

**11/06/18**  
**City Council Meeting**

**Handouts received after  
agenda posted**



# Kings County Regional Walk and Bike Plan

Presentation to Lemoore City Council | November 6, 2018



**Eisen | Letunic**

Transportation, Environmental and Land Use Planning

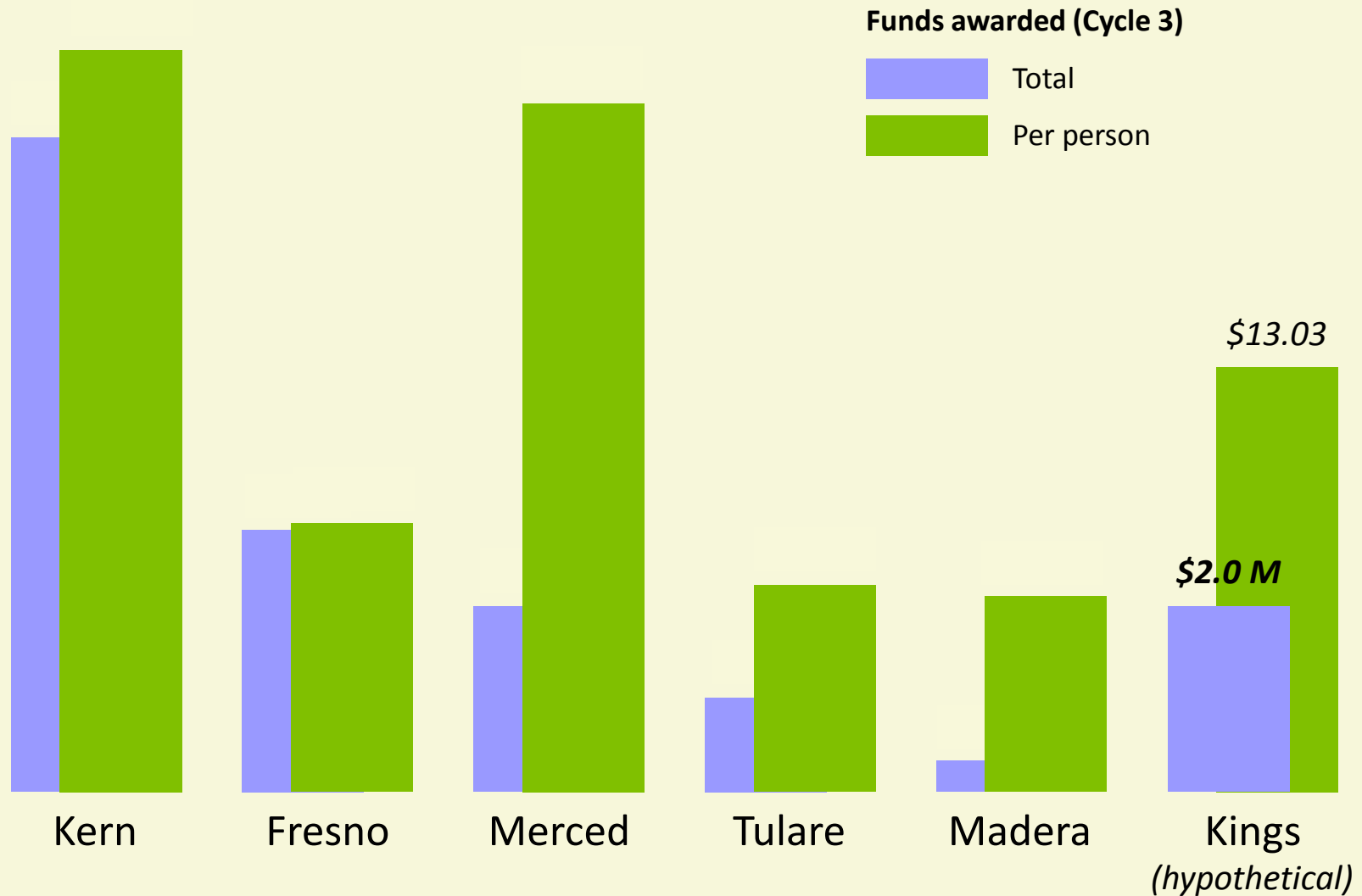


# Project objectives

- Advance local pedestrian/bike planning efforts
- Support the KCAG Regional Transportation Plan/Sustainable Communities Strategy update
- Equip local agencies to better compete for grant funding



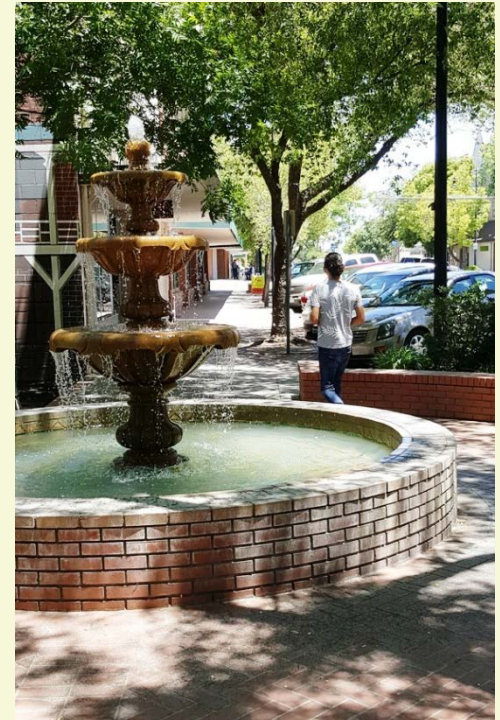
# ATP funding potential



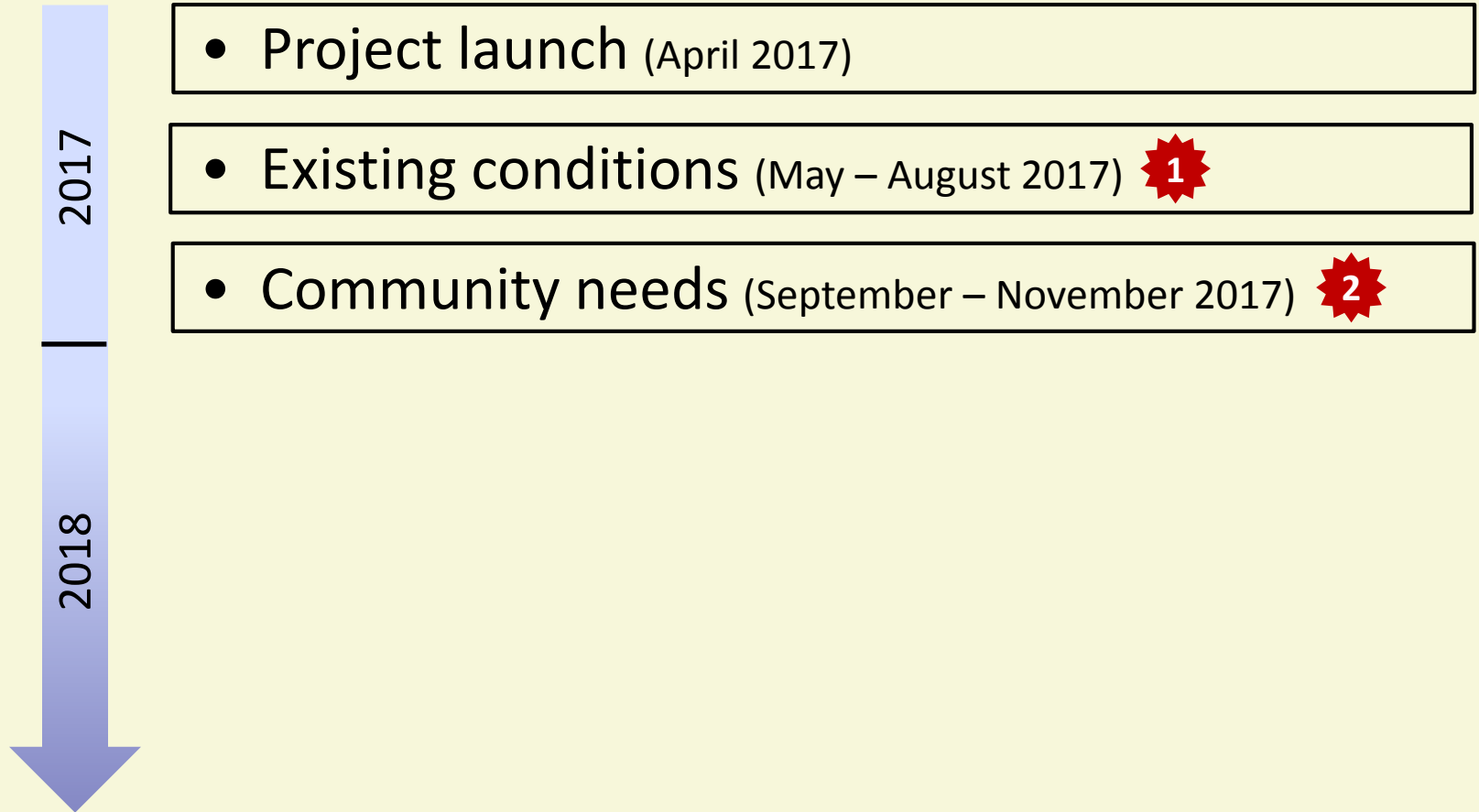
# Benefits of active transportation

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- Health
- Mobility
- Neighborhood livability
- Economy
- Environment



# Project timeline



**#** *Project Advisory Committee meeting*

# Community needs assessment

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- Earlier planning efforts
- Input from agency staff, PAC
- RTP outreach workshops
- Community survey
- Interactive “pinnable” map
- Comment form on project webpage
- Site visits



# Main **pedestrian** concerns

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- **Sidewalks:** Lacking, discontinuous, broken, uneven, obstructed
- Lack of **footpaths and trails**
- Lack of **crosswalks** or **safe crossings** at some key intersections
- No **street lights**, too few, not bright enough



# Main **bicycling** concerns

- **Bike lanes:** Lacking, discontinuous
- Potholes, **rough pavement**
- Lack of **paths and trails**
- No **bike parking** at key locations
- No **street lights**, too few, not bright enough



# Main **non-infrastructure** concerns

- **Driver behavior:**  
Speeding, fail to yield, distracted or aggressive driving
- Lack of **promotion or encouragement** of biking
- Bike lanes **blocked** by parked cars



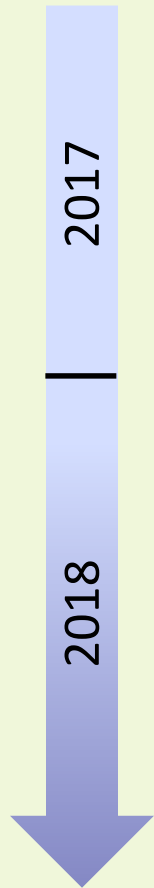


# Other concerns

- Scary or threatening dogs (stray and domestic).
- Vagrants, strangers and other types of individuals perceived as threatening.
- Uncomfortably hot or cold weather.



# Project timeline



- Project launch (April 2017)
- Existing conditions (May – August 2017) **#1**
- Community needs (September – November 2017) **#2**
- Improvements and priorities (Jan. – April 2018) **#3**

**#** *Project Advisory Committee meeting*

# Proposed improvements

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## Bicycling

Bikeway network from General Plan (2008), Kings County Regional Bicycle Plan (2011) and Regional Transportation Plan (2014)

## Walking

Recommendations from:

- General Plan
- ADA Transition Plan
- Consultant observations



# Project timeline



**#** *Project Advisory Committee meeting*

# ATP applications

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- An objective of this plan was to equip local agencies to better compete for grant funds
- The plan aimed to help local agencies determine potential projects for Active Transportation Program applications
- ATP prioritizes projects that:
  - Fill an important walking or biking need
  - Improve walking or biking safety
  - Are located in or benefit disadvantaged communities
  - Are a local priority and have local public support

# ATP applications: Equity analysis

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- School-age youth
- Seniors
- Median household income
- Exposure and sensitivity to pollution
- Students eligible for free or reduced-price school meals



# ATP applications: Potential projects



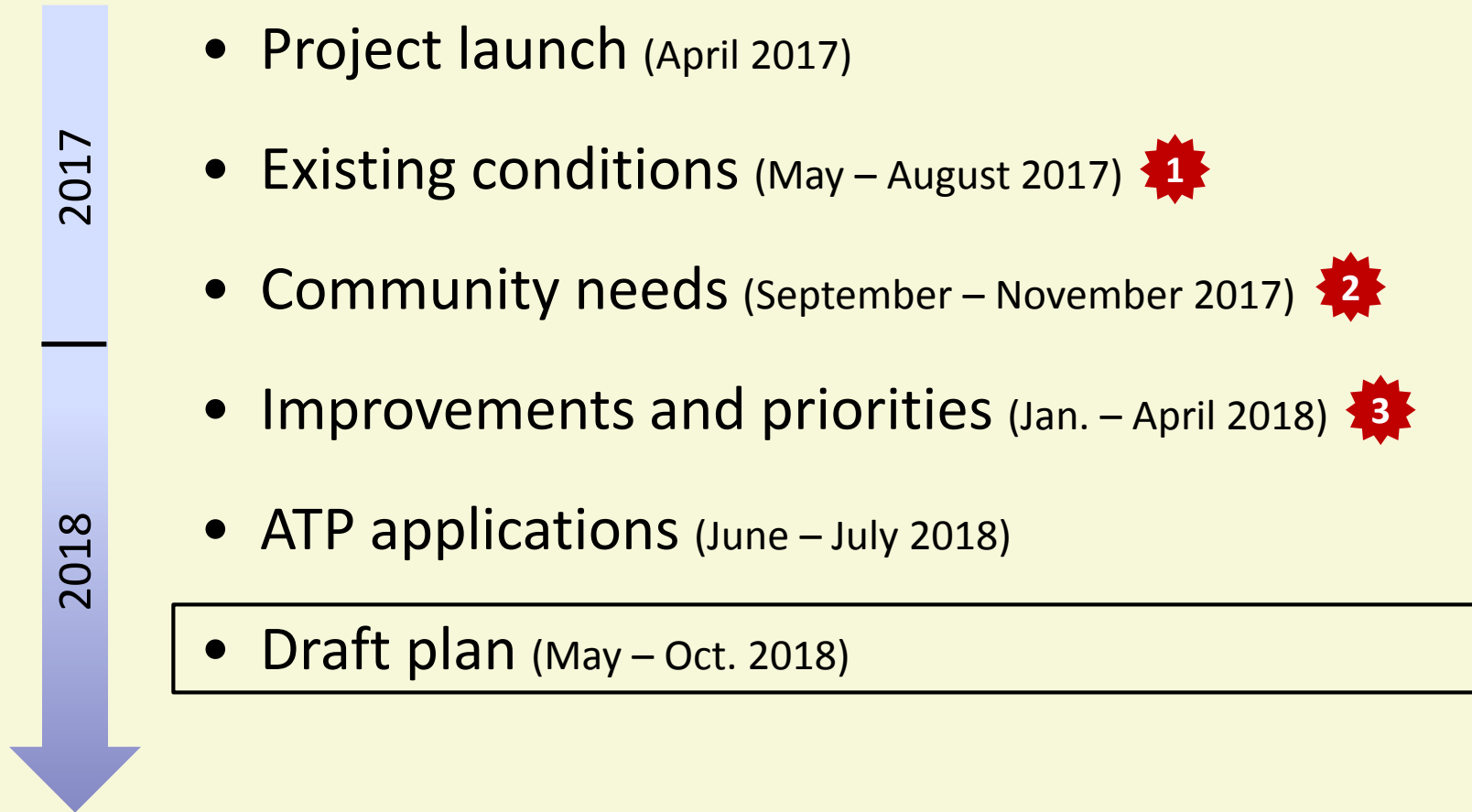
## Bicycling

- Bike lanes and routes:
  - Btwn. 19<sup>th</sup> and 17<sup>th</sup> Aves.
  - So. of Cinnamon/18<sup>th</sup> Ave/Hanford Armona Rd. and north of Hwy. 198.

## Walking

- Sidewalks and safer crossings near schools:
  - 18<sup>th</sup> and 19<sup>th</sup> Aves. north of Hwy. 198
  - Bush St. east of 19<sup>th</sup> Ave.
  - D St.; Cinnamon Dr.; Hanford Armona Rd. east of 18<sup>th</sup> Ave.

# Project timeline



**#** *Project Advisory Committee meeting*



# Plan contents

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1. Introduction
  2. Benefits of active transportation
  3. Equity and public health
  4. Community needs assessment
  5. Existing conditions
  6. Proposed improvements
  7. Strategic implementation
  8. Potential funding sources
- Appendices

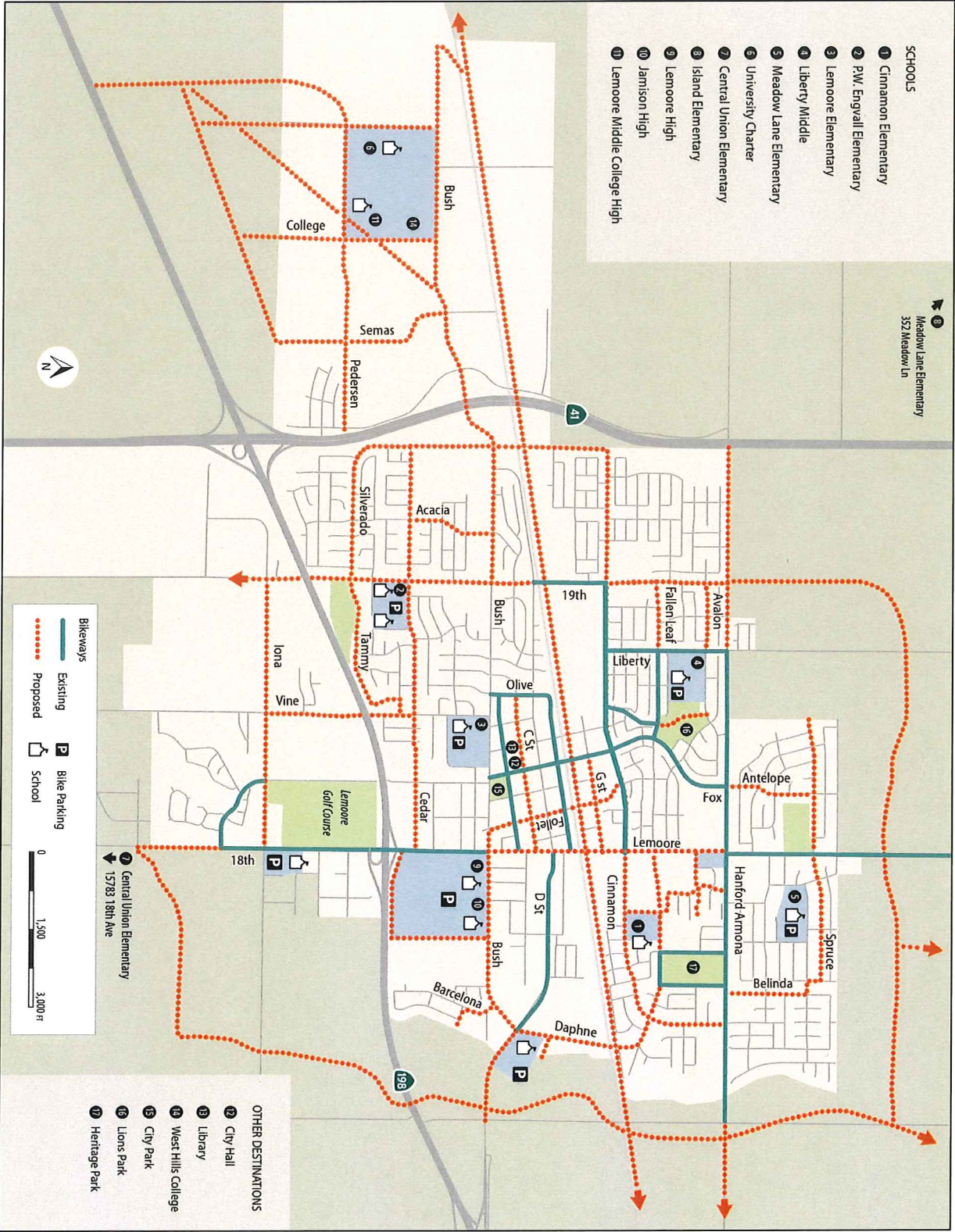


# Project timeline



# *Project Advisory Committee meeting*

**Figure 6.5.1 | Recommended Lemoore bikeway network**





Thomas Reed

1060 Par Avenue, Lemoore

817-7234

Mayor, Council Members:

Most council meetings, it seems, has at least one council member expressing the desire to have new sources of revenue, namely someone like a Walmart or a Denny's to choose Lemoore as a site for expansion.

However, for those companies to choose Lemoore there has to be adequate consumer traffic to fit their marketing plan. The tactic should therefore be: "how do we increase such traffic?" The wave ranch is one such business, but this is a private endeavor outside the city limits.

Here's an idea: Why not partner with West Hills College Lemoore to bring in entertainment such as concerts to the Golden Eagle Arena. I know the College has expressed no interest in such activities. The Arena was built with tax monies from you, me and all other Lemoore property owners. I recently received my property tax bill, and upon examination there were 7 bond items, that's 7, for West Hills College Lemoore.

Unless we can convince the College that we both will benefit, how can we expect corporations from outside this area to invest in Lemoore? The city has supported them and continues to support them, it is now time for the College to support the city. If they choose to not support Lemoore, I may choose to not support them for any future bond issue.

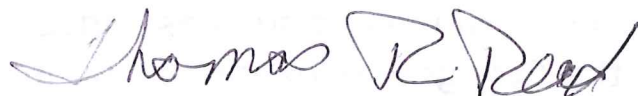
And, we must find a way for this Council to avoid negative incidents, both by and directed to and about Council Members. Such incidents will certainly throw up alarm signals to outside enterprise.

While I was unable to attend the previous Council Meeting, I was sadly disappointed that a resident sent a letter to be read expressing a sad, sad action by one of our Council Members.

Council Member Blair, you have many times made comments about being transparent, and about being accepting of views from others. It seems you were extremely intolerant of someone participating in an activity with which you disagreed. I realize the success of that activity could result in you being removed from your position as a Lemoore City Council Member. How about being transparent? Did you in fact make such derogatory comments to one of your constituents?

There are issues facing this City Council and staff that requires the best from each of you. In the Bible: 1 Corinthians 13:11 says: *When I was a child, I spoke as a child, I understood as a child, I thought as a child: but when I became an adult, I put away childish things.*

It is time to grow up and do what we need you to do!

A handwritten signature in dark ink, reading "Thomas R. Reed". The signature is fluid and cursive, with the first name "Thomas" written in a larger, more prominent script than the last name "Reed".

Thomas R Reed

11-6-18





Total Size of Mural 6'x33'

"D" Street – Odd Fellows Mural

Artist: Jennifer Butts



Dr. Phil spoke to a Lady this week about cryptic pregnancy and what it means. She swears on an oath she has been pregnant for more than 3 years 7 months and believed she was pregnant by 1000% and stated no one will tell her differently. The professionals, subject matter expert, and talk show host provided factual evidence she was not pregnant..... she still said she was. It is called CONFIRMATION BIAS. Psychology Today: Confirmation bias occurs from the direct influence of desire on beliefs. When people would like a certain idea/concept to be true, they end up believing it to be true. They are motivated by wishful thinking. This error leads the individual to stop gathering information when the evidence gathered so far confirms the views (prejudices) one would like to be true. Goes on to read: people may ultimately come to believe that the weight of evidence supports the position that they already wanted to believe was true. And they will believe this without recognizing that their own desires influenced the evaluation of the evidence. This is 1000% you Ms. Blair. Please anyone listening to me find us on social media and end the disgrace this councilmember is bringing to our City.

March of 2018 was my first meeting, since you Ms. Blair were voted in. That day, I stated you needed to be recalled or a complaint with the FPPC should be filed due to your unethical government practices and your violations of the Brown act. I didn't know your vote record nor do I care as you are only 1 of 5 votes and a majority of votes is the only thing that matters. Your 1 vote of "no" means nothing if you don't have the support of 2 others which you have not had. You don't have the support in any direction ~~that~~ and I can see and you don't have support from your constituents as your very next door neighbors have signed the petition to include your own family members signing the recall petition.

Since March, I have attended many meetings to just watch you act like a fool on social media, call people hideous names, embarrassed yourself and the City, plus put out false information. You are a disgrace to people of color such as myself. You do not present facts or truth and that is the only way to problem solve. It is disgraceful to the Latino community for you to think your lies are believable by anyone who is educated or has any common sense. You ramble online, you ramble in interviews and you ramble when people try to talk to you. RECALL BLAIR 2018 and RESTORE LEMOORE to a time when our City government was functional and not dysfunctional. It is our constitutional rights in the due process of City and State government nothing more nothing less.

Nothing Racist.

## Janie Venegas

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**From:** Janie Venegas  
**Sent:** Wednesday, October 31, 2018 2:31 PM  
**To:** Janie Venegas  
**Subject:** FW: Council person Holly Blair

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**From:** Victoria Arieas  
**Sent:** Wednesday, October 31, 2018 12:51 PM  
**To:** City Manager <[citymanager@lemoore.com](mailto:citymanager@lemoore.com)>  
**Subject:** Council person Holly Blair

Dear Sir: I currently work for the City of Hanford. As a professional person, I was shocked to see Facebook posts from your council member, Holly Blair. They are very unprofessional and sometimes out-right disgusting. I have blocked her entirely, as I do not want to see anything she has to say; therefore, it is not directly affecting me. But it is concerning that this person is representing your city, with foul language and offensive posts. Please realize that this gives a bad impression for your entire city. I have no idea how you would be able to handle this situation. I only wanted to bring it to your attention in a respectful way. Many others feel the same as myself.

Thank you for your time.

Respectfully,

*Victoria Arieas*




The background features abstract, overlapping green geometric shapes in various shades of green, creating a modern and dynamic visual effect.

# CV Housing, LLC

Agent: Brett Fugman

Application for Multi-family Housing Project  
and future Commercial Development

November 6, 2018



# General Plan Amendment No. 2017-01 Zone Change No. 2017-01 Site Plan Review No. 2016-03 Mitigated Negative Declaration

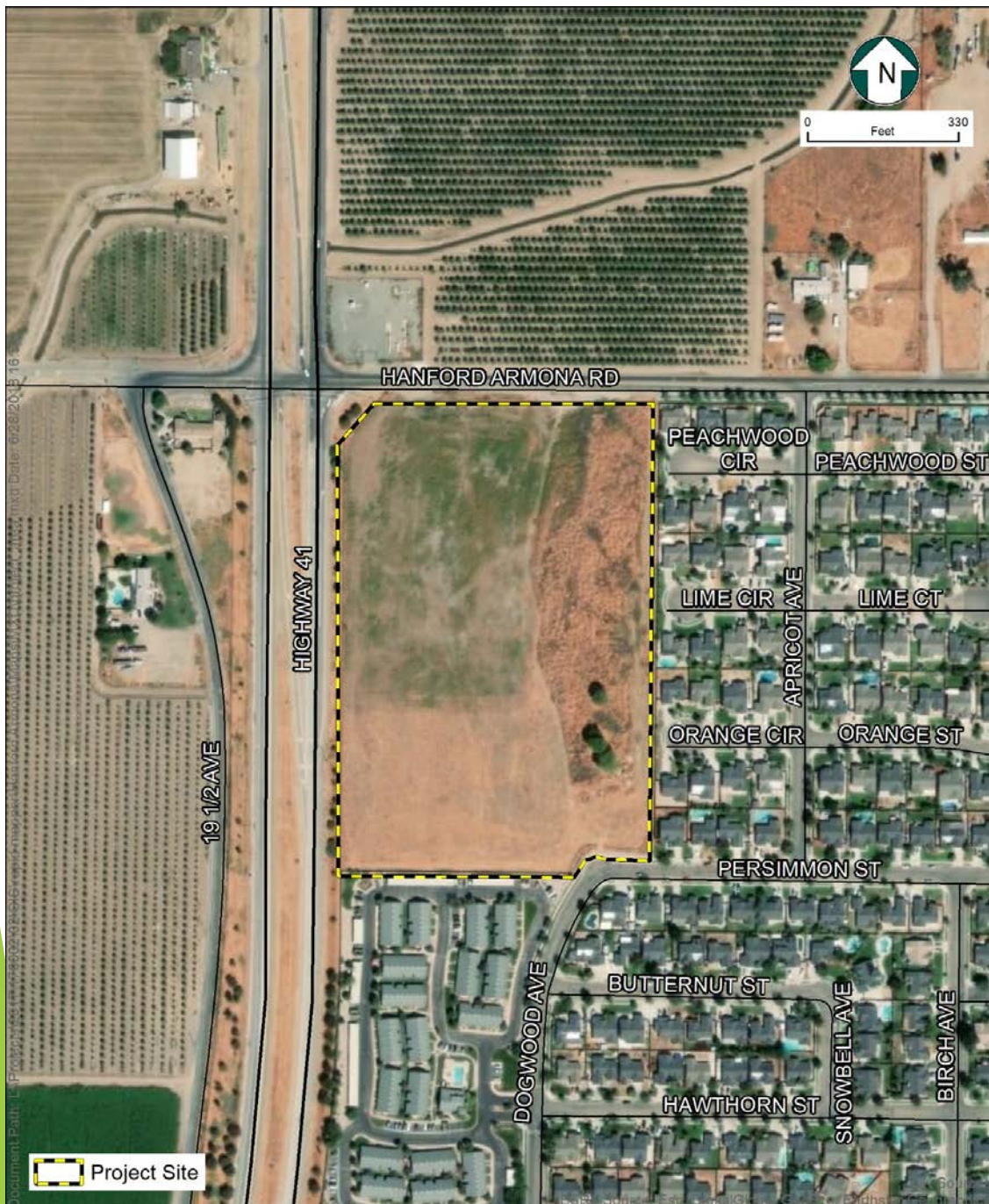
A request by CV Housing, LLC to change the General Plan land use designations and zoning from undesignated/unzoned, Mixed Use (MU), and Neighborhood Commercial (NC) to Medium Density Residential (RMD) and Neighborhood Commercial (NC) and to approve a site plan for a 176-unit multi-family apartment complex.





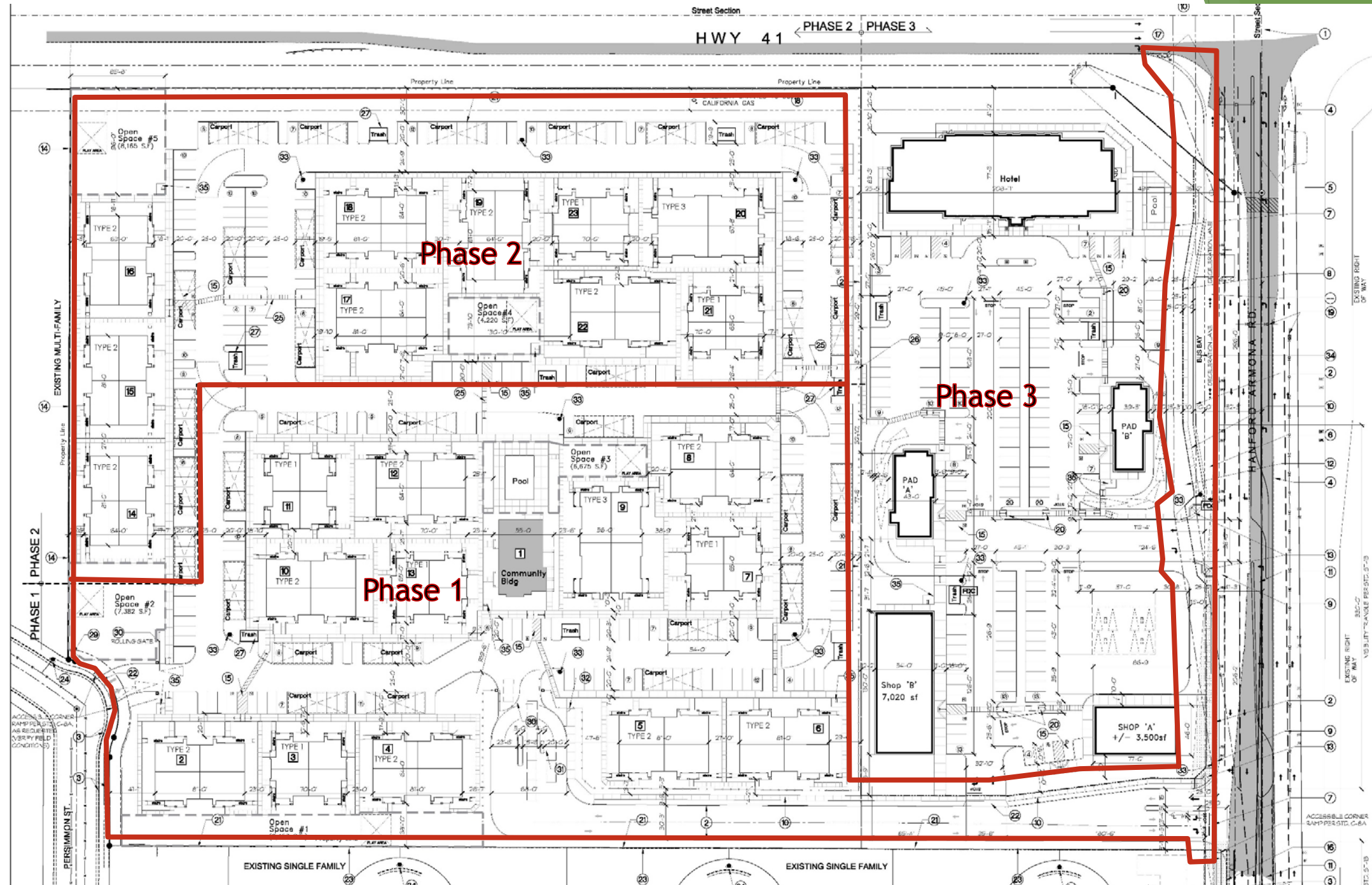
LEMOORE





- ▶ Project site is located at the southeast corner of Highway 41 and Hanford Armona Road.
- ▶ Approximately 16 acres in size.





# Proposed Project

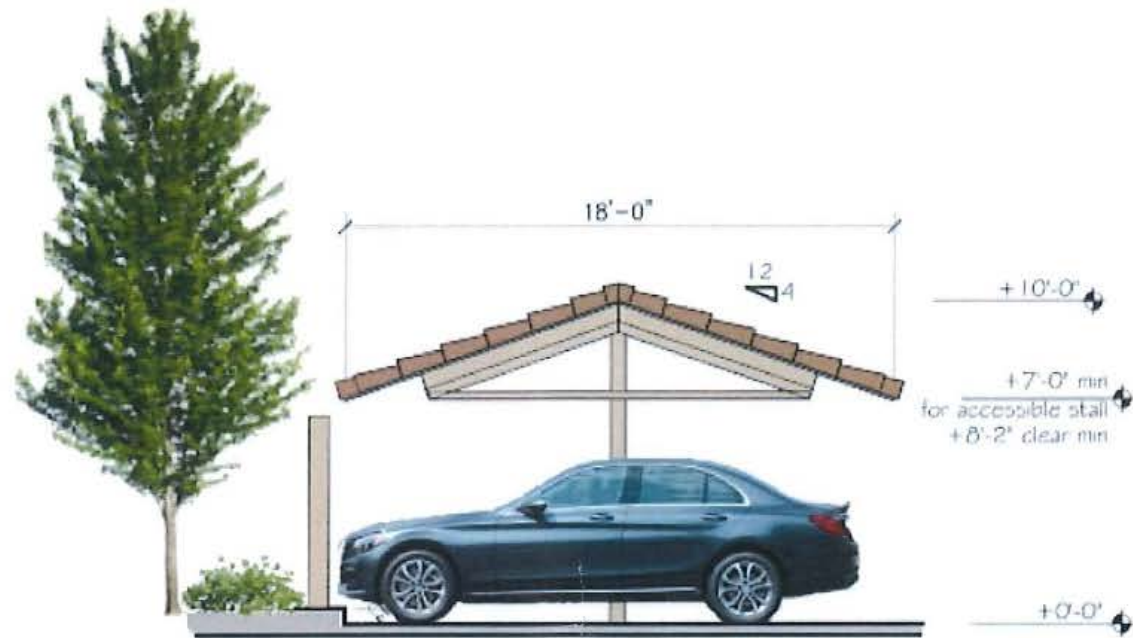
- ▶ Approval of the proposed General Plan Amendment and Zone Change will result in the southern 10.69 acres of land designated and zoned Medium Density Residential (RMD), and the northernmost 4.57 acres designated and zoned as Neighborhood Commercial (NC).
- ▶ The commercial portion of the site is 4.57 acres. There will be 0.93 acres dedicated for the widening of the Hanford-Armona Road right of way. It is recognized that the commercial area (Phase 3) would be in a future phase.
- ▶ The proposed 10.69 acre apartment complex includes:
  - ▶ community room and pool
  - ▶ five open spaces each with a children's play area
  - ▶ carports and uncovered stalls
  - ▶ two-story buildings with one-, two-, and three-bedroom units











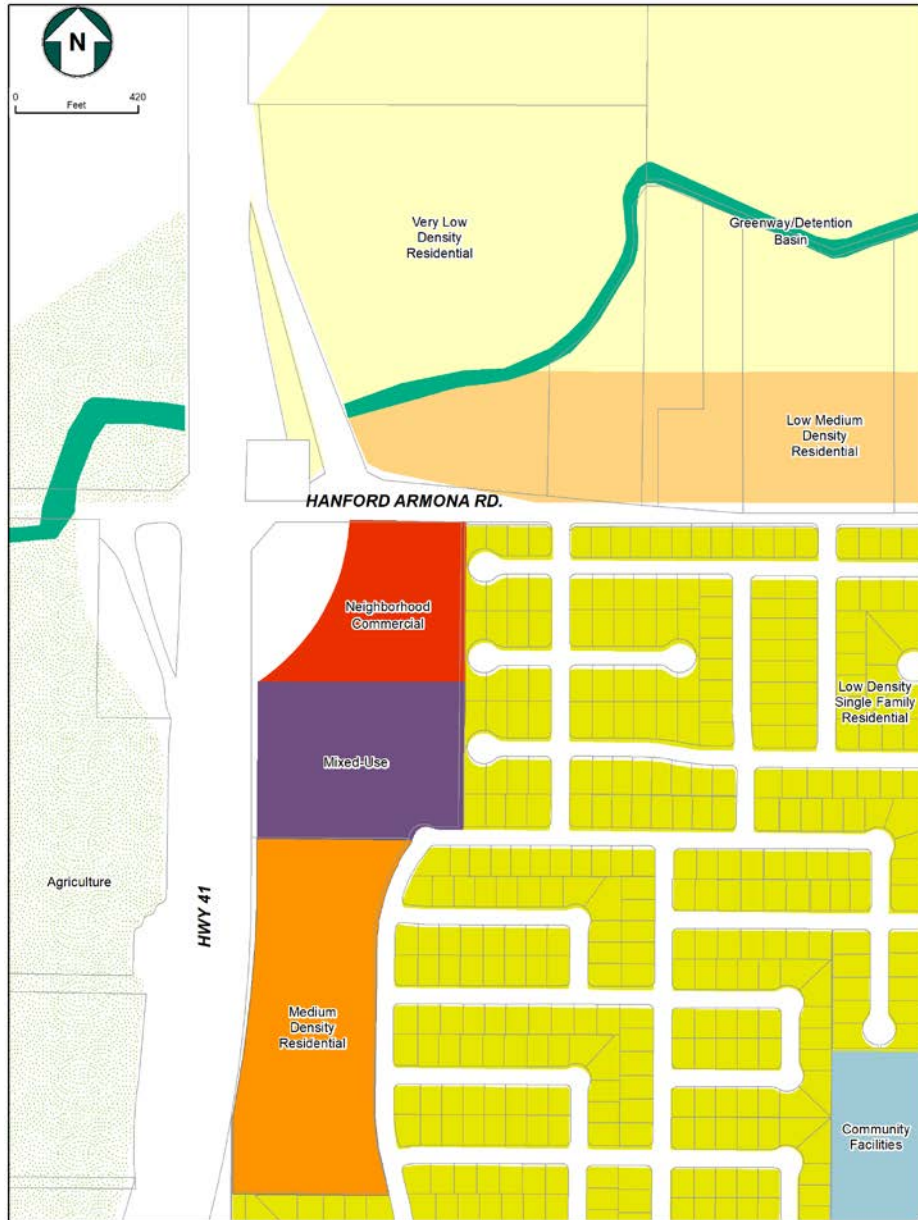
**SIDE ELEVATION**

1/4" = 1'-0"

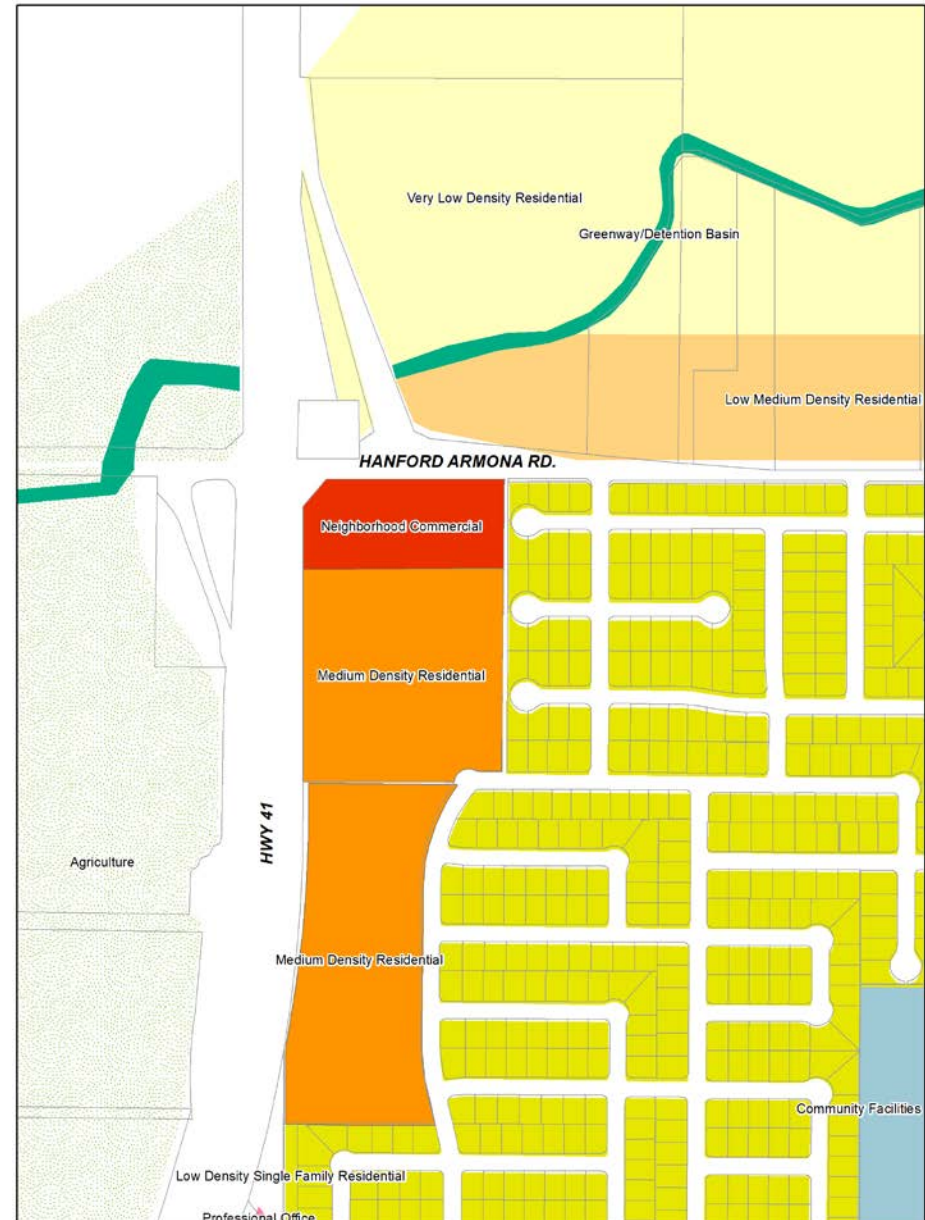


# Mitigated Negative Declaration

- ▶ CEQA review included Traffic Study and Air Impact Assessment.
- ▶ A request was received from Santa Rosa Rancheria for tribal consultation and monitoring. A Mitigation Measure is included to require consultation prior to construction.
- ▶ Comments were received from Caltrans.



**Before General Plan Amendment**



**After General Plan Amendment**

# Next Steps

- ▶ The Ordinance approving Zone Change No. 2017-01 will return for second reading before the City Council on December 4.



# Disposition & Development Agreement between City of Lemoore and KKAL, LP

November 6, 2018

# Consideration of Mitigated Negative Declaration and Disposition and Development Agreement between the City of Lemoore and KKAL, LP.

A request by the City of Lemoore and KKAL, LP for the adoption of the Mitigated Negative Declaration (MND) and approval of the Disposition and Development Agreement (DDA) between the City of Lemoore and KKAL, LP for development of approximately 83.5 acres.



LEMOORE







- ▶ Project site is located at the northeast corner of Idaho Avenue and Highway 41.
- ▶ Approximately 83.5 acres in size
- ▶ The site is currently undeveloped except for a ponding basin that will be relocated to a new site as part of this project.



## CEQA Review

- ▶ Mitigated Negative Declaration prepared
- ▶ Request for consultation and monitoring by Santa Rosa Rancheria Tribe. A mitigation measure is included in the Mitigated Negative Declaration to comply.

- ▶ The proposed DDA would allow KKAL, LP to purchase the property for ten (10) dollars.
- ▶ Developer will:
  - ▶ develop a manufacturing, distribution, and warehouse center consisting of approximately 1,025,000 square feet of industrial space
  - ▶ potential creation of approximately 1300 jobs
  - ▶ increase the property tax base
  - ▶ provide secondary economic benefits to the City of Lemoore
- ▶ The project will be developed in phases; twelve (12) acres every two (2) years over six (6) phases.
- ▶ The City of Lemoore will be responsible for constructing the necessary infrastructure for the project; including water, sewer, storm water, and streets, curbs, and gutters.

# Next Steps

- ▶ The Ordinance adopting the DDA will return for second reading before the City Council on December 4, 2018.

# EXPLORE *Lemoore*

The more you look... Lemoore you like!



*Museum • Recreation Center • Escape Rooms • Movies • Restaurants • Golf Course • Skate Park*

Visit us at

[www.Lemoore.com](http://www.Lemoore.com)

[www.facebook.com/CityofLemoore](https://www.facebook.com/CityofLemoore)

Interested in opening a business in Lemoore?

We are here to help! Contact Amanda Champion at (559) 924-6700.

Lemoore Golf Course

[www.lemooregolfcourse.net](http://www.lemooregolfcourse.net)





# LEMOORE, CA - 80 ACRES

- ◆ John Kashian is working with the city to develop approximately 83 acres.
- ◆ The land is located 2.5 miles from the local community college, West Hills Lemoore and 2.1 miles from Downtown Lemoore.
- ◆ State Route 41 adjacent
- ◆ Zoned light industrial
  - ◇ Indoor amusement/entertainment facility
  - ◇ Indoor fitness and sports facility
  - ◇ Outdoor commercial recreation
  - ◇ Restaurants
  - ◇ Hotels\*
  - ◇ Auto and vehicle sales
  - ◇ Manufacturing

*Usage is not limited to those listed above.*

*Source: Lemoore Municipal Code 9-4B-2*

*\*Pending approval of zoning text amendment*

*2018-01*

## 2016 Traffic Counts Highway 41 and 198 Junction ADT = Average Daily Traffic

Peak Hour ADT	1,350
Peak Month ADT	15,200
Annual ADT	12,900

*Source: Caltrans 2016 Traffic Volumes on California State Highways*

**IT WILL BE  
BUILT!  
WILL YOU  
COME?**





LEMOORE CITY COUNCIL  
COUNCIL CHAMBER  
429 C STREET  
November 6, 2018

## AGENDA

***Please silence all electronic devices as a courtesy to those in attendance. Thank you.***

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### PUBLIC COMMENT

This time is reserved for members of the audience to address the City Council on items of interest that are not on the Agenda and are within the subject matter jurisdiction of the Council. It is recommended that speakers limit their comments to 3 minutes each and it is requested that no comments be made during this period on items on the Agenda. The Council is prohibited by law from taking any action on matters discussed that are not on the Agenda. Prior to addressing the Council, any handouts for Council will be provided to the City Clerk for distribution to the Council and appropriate staff.

### 5:30 pm STUDY SESSION

- SS-1 Kings County Association of Governments Regional Active Transportation Plan - Walking and Biking Plan (Speer)

### CLOSED SESSION

This item has been set aside for the City Council to meet in a closed session to discuss matters pursuant to Government Code Section 54956.9(d)(4). The Mayor will provide an oral report regarding the Closed Session at the beginning of the next regular City Council meeting.

1. Conference with Labor Negotiator  
Government Code Section 54957.6  
Agency Negotiator: Jenell Van Bindsbergen, City Attorney  
Employee Organizations: General Association of Service Employees, Lemoore  
Police Officers Association, Lemoore Police Sergeants Unit, Unrepresented Employees
2. Conference with Legal Counsel – Anticipated Litigation  
Significant Exposure to Litigation Pursuant to Paragraph (2) or (3) of Subdivision (d) of Section 54956.9  
Two Cases
3. Conference with Legal Counsel – Existing Litigation  
Government Code Section 54956.9(d)(1)  
Mary J. Venegas vs. Holly Andrade Blair  
Case No. 18-C-0289
4. Conference with Legal Counsel – Existing Litigation  
Government Code Section 54956.9(d)(1)  
Steve Rose v. City of Lemoore and Michelle Speer  
Case No. 18C-0118

5. Public Employee Performance Evaluation  
City Manager
6. Liability Claims  
Government Code Section 54956.95  
Mr. Jeff Fabry
7. Conference with Legal Counsel – Existing Litigation  
Government Code Section 54956.9(d)(1)  
Sears Holding Corporation, et al., Debtors  
Case No. 18-23538 (RDD)

In the event that all the items on the closed session agenda have not been deliberated in the time provided, the City Council may continue the closed session at the end of the regularly scheduled Council Meeting.

### 7:30 pm REGULAR SESSION

- a. CALL TO ORDER
- b. PLEDGE OF ALLEGIANCE
- c. INVOCATION
- d. AGENDA APPROVAL, ADDITIONS, AND/OR DELETIONS

### PUBLIC COMMENT

This time is reserved for members of the audience to address the City Council on items of interest that are not on the Agenda and are within the subject matter jurisdiction of the Council. It is recommended that speakers limit their comments to 3 minutes each and it is requested that no comments be made during this period on items on the Agenda. The Council is prohibited by law from taking any action on matters discussed that are not on the Agenda. Prior to addressing the Council, any handouts for Council will be provided to the City Clerk for distribution to the Council and appropriate staff.

### CEREMONIAL / PRESENTATION – Section 1

- 1-1 Lemoore Police Department Explorer Recognition (Smith)

### DEPARTMENT AND CITY MANAGER REPORTS – Section 2

- 2-1 Department & City Manager Reports

### CONSENT CALENDAR – Section 3

Items considered routine in nature are placed on the Consent Calendar. They will all be considered and voted upon in one vote as one item unless a Council member or member of the public requests individual consideration.

- 3-1 Approval – Minutes – Regular Meeting – October 16, 2018
- 3-2 Approval – Mural Application – “The Fabric of Our Heritage” proposed by Sarah A. Mooney Museum
- 3-3 Approval – Hiring of Wildan for Continuing Annual Disclosure for the Enterprise Bond
- 3-4 Approval – Purchase of a New CNG Front-Loading Refuse Truck – CIP 5400
- 3-5 Approval – Purchase of a New Side-Loading Refuse Truck – CIP 5404
- 3-6 Approval – Denial of Claim for Mr. Jeff Fabry



## PUBLIC HEARINGS – Section 4

Report, discussion and/or other Council action will be taken.

- 4-1 General Plan Amendment No. 2017-01, Zone Change No. 2017-01 and Site Plan Review No. 2016-03: A request by CV Housing, LLC (agent: Brett Fugman) to change the General Plan land use designations and zoning from Mixed Use (MU) and Neighborhood Commercial (NC) to Medium Density Residential (RMD) and Neighborhood Commercial (NC) and to approve a site plan for a 176-unit multi-family apartment complex, located at the southeast corner of Highway 41 and Hanford-Armona Road (APN 021-660-031) Resolution 2018-46 and Ordinance 2018-08 (Brandt)
- 4-2 Consideration of Mitigated Negative Declaration and Disposition and Development Agreement between the City of Lemoore and with KKAL, LP: A request by the City of Lemoore and KKAL, LP for the adoption of the Mitigated Negative Declaration (MND) and approval of the Disposition and Development Agreement (DDA) between the City of Lemoore and KKAL, LP for Development of Approximately 83.5 acres, located on the Northeast corner of State Route (SR) 41 and Idaho Avenue (APN 024-051-031) Resolution 2018-47 and Ordinance 2018-09 (Brandt)

## NEW BUSINESS – Section 5

Report, discussion and/or other Council action will be taken.

- 5-1 Report and Recommendation – Award Contract for Geotechnical Engineering Services for Athletic Field Lights for the Lemoore Youth Sports Complex
- 5-2 Report and Recommendation – Budget Amendment - Agreement with IG Services for a Refuse Rate Study (Rivera)

## CITY COUNCIL REPORTS AND REQUESTS – Section 6

- 6-1 City Council Reports / Requests

## ADJOURNMENT

### Upcoming Council Meetings

- City Council Regular Meeting, Tuesday, November 20, 2018 - CANCELLED
- City Council Regular Meeting, Tuesday, December 04, 2018

Agendas for all City Council meetings are posted at least 72 hours prior to the meeting at the City Hall, 119 Fox St., Written communications from the public for the agenda must be received by the City Clerk's Office no less than seven (7) days prior to the meeting date. The City of Lemoore complies with the Americans with Disabilities Act (ADA of 1990). The Council Chamber is accessible to the physically disabled. Should you need special assistance, please call (559) 924-6705, at least 4 business days prior to the meeting.

## PUBLIC NOTIFICATION

I, Mary J. Venegas, City Clerk for the City of Lemoore, declare under penalty of perjury that I posted the above City Council Agenda for the meeting of November 6, 2018 at City Hall, 119 Fox Street, Lemoore, CA on November 2, 2018.

//s//

Mary J. Venegas, City Clerk





711 West Cinnamon Drive • Lemoore, California 93245 • (559) 924-6700 • Fax (559) 924-6708

## Staff Report

**Item No: SS-1**

**To:** Lemoore City Council  
**From:** Michelle Speer, Assistant City Manager  
**Date:** October 23, 2018      **Meeting Date:** November 6, 2018  
**Subject:** Kings County Association of Governments Regional Active Transportation Plan

**Strategic Initiative:**

- |   |  |
|---|--|
| <input type="checkbox"/> Safe & Vibrant Community                       | <input type="checkbox"/> Growing & Dynamic Economy |
| <input type="checkbox"/> Fiscally Sound Government                      | <input type="checkbox"/> Operational Excellence    |
| <input checked="" type="checkbox"/> Community & Neighborhood Livability | <input type="checkbox"/> Not Applicable            |

**Proposed Motion:**

Information Only.

**Subject/Discussion:**

Niko Letunic, Project Manager, will provide a brief presentation on the Kings County Association of Governments Regional Active Transportation Plan, which is also known as the Walking and Biking Plan. The plan is meant to improve the walking and biking environment for communities in the region.

**Financial Consideration(s):**

Not Applicable.

**Alternatives or Pros/Cons:**

Not Applicable.

**Commission/Board Recommendation:**

Not Applicable.

**Staff Recommendation:**  
Information Only.

**Attachments:**

- ☐ Resolution:
  - ☐ Ordinance:
  - ☐ Map
  - ☐ Contract
  - ☐ Other
- List: Transportation Plan

**Review:**

- ☒ Asst. City Manager
- ☒ City Attorney
- ☒ City Clerk
- ☒ City Manger
- ☒ Finance

**Date:**

- 10/26/18
- 11/01/18
- 11/01/18
- 10/31/18
- 10/29/18



# Kings County Regional Active Transportation Plan

October 2018



**EISEN | LETUNIC**

TRANSPORTATION, ENVIRONMENTAL AND URBAN PLANNING







# Contents

## Chapters

Acknowledgments .....	ii
1. Introduction .....	1
2. Benefits of active transportation .....	4
3. Equity and public health .....	7
4. Community needs assessment .....	21
5. Existing conditions	
5.1. Overview .....	34
5.2. Avenal .....	44
5.3. Corcoran .....	54
5.4. Hanford .....	63
5.5. Lemoore .....	73
5.6. Unincorporated Kings County .....	81
6. Proposed improvements	
6.1. Overview .....	90
6.2. Avenal .....	100
6.3. Corcoran .....	106
6.4. Hanford .....	115
6.5. Lemoore .....	125
6.6. Unincorporated Kings County .....	130
7. Strategic implementation	
7.1. Overview .....	134
7.2. Avenal .....	137
7.3. Corcoran .....	138
7.4. Hanford .....	139
7.5. Lemoore .....	143
7.6. Unincorporated Kings County .....	144
8. Potential funding sources .....	147

## Appendices

A. Equity and public health data .....	151
B. Needs assessment comments .....	158

## Common acronyms

<b>ADA</b>	Americans with Disabilities Act
<b>ATP</b>	Active Transportation Program
<b>CTC</b>	California Transportation Commission
<b>KCAG</b>	Kings County Association of Governments
<b>RATP</b>	Regional Active Transportation Plan
<b>RTP / SCS</b>	Regional Transportation Plan / Sustainable Communities Strategy
<b>SRTS / SR2S</b>	Safe Routes to School(s)

## Credits

All photos are by Niko Letunic (Eisen | Letunic), except those on pages 94 and 95, which are by Gary Feinstein (Feinsteinphotos.com). All screenshots of roadways are from Google Street View.

# Acknowledgments

## KCAG Commissioners

- Glenda Woolley, Avenal City Council
- Sid Palmerin, Corcoran City Council
- David Ayers, Hanford City Council
- Ray Madrigal, Lemoore City Council
- Doug Verboon, Kings County Board of Supervisors
- Joe Neves, Kings County Board of Supervisors

## KCAG member agencies

- County of Kings
- City of Avenal
- City of Corcoran
- City of Hanford
- City of Lemoore

## KCAG staff

- Terri King, Executive Director
- Yunsheng Luo, Regional Planner
- Christopher Xiong, Regional Planner
- Joel Gandarilla, Executive Assistant
- Teresa Nickell, Regional Planner
- Mary Madrid, Fiscal Analyst

## Consultants

- Eisen|Letunic (Niko Letunic, Project Manager)
- Parisi Transportation Consulting

# 1 | Introduction

## What is active transportation?

Active transportation means getting around by walking or biking—and also by rolling, as in a wheelchair or on a push scooter, for example. It is another term for non-motorized transportation, one that expresses the important connection between our transportation choices and healthy, active living.



Active transportation provides a number of important benefits to individuals and communities (see Chapter 2). As people have become more aware of these benefits, interest in walking and biking has increased in many communities, including in Kings County, and there have been growing calls by both decision-makers and the broader public to promote

and encourage these forms of transportation. For people to choose active transportation as a way of getting around, communities must provide a network of sidewalks, bike lanes, paths and trails, safe crossings, traffic-calmed streets and other pedestrian and bicycle facilities that connect the places where people live, work, study, shop, play and visit.

## Overview of the Regional Walk and Bike Plan

KCAG has played an important role in promoting active transportation in the county by providing funding and logistical support to its member agencies for the implementation of pedestrian and bicycle projects and programs. This Kings County Regional Active Transportation Plan, known more informally as the Regional Walk and Bike Plan, further demonstrates KCAG's commitment to active transportation. This plan has been prepared in recognition of the benefits of active transportation and its contribution to a more balanced transportation system for the county that gives its residents more options for getting around.

### Who, or what, is KCAG?

KCAG, the Kings County Association of Governments, is a government agency that serves as the "metropolitan planning organization" (MPO) for the Kings County region. As such, KCAG carries out multiple planning responsibilities for the region, delivering a range of federal, state and local transportation and other programs. Its most relevant roles to the Regional Walk and Bike Plan are as the agency that plans the region's overall countywide transportation system, coordinates transportation projects among local agencies and distributes much of the funding used for local transportation projects.

KCAG was founded jointly by, and represents, the five municipalities in the county. These five KCAG "member agencies" are the County of Kings and the Cities of Avenal, Corcoran, Hanford and Lemoore. Representatives from each of these agencies serve on KCAG's various boards and committees, with the California Department of Transportation (Caltrans) participating in an advisory capacity.



The Walk and Bike Plan has three main objectives:

- Identify high-priority projects that will make walking and biking throughout Kings County safer and more convenient, more pleasant and more popular.
- Support the goals under the Kings County Regional Transportation Plan (RTP) and Sustainable Communities Strategies (SCS) of a more balanced transportation system, and serve as the foundation for the non-motorized transportation chapter of the 2018 update of the RTP/SCS. (The RTP/SCS is the long-range plan that guides the development of the transportation system in the county. The plan, which is updated every four years, lists projects and programs to manage, operate and maintain the transportation system better and also to expand it.)
- Position the high-priority projects, and equip the jurisdictions in Kings County, to better compete for federal, state and regional grant funds. That is particularly true for the California Transportation Commission's Active Transportation Program, which is the main statewide source of funding for pedestrian and bicycle projects.

## Contents of the plan

Beyond this introductory chapter, the Walk and Bike Plan consists of the following main sections:

- **Chapter 2: Benefits of active transportation.** Chapter 2 makes the case for promoting walking and biking by outlining the numerous benefits of active transportation. These benefit are grouped under five themes: (i) individual and public health; (ii) access and mobility; (iii) neighborhood livability; (iv) economy vitality; and (v) environmental quality of life.
- **Chapter 3: Equity and public health.** This chapter analyzes and summarizes data from around the county on a range of key indicators related to socioeconomic conditions and public health. By documenting the presence of disadvantaged communities and vulnerable populations, Chapter 3 strengthens the case for implementing active transportation projects in Kings County.

An appendix to the plan presents the data that was collected and analyzed for this chapter.

- **Chapter 4: Community needs assessment.** As part of the planning process, KCAG gathered input from the public on the barriers, obstacles and challenges to walking and biking in the county; the needs and concerns of pedestrians and cyclists; problem areas and locations; and ideas and suggestions for improving conditions. Chapter 4 presents the results of the community needs assessment conducted for the Walk and Bike Plan.
- **Chapter 5: Existing conditions.** This chapter establishes the planning context surrounding active transportation in Kings County. It analyzes data on trip-making and traffic collisions, and presents information gathered from the County and the four cities about pedestrian and bicycle issues and conditions at the local level. The chapter is divided into separate sections for each of the four cities, for the unincorporated areas of the county and for countywide issues as a whole.
- **Chapter 6: Proposed improvements.** This chapter compiles the many pedestrian and bicycle projects that have been proposed—under local plans or earlier regional plans—around Kings County. Like Chapter 3 (and also like Chapter 7, below), this chapter is subdivided into separate sections for each of the four cities and for the unincorporated areas. An overview at the beginning of the chapter describes the many types of both infrastructure and non-capital improvements that municipalities may use to improve conditions for cyclists and pedestrians, including school children and people with disabilities.
- **Chapter 7: Strategic implementation.** This chapter may be thought of as the heart of the plan, given that it directly informed the pedestrian and bicycle projects included in the 2018 RTP update. From the longer project lists in Chapter 6, this chapter selects the higher-priority projects for each jurisdiction, including the projects that would likely compete best for funding under the state's Active Transportation Program.

- **Chapter 8: Potential funding sources.** Chapter 8 provides a summary of the most promising federal, state, regional and local funding sources for implementing pedestrian and bicycle projects, particularly the most common types of projects outlined in the Walk and Bike Plan.

## Public engagement

Public engagement efforts for the Walk and Bike Plan were focused on four phases of the project: (i) as part of the project launch; (ii) during the community needs assessment process; (iii) to present the proposed improvements; and (iv) during the review and comment period for the public draft version of the plan.

### Project launch

KCAG began inviting the public to learn more about the Walk and Bike Plan before the planning process was fully underway. The goals of this early, initial outreach were to introduce the project, and describe the upcoming work and schedule. KCAG set up two versions of a project webpage—one in English ([bit.ly/KingsWalknBike](http://bit.ly/KingsWalknBike)) and one in Spanish ([bit.ly/KingsPieyBici](http://bit.ly/KingsPieyBici))—that included contact information and a comment form encouraging people to submit concerns, ideas, suggestions or questions. KCAG also created a bilingual fact sheet about the project.

The inaugural meeting of the Project Advisory Committee for the Regional Walk and Bike Plan was held on October 11, 2017. The project consultant provided an overview of the objectives, planning process and timeline for the project. This was followed by a presentation of the work conducted up to that point, including a write-up of the benefits of active transportation (see Chapter 2), countywide equity and public health analyses (Chapter 3) and the inventory of existing conditions (Chapter 5).

### Community needs assessment

While the Walk and Bike Plan reflects projects previously formulated and proposed under earlier plans, it was nevertheless important to conduct a separate needs assessment process for the regional

plan in order to validate those previously proposed projects and to determine the priorities among them. This process gathered input from the public on the barriers, obstacles and challenges to walking and biking in their community; the needs and concerns of pedestrians and cyclists; and ideas and suggestions for improving conditions. Input was sought through an online survey, an online “pinnable” map, community workshops and the second meeting of the Project Advisory Committee, held on February 14, 2018. The community needs assessment process—including the various opportunities for public participation and the resulting comments—is described in more detail in Chapter 4 of this plan.

### Proposed improvements

During this outreach round, the proposed improvements compiled under Chapter 6 were presented at two community workshops—on April 30, 2018, at the Avenal Theater, in Avenal; and on May 1, 2018, at the Corcoran City Council Chambers, in Corcoran—and also at the last of three meetings of the Project Advisory Committee, on May 24, 2018. The draft subchapters under Chapter 6 were uploaded to the project webpage for the public to review.



### Public draft plan

[This section will be written last, after the draft plan is circulated. It will also include a write-up about the plan adoption process.]

## 2 | Benefits of active transportation

### Why active transportation?

Many communities throughout California and elsewhere have seen greatly increased interest in walking and biking on the part of residents in recent years, not only for recreation but also for transportation. At the same time, there has been a growing acknowledgment by decision-makers and the broader public that active transportation contributes positively to quality of life and, for that reason, it should be encouraged and promoted. The many benefits of active transportation can be grouped into five broad categories:

- Health
- Mobility
- Neighborhood livability
- Economy
- Environment

### Health

By definition, active transportation allows people to integrate physical activity into everyday life, by enabling them to walk or bike to their destinations. Even a moderate amount of daily exercise has an impressive range of benefits to both physical and mental health. These benefits range from lower risk of heart disease, adult-onset diabetes, high-blood pressure and stress to more energy, flexibility and muscle strength. Of course, physical activity can also help combat our much-publicized obesity crisis. In addition, by enabling people to drive and pollute less, active transportation can reduce the number of traffic collisions and lead to lower asthma rates.



### Did you know...?

- 55% of American adults do not meet minimum recommended levels of physical activity.<sup>1</sup>
- Two-thirds of adults, and nearly one-third of children, are considered overweight or obese, with obesity-related health care costs now estimated at \$160 billion per year.<sup>2</sup>
- Residents in communities with sidewalks are 65% more likely to walk.<sup>3</sup>
- Teens who walk or bike to school watch less TV and are less likely to smoke.<sup>4</sup>
- The health benefits to individuals of walking and biking have major financial implications for society, since the federal and state governments pay 44% of health care costs.<sup>5</sup>

<sup>1</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see "Health and Environment" fact sheet)

<sup>2</sup> [www.partnership4at.org/why/benefits](http://www.partnership4at.org/why/benefits)

<sup>3</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see "Health and Environment" fact sheet)

<sup>4</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see "Youth" fact sheet)

<sup>5</sup> [www.railstotrails.org/policy/active-transportation-for-america/quantifying-benefits/#healthben](http://www.railstotrails.org/policy/active-transportation-for-america/quantifying-benefits/#healthben)

## Mobility

Active transportation gives people who cannot drive more and cheaper options for getting around independently to meet every day needs. Those who benefit most from improvements to walking and biking include children (particularly for going to school); many seniors and people with disabilities; and low-income people, for whom the cost of owning and operating a car can be prohibitive.



Transportation options are also important for drivers who would like to spend less time behind the wheel shuttling themselves or others around. Drivers benefit from less congestion and demand for parking, and even a small number of people shifting to walking and biking can have an outsized impact on traffic. (The impact is similar to water filling up a slow-draining sink or bathtub and spilling over from even a small change in water flow.)

### Did you know...?

- In a typical community, roughly a third of people cannot drive due to age, disabilities or low income.<sup>6</sup>
- In 1969, almost half of children went to school on foot or by bike; by 2009, only 13% did.<sup>7</sup>
- Seniors who do not drive make 65% fewer trips to visit family, see friends or go to church.<sup>8</sup>
- 28% of all trips are one mile or less yet two-thirds of these trips are made by car.<sup>9</sup>
- The 3% drop in vehicle miles traveled in the economic crisis of 2008 produced a 30% drop in peak-period congestion during that year.<sup>10</sup>

<sup>6</sup> [www.vtpi.org/nmt-tdm.pdf](http://www.vtpi.org/nmt-tdm.pdf)

<sup>7</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see “Youth” fact sheet)

<sup>8</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see “Older Adults” fact sheet)

<sup>9</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see “Health and Environment” fact sheet)

<sup>10</sup> [www.railstotrails.org/policy/active-transportation-for-america/quantifying-benefits/#healthben](http://www.railstotrails.org/policy/active-transportation-for-america/quantifying-benefits/#healthben)

## Neighborhood livability

To the extent that promoting active transportation leads people to walk and bike more and to drive less, it can improve the quality of life in our neighborhoods in important ways. When residents are out on foot or by bike, they interact more with neighbors. Residential streets become calmer and quieter, which, again, encourages interaction. Streets become safer, not only in terms of traffic but also in terms of crime, since pedestrians and cyclists “put more eyes on the street.” In ways that are rarely appreciated, walking and biking build community and create “social capital.”

### Did you know...?

- Improving sidewalks, trails and other places for active transportation creates more attractive and vibrant communities. It is in such places that people typically interact in public, as they stand, wait, socialize and window-shop.<sup>11</sup>
- Perhaps contrary to popular belief, per capita crime rates tend to be lower in more walkable communities. Better conditions for walking increases the number of active participants, who act as deterrents to illegal or anti-social behavior and are readier to report threats.<sup>12</sup>

<sup>11</sup> [www.vtpi.org/nmt-tdm.pdf](http://www.vtpi.org/nmt-tdm.pdf)

<sup>12</sup> [www.vtpi.org/nmt-tdm.pdf](http://www.vtpi.org/nmt-tdm.pdf)



## Economy

Active transportation can benefit the bottom line of households, businesses and cities. The economic benefits of walking and biking include lower transportation costs for individuals and families; increased property values in traffic-calmed neighborhoods; savings to cities from less wear and tear on streets and less demand for roadway improvements and parking lots; a greater ability for cities and the region to attract new residents and employers; and a potential boost to regional tourism.

### Did you know....?

- The average annual cost for owning and operating a car is almost \$8,600.<sup>13</sup>
- Car-dependent households devote 20% more income to transportation than households in communities with more pedestrian- and bicycle-friendly streets.<sup>14</sup>
- Homes in neighborhoods with a high WalkScore sell for \$4,000 to \$34,000 more than the average home.<sup>15</sup>
- 81% of millennials [generally speaking, people born in the 1980s and 1990s] say affordable and convenient transportation alternatives are at least somewhat important when deciding where to live and work.<sup>16</sup>

<sup>13</sup> <https://www.aaa.com/autorepair/articles/what-does-it-cost-to-own-and-operate-a-car>

<sup>14</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see “Economy” fact sheet)

<sup>15</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see “Economy” fact sheet)

<sup>16</sup> “Investing in Place for Economic Growth and Competitiveness,” American Planning Association, May 2014

## Environment

In enabling people to make short trips on foot or by bike instead of by car, active transportation can help us address a number of environmental challenges. The most discussed, and perhaps most critical, environmental benefits of active transportation are reduced air pollution and emissions of greenhouse gases. They are not the only ones, however. Other environmental benefits include energy savings; less noise pollution; less water pollution; and even reduced pressure to develop agricultural and open space.

### Did you know....?

- 30–45% of Americans live in areas impacted by traffic-related air pollution.<sup>17</sup>
- Short car trips pollute more per mile because engines are less efficient during the first few minutes of operation. Because walking and biking tend to substitute for short trips, they provide relatively large energy savings: a 1% shift from driving to walking or biking reduces fuel consumption 2–4%.<sup>18</sup>
- Driving can lead to water pollution from car fluids washing off streets and highways in the form of run-off; and from air pollution “depositing” into water bodies.<sup>19</sup>
- Driving requires 15 times as much space—in the form of roads and parking—than biking, and about 100 times as much as walking.<sup>20</sup>

<sup>17</sup> <http://atpolicy.org/resources/making-the-case-for-complete-streets/factsheets/> (see “Health and Environment” fact sheet)

<sup>18</sup> [www.vtpi.org/nmt-tdm.pdf](http://www.vtpi.org/nmt-tdm.pdf)

<sup>19</sup> [water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/airdeposition\\_index.cfm](http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/airdeposition_index.cfm)

<sup>20</sup> [www.vtpi.org/nmt-tdm.pdf](http://www.vtpi.org/nmt-tdm.pdf)

# 3 | Equity and public health

## Overview of equity analysis

Certain communities and populations have been marginalized to varying extents by society's over-reliance on cars. Children and many seniors, for example, cannot drive. Lower-income individuals are less likely to own cars and more likely to be stretched financially by transit costs. Limited mobility restricts people's access to jobs, school and other crucial destinations and services. Active transportation can begin to address some of these challenges, since biking and especially walking are affordable transportation options.



In California, the largest source of grant funds for walking and bicycling projects is the California Transportation Commission's Active Transportation Program (ATP). In recognition of transportation's social and equity impacts, the scoring criteria under the ATP strongly favor grant applications for projects that increase access between disadvantaged communities and community resources such as school, employers, parks, medical facilities and community centers. Under the ATP's third funding cycle, in 2017, all of the approximately 50 projects selected for funding under the program's two state-level competitions qualified as directly benefiting disadvantaged communities. For purposes of the ATP, disadvantaged communities are generally defined as meeting certain criteria relating to median household income, environmental pollution and student eligibility to free or reduced-price school meals.

This chapter presents the results of a countywide equity analysis that was conducted as part of the Regional Walk and Bike Plan. The analysis examined the ATP's three indicators relating to disadvantaged communities, plus two additional measures regarding vulnerable populations, at various geographic scales throughout Kings County. The five indicators are:

- Median household income.
- Exposure and sensitivity to environmental pollution.
- Number of students eligible for free or reduced-price school lunch.
- School-age youth as percentage of the population.
- Seniors as percentage of the population.

The sources of the data provided in this section are:

- Median household income and school-age youth and seniors as percentage of the population: U.S. Census Bureau's 2015 American Community Survey 5-year estimates (covering 2011–2015).
- Exposure and sensitivity to environmental pollution: CalEnviroScreen 3.0.
- Number of students eligible for free or reduced-price school lunch: 2016–17 California Longitudinal Pupil Achievement Data System (CALPADS).

**Note:** Data on some indicators is not available for certain geographic areas, typically due to those areas having small sample sizes.

## Household income

Income is a strong predictor of health and other life outcomes. Among other things, higher income increases access to healthcare, options for active living and fresh, healthy food, and is associated with lower exposures to environmental pollution.

As shown below, Kings County, all of its cities and all but one of its unincorporated communities have a lower median household income than does California as a whole.

**Table 3.1 | Median household income**

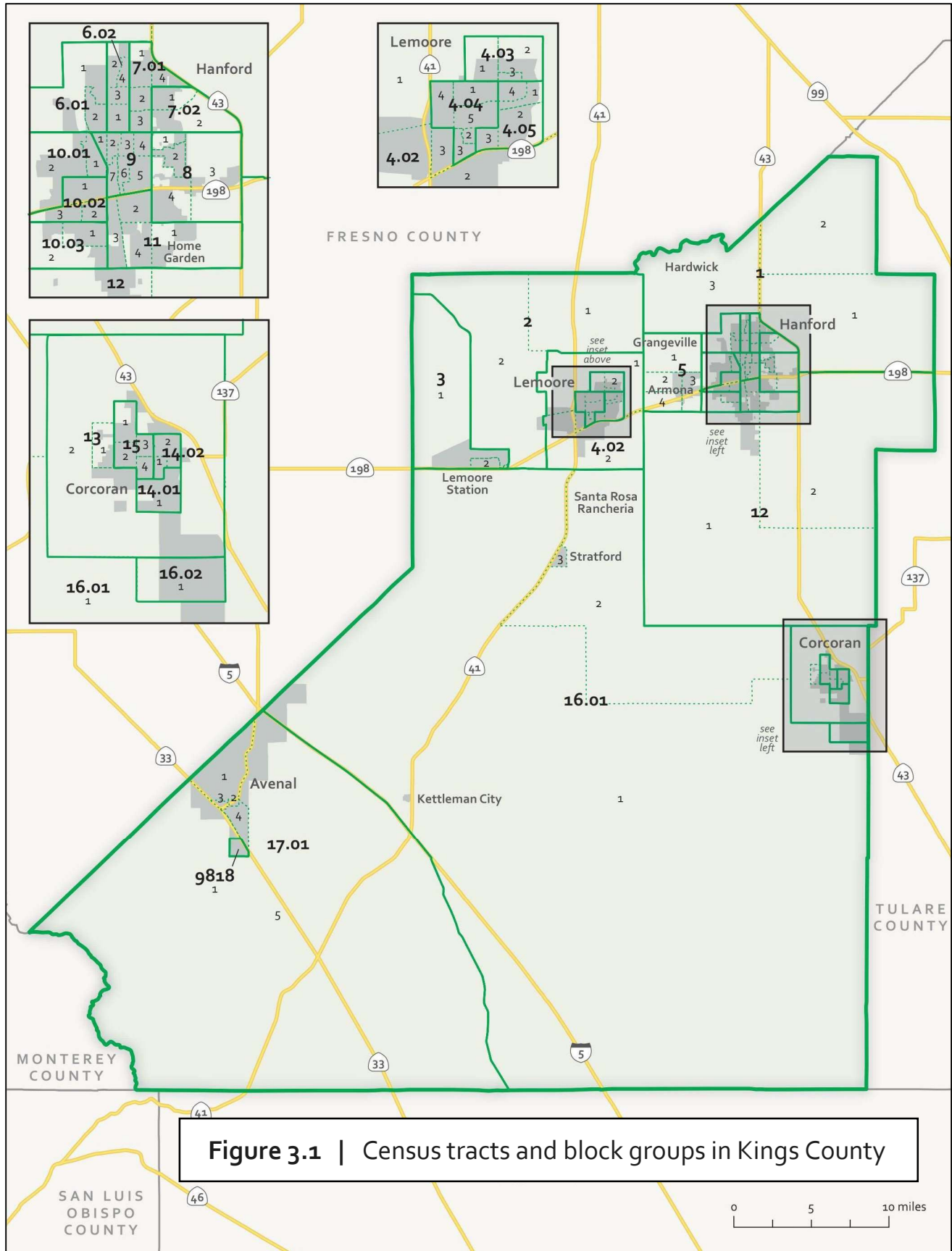
<i>State, county, cities</i>		<i>Unincorporated communities</i>	
California	\$61,818	Armona	\$35,500
Kings County	\$46,481	Grangeville	\$75,313
Avenal	\$32,432	Hardwick	n/a
Corcoran	\$31,831	Home Garden	\$32,411
Hanford	\$53,986	Kettleman City	\$34,286
Lemoore	\$49,623	Lemoore Station	\$41,552
		Stratford	\$22,401

Information on household income is also available at the census tract and census block group levels. (A block group is the smallest geographical unit for which the U.S. Census Bureau publishes sample data.) Data is available for 25 of the county's 27 census tracts (all except the census tracts covering the state prisons at Avenal and at Corcoran) and for 75 block groups. Of these, 14 census tracts and 45 block groups have a median household income that is less than 80% of the statewide median. The table below lists the county's five census tracts and ten block groups with the lowest median household income, including income as a percentage of the statewide median. A map of the county's census tracts and block groups is shown on the next page. Appendix A-1 provides data on median household income for all census tracts and block groups in Kings County.

**Table 3.2 | Areas with lowest median household income**

<i>Census tract</i>	<i>General location or area</i>	<i>Income</i>	<i>% of statewide median</i>
14.02	Corcoran central area	\$25,089	41%
13	Surrounding Corcoran	\$30,191	49%
11	Hanford SE side, Home Garden	\$30,841	50%
17.01	Avenal, Kings County SW side	\$32,432	52%
15	Corcoran northwest side	\$33,654	54%

<i>Census tract</i>	<i>Block group</i>	<i>General location or area (of census tract)</i>	<i>Income</i>	<i>% of statewide median</i>
9	5	Hanford central area	\$22,106	36%
11	3	Hanford southeast side, Home Garden	\$22,390	36%
16.01	3	Kings County central area, Stratford, Kettleman City	\$22,401	36%
15	2	Corcoran northwest side	\$23,333	38%
14.02	1	Corcoran central area	\$24,432	40%
14.02	2	Corcoran central area	\$25,201	41%
13	1	Surrounding Corcoran	\$25,882	42%
17.01	4	Avenal, Kings County southwest side	\$25,938	42%
11	2	Hanford southeast side, Home Garden	\$27,448	44%
10.02	2	Hanford west side	\$27,740	45%





## Environmental pollution

Some communities are more exposed than others to environmental pollution—for example, in the form of dirty air and contaminated water. At the same time, some populations, such as children and seniors, are more sensitive to pollution. A State of California online tool called CalEnviroScreen (version 3.0), identifies communities—based on a variety of environmental and socioeconomic indicators—that are disproportionately burdened by multiple sources of pollution and with population characteristics that make them more sensitive to pollution. High CalEnviroScreen scores are “bad,” reflecting a high pollution burden and/or sensitivity to pollution; they are associated with adverse health impacts that affect vulnerable populations.

CalEnviroScreen scores are available for 25 of Kings County’s census tracts (all except the census tracts covering the state prisons at Avenal and at Corcoran). Of these, 23 are among the half of census tracts statewide with the highest (or worst) scores for pollution burden and sensitivity to pollution.

The table below lists the census tracts in Kings County with CalEnviroScreen scores in the 75th percentile of census tracts statewide. (Scores have been rounded to the nearest unit.) This means that their score is higher, or “worse,” than that of 75% of census tracts statewide or, in other words, that they are among the 25% most disadvantaged census tracts in the state under this measure. Appendix A-1 provides CalEnviroScreen scores for all census tracts in Kings County.

**Table 3.3 | Areas with highest CalEnviroScreen scores**

<i>Census tract</i>	<i>General location or area</i>	<i>CES 3.0 percentile</i>
<i>90<sup>th</sup> percentile and higher</i>		
11	Hanford southeast side, Home Garden	97
<i>85<sup>th</sup> – 90<sup>th</sup> percentile</i>		
16.01	Kings County central area, Stratford, Kettleman City	89
13	Surrounding Corcoran	88
8	Hanford east side	86
10.03	Hanford southwest side	86
<i>80<sup>th</sup> – 85<sup>th</sup> percentile</i>		
10.02	Hanford west side	83
3	NAS Lemoore and Lemoore Station	82
<i>75<sup>th</sup> – 80<sup>th</sup> percentile</i>		
2	North and west of Lemoore	80
5	Armona, Grangeville	77
14.02	Corcoran central area	77
17.01	Avenal, Kings County southwest side	75

## School meals

The National School Lunch Program, administered in California by the state's Department of Education, aims to provide nutritionally balanced school meals for free or at reduced prices to qualifying low-income students. The percentage of students who are eligible for free or reduced-price meals (FRPM) at school is broadly reflective of an area's income level.

**Table 3.4 | FRPM-eligible students**

<i>State, county, school district</i>	<i>Rate</i>
California	58%
Kings County	69%
Armona Union Elementary	82%
Central Union Elementary	53%
Corcoran Joint Unified	83%
Hanford Elementary	81%
Hanford Joint Union High	60%
Island Union Elementary	39%
Kings County Office of Education	72%
Kings River-Hardwick Union Elementary	31%
Kit Carson Union Elementary	80%
Lakeside Union Elementary	91%
Lemoore Union Elementary	63%
Lemoore Union High	45%
Pioneer Union Elementary	43%
Reef-Sunset Unified	90%

The percentage of public school students in Kings County who were FRPM-eligible in the 2016–2017 academic year was almost 10 percentage points higher than in California as a whole (figures have been rounded to the nearest unit). The percentage was also higher for nine of the county's 14 school districts and also for a majority of individual schools in the county. The table below lists the schools in Kings County in which 90% or more of students were FRPM-eligible. Appendix A-2 provides figures for all schools in Kings County.

**Table 3.5 | Highest percentage of FRPM-eligible students**

<i>School</i>	<i>School district</i>	<i>Rate</i>
Mission Community Day	Corcoran Joint Unified	100%
Hanford Community Day	Hanford Joint Union High	100%
JC Montgomery	Kings County Office of Education	100%
Kings Community	Kings County Office of Education	100%
Adelante High	Reef-Sunset Unified	100%
Lincoln Elementary	Hanford Elementary	97%
Tamarack Elementary	Reef-Sunset Unified	97%
Hanford Elem. Comm. Day	Hanford Elementary	95%
Parkview Middle	Armona Union Elementary	95%
Armona Elementary	Armona Union Elementary	94%
Roosevelt Elementary	Hanford Elementary	93%
Lee Richmond Elem.	Hanford Elementary	92%
Kettleman City Elem.	Reef-Sunset Unified	92%
Lakeside Elementary	Lakeside Union Elementary	91%

## School-age youth

Being able to walk and bike safely is essential for children, since they cannot drive and must often get around unaccompanied by an adult. Because so many of the trips made by children are school-related, it is especially important for communities to provide safe walking and biking routes to school.

According to information from the U.S. Census Bureau, Kings County has a higher percentage of school-age children and teenagers (ages 5–17) than does California as a whole. So do two of its cities (Hanford and Lemoore) and all the unincorporated communities except for Lemoore Station. (Figures have been rounded to the nearest unit)

**Table 3.6 |** School-age youth as percentage of the population

State, county, cities		Unincorporated communities	
California	17%	Armona	30%
Kings County	20%	Grangeville	25%
Avenal	14%	Hardwick	22%
Corcoran	13%	Home Garden	26%
Hanford	22%	Kettleman City	20%
Lemoore	21%	Lemoore Station	17%
		Stratford	22%

Of the 27 census tracts in Kings County, a large majority (21) have a higher percentage of school-age youth than California as a whole, as do 55 of the county's 81 block groups. The table below lists the county's five census tracts and ten block groups with the highest percentage of school-age youth. Appendix A-1 provides figures for all the census tracts and block groups in the county.

**Table 3.7 |** Areas with the highest percentage of school-age youth

Census tract	General location or area		Rate
13	Surrounding Corcoran		27%
11	Hanford southeast side, Home Garden		27%
6.01	Hanford northwest side		25%
9	Hanford central area		25%
5	Armona, Grangeville		25%

Census tract	Block group	General location or area (of census tract)	Rate
4.04	2	Lemoore central area	43%
10.02	3	Hanford west side	36%
4.05	3	Lemoore east side	36%
9	6	Hanford central area	35%
8	4	Hanford east side	34%
5	3	Armona, Grangeville	33%
11	3	Hanford SE side; Home Garden	33%
4.04	3	Lemoore central area	32%
17.01	4	Avenal, Kings County SW side	31%
15	2	Corcoran northwest side	30%

## Seniors

Pedestrian safety is a particular concern for seniors. They are especially vulnerable users of the transportation system, as demonstrated by the fact that in many communities they make up a disproportionate percentage of the people killed or injured in traffic collisions.

The flip side of Kings County's high percentage of youth (see previous section) is a low percentage of seniors. The county and all of its cities and unincorporated communities have a lower percentage of people who are 65 years old and over than does California as a whole. (Figures have been rounded to the nearest unit)

**Table 3.8 | Seniors as percentage of the population**

<i>State, county, cities</i>		<i>Unincorporated communities</i>	
California	13%	Armona	9%
Kings County	9%	Grangeville	7%
Avenal	5%	Hardwick	3%
Corcoran	6%	Home Garden	10%
Hanford	11%	Kettleman City	2%
Lemoore	7%	Lemoore Station	0%
		Stratford	10%

Even if the population of Kings County is relatively young, eight of the county's 27 census tracts and 21 of its 81 block groups have a higher percentage of seniors than California as a whole. The table below lists the county's five census tracts (plus one tied for fifth) and ten block groups with the highest percentage of seniors. Appendix A-1 provides figures for all the census tracts and block groups in the county.

**Table 3.9 | Areas with the highest percentage of seniors**

<i>Census tract</i>	<i>General location or area covered</i>		<i>Rate</i>
10.01	Hanford northwest side		19%
6.02	Hanford north of W Grangeville between N 11 <sup>th</sup> and N Douty		16%
7.02	Hanford north of W Grangeville and east of N 10 <sup>th</sup>		15%
2	North and west of Lemoore		15%
1	North and northeast of Hanford		14%
7.01	Hanford north of W Grangeville between N Douty and N 10 <sup>th</sup>		14%

<i>Census tract</i>	<i>Block group</i>	<i>General location or area (of census tract)</i>	<i>Rate</i>
8	3	Hanford east side	23%
6.02	3	Hanford north of W Grangeville btwn N 11 <sup>th</sup> and N Douty	23%
5	4	Armona, Grangeville	22%
1	1	North and northeast of Hanford	21%
7.01	2	Hanford north of W Grangeville btwn N Douty and N 10 <sup>th</sup>	20%
1	3	North and northeast of Hanford	20%
10.01	1	Hanford northwest side	19%
10.01	2	Hanford northwest side	19%
7.01	3	Hanford north of W Grangeville btwn N Douty and N 10 <sup>th</sup>	18%
2	1	North and west of Lemoore	17%



## Overview of public health analysis

Common sense and hard data both tell us that sedentary lifestyles are taking a heavy toll on our health. According to California Active Communities, “In California, physical inactivity...is by a large margin the most prevalent chronic disease risk factor, contributing to an estimated 30,000 deaths each year.”

As the evidence has mounted, the world of transportation planning (and also of land use planning) has responded by paying increased attention to the connection between active transportation and public health. Walking and biking are among the most accessible forms of physical activity, promising multiple health benefits. Potential health benefits include preventing or controlling chronic diseases such as high blood pressure, heart disease, stroke and diabetes; helping to maintain a healthy weight; and improving mood and lowering stress levels.

An especially relevant example of the increased attention paid to the link between active transportation and public health is found in the California Transportation Commission’s guidelines for the Active Transportation Program (ATP). The scoring criteria under the ATP strongly favor grant applications for projects that not only increase disadvantaged communities’ access to community amenities (see introduction to equity section) but also projects that can demonstrate a public health need and that benefit populations with high risk factors for various health issues.

This chapter presents the results of a countywide public health analysis that was conducted as part of the Regional Walk and Bike Plan. The analysis examined seven measures, or indicators, listed below, related to public health at various geographic scales throughout Kings County.

- Percentages of students not meeting certain physical fitness standards.
- Percentage of adults who walk regularly.
- Percentage of adults in fair or poor health.
- Percentage of teenagers considered overweight or obese.

- Percentage of adults considered obese.
- Percentage of adults ever diagnosed with asthma.
- Percentage of adults ever diagnosed with diabetes.

The data on youth physical fitness comes from the California Department of Education. The data for all the other indicators is from the California Health Interview Survey (CHIS), for the year 2014.

**Note:** Data on some indicators is not available for certain geographic areas, typically due to those areas having small sample sizes.

## Youth physical fitness

Regular physical activity is perhaps even more essential for children and teenagers, given their developing bodies, than for adults. The California Department of Education assesses public school students in the 5th, 7th and 9th grades across the state under six measures of fitness. The two measures most related to physical activity are aerobic capacity and body composition (which generally describes the percentages of fat, bone and muscle in human bodies). Student results that do not fall within the “Healthy Fitness Zone” under a fitness measure are generally classified as “Needs Improvement” or, for worse results, as “Needs Improvement—Health Risk” (NI-HR).

The table below shows the number of schools where the percentages of students in each of three grade levels who fall in the NI-HR category for aerobic capacity and for body composition are higher than the statewide percentages. The numbers are shown as fractions: for example, 19/30 in the table below means that at 19 out of 30 schools countywide that have a 5th grade, and for which results were reported, a higher percentage of students fall within the NI-HR category than statewide. (To protect confidentiality, the Department of Education does not show scores for when the number of students tested in a school at a given grade level was 10 or less.) Appendix B presents the results for all the schools.

**Table 3.10 |** Percent of students in the “Needs Improvement—Health Risk” category

	<i>5<sup>th</sup> grade</i>	<i>7<sup>th</sup> grade</i>	<i>9<sup>th</sup> grade</i>
Aerobic capacity	19 / 30	7 / 19	7 / 10
Body composition	18 / 30	11 / 19	5 / 10

## Adult physical activity

Regular exercise is important in maintaining health and preventing disease. Physical activity can help control weight; strengthen bones and muscles; reduce the risk of obesity, diabetes, heart disease, some cancers and other diseases; and improve mental health and mood. Guidelines by the U.S. Office of Disease Prevention and Health Promotion recommend that adults participate in at least 150 minutes a week of moderate-intensity physical activity such as walking or 75 minutes a week of vigorous-intensity aerobic physical activity such as running.



A significantly lower percentage of adults (ages 18 and over) in Kings County had walked for transportation or leisure for at least 150 minutes in a previous one-week period than in California as a whole. As shown in the table below, the rate was also lower in all of the county’s cities and zip codes and in the four unincorporated communities for which data is available. (The map of zip codes in Kings County is shown on the next page.)

**Table 3.11 | Adults walking regularly**

<i>State, county, city</i>	<i>Rate</i>
California	33.0%
Kings County	24.2%
Avenal	22.2%
Corcoran	25.4%
Hanford	24.6%
Lemoore	25.5%

<i>Unincorporated community</i>	<i>Rate</i>
Armona	20.9%
Grangeville	n/a
Hardwick	22.8%
Home Garden	n/a
Kettleman City	22.9%
Lemoore Station	22.4%
Stratford	n/a

<i>Zip code</i>	<i>General location or area</i>	<i>Rate</i>
93202	Armona south of Front Street	20.9%
93204	Avenal and surroundings	22.2%
93212	Corcoran and surroundings	26.1%
93230	Hanford, Grangeville, Hardwick, Home Garden	24.2%
93239	Kettleman City and surroundings	22.9%
93245	Lemoore, Lemoore Station, Santa Rosa Rancheria	24.6%
93266	Stratford and surroundings	22.7%

## Health status

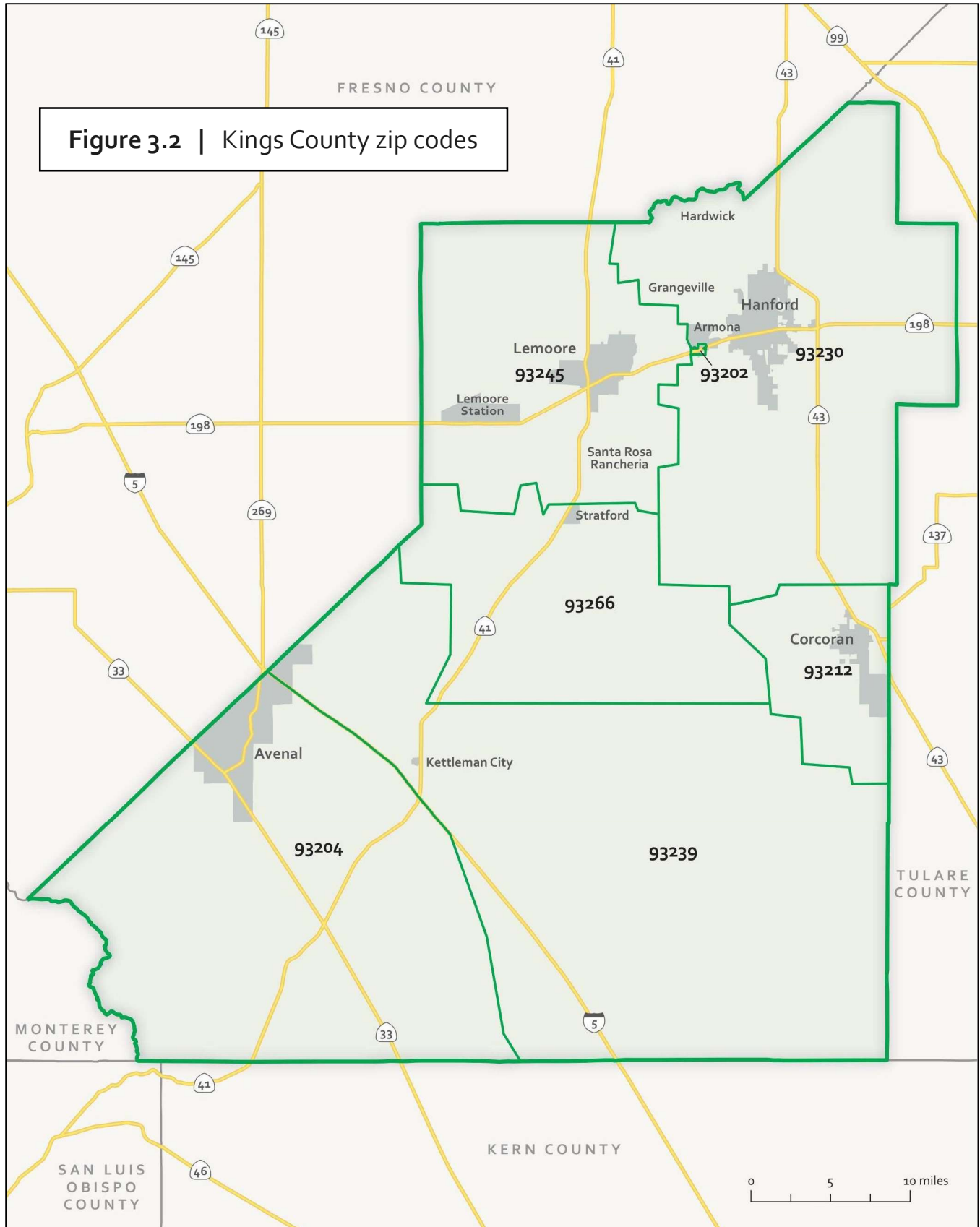
A significantly higher percentage of adults (ages 18–64) in Kings County reported being in poor or only fair health than in California as a whole. As shown in the table below, and with the exception of Lemoore Station, the rate was also higher in all of the cities, unincorporated communities and zip codes for which data is available.

**Table 3.12 | Adults reporting fair or poor health**

<i>State, county, city</i>	<i>Rate</i>
California	19.2%
Kings County	28.6%
Avenal	n/a
Corcoran	37.2%
Hanford	26.0%
Lemoore	23.9%

<i>Unincorporated community</i>	<i>Rate</i>
Armona	41.4%
Grangeville	n/a
Hardwick	n/a
Home Garden	n/a
Kettleman City	40.6%
Lemoore Station	18.1%
Stratford	n/a

<i>Zip code</i>	<i>General location or area</i>	<i>Rate</i>
93202	Armona south of Front Street	41.4%
93204	Avenal and surroundings	n/a
93212	Corcoran and surroundings	37.1%
93230	Hanford, Grangeville, Hardwick, Home Garden	27.6%
93239	Kettleman City and surroundings	40.6%
93245	Lemoore, Lemoore Station, Santa Rosa Rancheria	24.8%
93266	Stratford and surroundings	37.3%





## Overweight and obesity

Overweight and obesity are the accumulation of excess body fat. These conditions are generally considered medically unhealthy, since they can lead to a host of long-term complications such as diabetes, high blood pressure, heart disease and reduced life expectancy. Adults are commonly considered obese if their “body mass index” (BMI) is 30 units or higher (BMI is a measure that relates a person’s weight to his or her height). Overweight for adults is defined as a BMI of 25 units or higher. Definitions for children vary depending on age.



As shown in the table below, Kings County and all its cities and zip codes for which data is available have a significantly higher percentage than California as a whole of teens (ages 12–17) whose BMI is in the 85th percentile of the population or higher. Similarly, the county and all its cities, unincorporated communities (except Lemoore Station) and zip codes have a significantly higher percentage than statewide of adults (ages 18 and over) who had a BMI of 30 or above, based on self-reported weight and height.

**Table 3.13 |** Overweight / obese teens; obese adults

<i>State, county, city</i>	<i>Teen rate</i>	<i>Adult rate</i>
California	33.1%	25.8%
Kings County	43.1%	36.6%
Avenal	n/a	35.0%
Corcoran	44.3%	42.8%
Hanford	41.0%	36.4%
Lemoore	44.0%	33.9%

<i>Unincorporated community</i>	<i>Teen rate</i>	<i>Adult rate</i>
Armona	n/a	44.8%
Grangeville	n/a	n/a
Hardwick	n/a	36.8%
Home Garden	n/a	n/a
Kettleman City	n/a	41.4%
Lemoore Station	n/a	24.4%
Stratford	n/a	n/a

<i>Zip code</i>	<i>General location or area</i>	<i>Teen rate</i>	<i>Adult rate</i>
93202	Armona south of Front Street)	n/a	44.8%
93204	Avenal and surroundings)	n/a	35.0%
93212	Corcoran and surroundings)	44.5%	42.2%
93230	Hanford, Grangeville, Hardwick, Home Garden)	41.3%	37.4%
93239	Kettleman City and surroundings)	n/a	41.4%
93245	Lemoore, Lemoore Station, Santa Rosa Rancheria)	43.1%	33.1%
93266	Stratford and surroundings)	n/a	39.4%

## Asthma

Asthma is a chronic lung disease that inflames and narrows the airways. It can cause repeated episodes of wheezing, chest tightness, shortness of breath and coughing. Asthma attacks are triggered by a number of factors, including smog, dust, smoke and pollen. Although it cannot be cured, asthma can be managed with appropriate treatment and medication.

The table below shows the percentages of adults (ages 18 and over) in various areas who have ever been diagnosed with asthma by a doctor. Kings County, as well all its cities, unincorporated communities and zip codes for which data is available, has a higher percentage of asthma-diagnosed adults than California as a whole.



**Table 3.14 | Adults diagnosed with asthma**

<i>State, county, city</i>	<i>Rate</i>
<b>California</b>	<b>13.9%</b>
Kings County	18.4%
Avenal	n/a
Corcoran	18.9%
Hanford	18.7%
Lemoore	20.0%

<i>Unincorporated community</i>	<i>Rate</i>
Armona	16.2%
Grangeville	n/a
Hardwick	18.7%
Home Garden	n/a
Kettleman City	19.0%
Lemoore Station	23.2%
Stratford	n/a

<i>Zip code</i>	<i>General location or area</i>	<i>Rate</i>
93202	Armona south of Front Street)	16.2%
93204	Avenal and surroundings)	n/a
93212	Corcoran and surroundings)	18.6%
93230	Hanford, Grangeville, Hardwick, Home Garden)	18.5%
93239	Kettleman City and surroundings)	19.0%
93245	Lemoore, Lemoore Station, Santa Rosa Rancheria)	19.8%
93266	Stratford and surroundings)	22.5%

## Diabetes

Diabetes is a collection of metabolic diseases characterized by high blood-sugar levels over an extended period. Untreated, diabetes can cause serious health problems such as strokes, heart disease, kidney failure and associated complications. There are two main types of the disease: Type 1, usually diagnosed in children and young adults; and Type 2, traditionally known as “adult-onset diabetes” but being increasingly diagnosed in children as a result of higher childhood obesity rates. Regular physical activity can help prevent or delay Type 2 diabetes from developing.

The table below shows the percentages of adults (ages 18 and over) in various areas who have ever been diagnosed with diabetes by a doctor. Kings County—as well as all its cities, unincorporated communities and zip codes for which data is available, with the exception of Lemoore Station—has a higher percentage of diabetes-diagnosed adults than California as a whole.

**Table 3.15 | Adults ever diagnosed with diabetes**

<i>State, county, city</i>	<i>Rate</i>	
<b>California</b>	<b>8.8%</b>	
Kings County	10.6%	
Avenal	n/a	
Corcoran	15.1%	
Hanford	10.8%	
Lemoore	9.3%	
<i>Unincorporated community</i>		
Armona	13.7%	
Grangeville	n/a	
Hardwick	10.7%	
Home Garden	n/a	
Kettleman City	14.1%	
Lemoore Station	2.8%	
Stratford	n/a	
<i>Zip code</i>	<i>General location or area</i>	<i>Rate</i>
93202	Armona south of Front Street	13.7%
93204	Avenal and surroundings	n/a
93212	Corcoran and surroundings	14.8%
93230	Hanford, Grangeville, Hardwick, Home Garden	11.1%
93239	Kettleman City and surroundings	14.1%
93245	Lemoore, Lemoore Station, Santa Rosa Rancheria	9.1%
93266	Stratford and surroundings	12.8%

# 4 | Community needs assessment

## Overview

Through a planning-level review of existing facilities and of earlier related planning documents, the existing conditions task for the Kings County Regional Walk and Bike Plan began to reveal challenges and deficiencies in the county's pedestrian and bicycle systems. However, those reviews lacked the "user perspective." To gain a meaningful understanding of pedestrian- and bicycle-related needs in Kings County, it was necessary to seek the input of the real experts: people who walk and bike on the county's roads on a regular basis—or who would like to but are discouraged from doing so for various reasons.

The community needs assessment for the Regional Walk and Bike Plan consisted of gathering input from the public on the following issues:

- Barriers, obstacles and challenges to walking and biking in the county;
- Needs and concerns of local pedestrians and cyclists;
- Specific problem areas and locations; and
- Ideas and suggestions for improving conditions.

This chapter describes the various opportunities that KCAG made available for public engagement and participation on these issues. More importantly, the chapter summarizes the community input received.

## Opportunities for public input

Community input on needs was gathered through three main channels. These are discussed in detail in the rest of this chapter:

- Online survey, administered in both English and Spanish. The survey ran for two months, from October 17 through December 17, 2017.
- Interactive map on which people could post comments. The map was also available in both English and Spanish versions, and it was open for comments during the same period as the survey.

- Presentations made at a series of meetings and workshops between mid-October and mid-December 2017.

These engagement opportunities were publicized in the various presentations and in the following additional main ways:

- On the project webpage for the Walk and Bike Plan (English version at [bit.ly/KingsWalknBike](http://bit.ly/KingsWalknBike); Spanish version at [bit.ly/KingsPieyBici](http://bit.ly/KingsPieyBici); see the figure on the next page).
- In a mass email to the approximately 100 people on the project's email distribution list; the list includes city and county staff and officials, representatives of community organizations, advocates, and other stakeholders and interested members of the public.
- On the KCAG website.
- In customized announcements, with a request to forward information to their constituents, to:
  - City and county staff.
  - Local print and online media, namely the Hanford Sentinel, Lemoore Leader, Corcoran Journal and Avenal Chimes
  - The Hanford Chamber of Commerce and Downtown Lemoore Merchants Association.
- In an announcement through the County Superintendent of Schools to all the school districts in the county.
- At the November 29, 2017 meeting of the Stakeholder Advisory Group for the Kings County Regional Transportation Plan / Sustainable Community Strategy.



Figure 4.1 | Screenshot of project webpage

# Kings County Regional Walk and Bike Plan

OCTOBER 2017

How can we make it safer and easier to walk and bike in Kings County? To find out, the Kings County Association of Governments (KCAG) is currently developing a Walk and Bike Plan for the county. The plan will identify the most important projects for walking and biking in each of the county's four cities – Avenal, Corcoran, Hanford and Lemoore – as well as for the rest of the county.

At this point, we are looking for input from the residents of Kings County on your concerns and needs related to walking and biking in your area, and also for your ideas and suggestions on how to improve conditions. Listed below are five ways in which you can provide input.

## WAYS TO PROVIDE INPUT

1. Fill out our survey at [www.surveymonkey.com/r/KingsWalknBike](http://www.surveymonkey.com/r/KingsWalknBike). The survey is open through Sunday, December 17, 2017. Anyone who completes the survey will be eligible to win one of three \$25 gift cards for Amazon.com.
2. Post your comments on our interactive map at [bit.ly/2kLxi4u](http://bit.ly/2kLxi4u) (also through December 17).
3. Submit a comment directly through here by clicking on "Next" at the bottom of the page.
4. Attend KCAG's workshops: (i) Nov. 1, 2017, 6:30 to 8:30 pm, at the Avenal Theater (233 E Kings St., in Avenal); (ii) Nov. 9, 2017, 6:30 to 8:30 pm, at the Kings County Government Center (Building #1, Multi-Purpose Room; 1400 W. Lacey Blvd., in Hanford).
5. Contact Yunsheng Luo (KCAG) at [Yunsheng.Luo@co.kings.ca.us](mailto:Yunsheng.Luo@co.kings.ca.us) or at (559) 852-2584.

Thanks in advance for taking the time to share your thoughts. Your input is important, as it will help us develop recommendations for the Kings County Regional Walk and Bike Plan.

Versión en ESPAÑOL de esta página: [bit.ly/KingsPieyBici](http://bit.ly/KingsPieyBici)



NEXT

Never submit passwords through Google Forms.

## Key themes from the comments

The comments summarized later in this chapter, and listed in the appendices, present a rich picture of the community's thoughts and opinions about walking and biking in Kings County. From these comments, several themes emerge as especially important areas of concern and as key focus areas for improvements:

- The main issues, concerns and needs related to **infrastructure for walking** are:
  - Lack of or discontinuous sidewalks on some key street segments.
  - Cracked, broken or uneven sidewalks.
  - Sidewalk obstructions such as trash, fallen trees, low-hanging branches, tree roots and overgrown vegetation.
  - Lack of walking paths and trails separated from traffic.
  - Lack of crosswalks or of other crossing improvements at some key intersections.
  - Insufficient, or insufficiently bright, street lights.
- The main issues related to **infrastructure for biking** are:
  - Lack of or discontinuous bike lanes on some key street segments.
  - Potholes and rough or uneven pavement.
  - Lack of multi-use paths and trails separated from traffic.
  - Lack of bike-parking racks at some key locations, particularly stores and parks.
  - Insufficient, or insufficiently bright, street lights.
  - The concerns related to sidewalks and crosswalks mentioned above also apply to children riding bikes, since they may use sidewalks and crosswalks legally.
- A number of key issues raised are not infrastructural but instead are of a more **policy-related** nature:
  - Dangerous behavior on the part of drivers (most importantly around schools) in the form of speeding, distracted driving, failure to yield to pedestrians and disregard of cyclists.

- Lack of promotion or encouragement of biking.
- Bike lanes blocked by parked cars.

- Lastly, some of the most salient issues, needs and concerns are related to pedestrian and bicycle planning **only minimally or indirectly**:
  - Scary or threatening dogs (both stray and domestic ones).
  - Vagrants, strangers and other types of individuals perceived as threatening.
  - Uncomfortably hot or cold weather.

## How the needs assessment will be used

The community input on walking and biking concerns and needs will be used during the next task in the planning process to identify potential improvements and formulate recommendations under the Regional Walk and Bike Plan. The recommendations will attempt to respond closely to the community input expressed through the needs assessment, as presented in this chapter. At the same time, the identification of potential improvements and formulation of recommendations will be informed by several other important sources:

- Proposals and recommendations in earlier related plans that were reviewed and summarized under the existing conditions task.
- A simple "call for projects"-type process asking KCAG member-agency staff to suggest projects and other improvements beyond those identified in earlier plans.
- Targeted site visits by the plan consultants to examine physical conditions more closely. The site visits will focus on arterial streets in the three jurisdictions for which pedestrian/bicycle plans have not been prepared: Corcoran, Lemoore and unincorporated Kings County. Arterials are typically the most direct, convenient routes and on which most key destinations are located. For these reasons, arterials attract the bulk of pedestrian, bike and car traffic, and therefore experience the majority of conflicts between drivers and pedestrians or cyclists.

## Online survey

KCAG ran an online survey on walking and biking for two months, from October 17 through December 17, 2017. The survey was administered through SurveyMonkey.com in two versions, English and Spanish, and contained 12 questions, all of which were optional. The survey received 647 responses. (Some responses were incomplete, meaning that not all questions were answered.) Respondents were eligible to win one of three \$25 gift cards for Amazon.com.

Below is a description of each question on the survey and summaries of the responses given. In addition, as indicated under various questions, all relevant comments submitted through the survey are listed in Appendix B. (The comments have been edited lightly for readability.)

It should be noted that the survey was announced to all school districts through the County Office of Education. Many students took the opportunity to respond, with the result that students and people under 18 years of age make up approximately three quarters of the survey respondents. Also, roughly

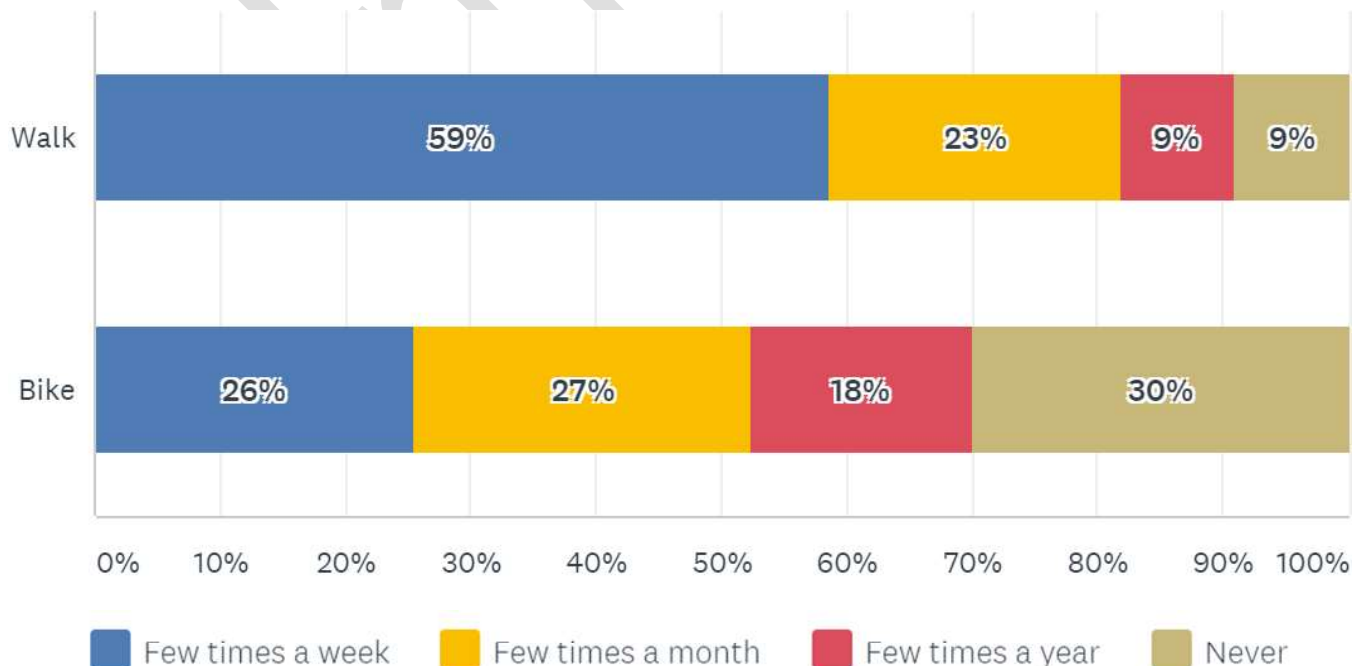
the same percentage of respondents live in Hanford, indicating that the survey announcement was especially successful in reaching schools in that city. At the same time, over 140 non-students and a similar number of non-Hanford residents responded to the survey.

### 1. Walking or biking for recreation

The survey's opening question asked, "How often do you walk or bike for fun or exercise (to go around the neighborhood, around the park, etc.)?" There were four answer choices: "a few times a week," "a few times a month," "a few times a year" and "never." Two rows of answer choices were provided, one for walking and one for biking; 623 people responded regarding walking and 575 responded regarding biking.

As the figure below shows, almost 60% of respondents walk for recreation a few times a week while just over a quarter bike for recreation at the same frequency. At the other end of the spectrum, almost one tenth never walk, and 30% never bike, for recreation.

**Figure 4.2 |** How often respondents walk or bike for fun or exercise

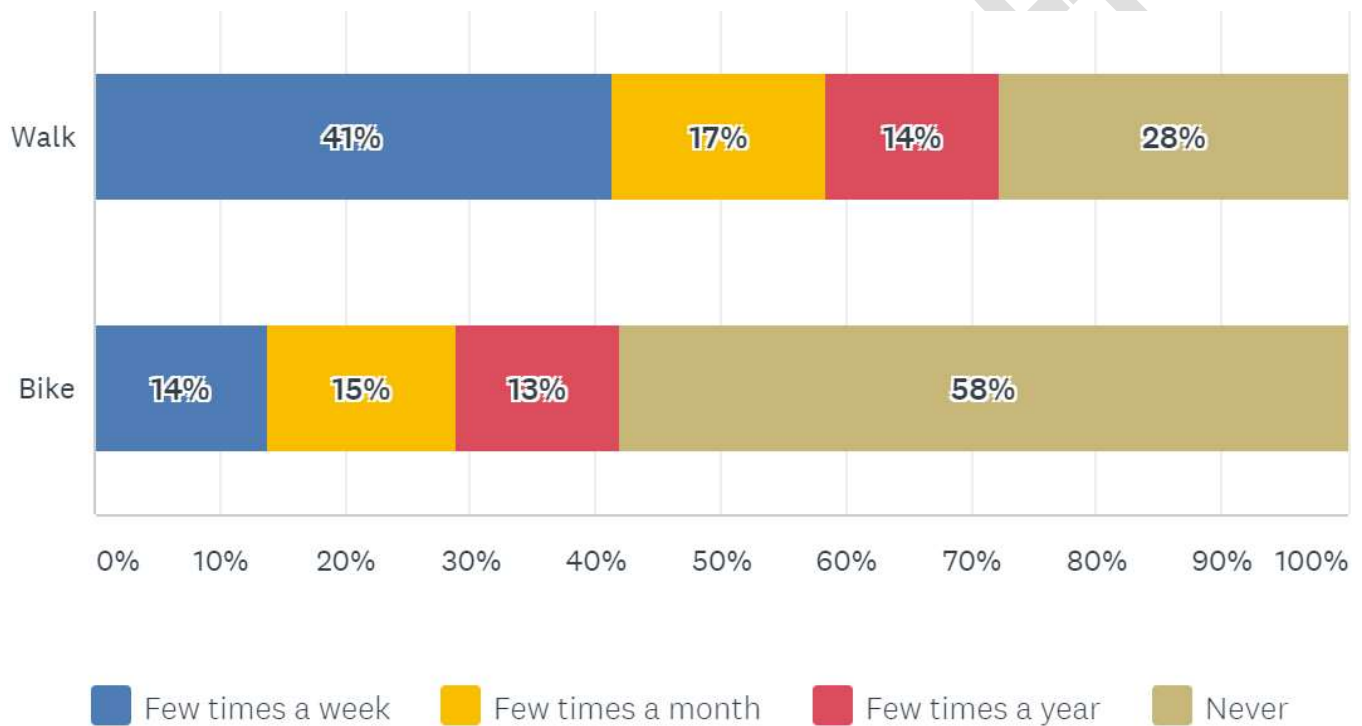


## 2. Walking or biking for transportation

Similarly, Question 2 asked, “How often do you walk or bike for transportation (to go to school, to work, to the store, etc.)?” 615 people responded regarding walking and 562 responded regarding biking.

Just over 40% of respondents walk for transportation a few times a week while 14% bike for transportation at the same frequency (see the figure below). At the other end of the spectrum, almost 30% never walk, and almost 60% never bike, for transportation.

**Figure 4.3 |** How often respondents walk or bike for transportation



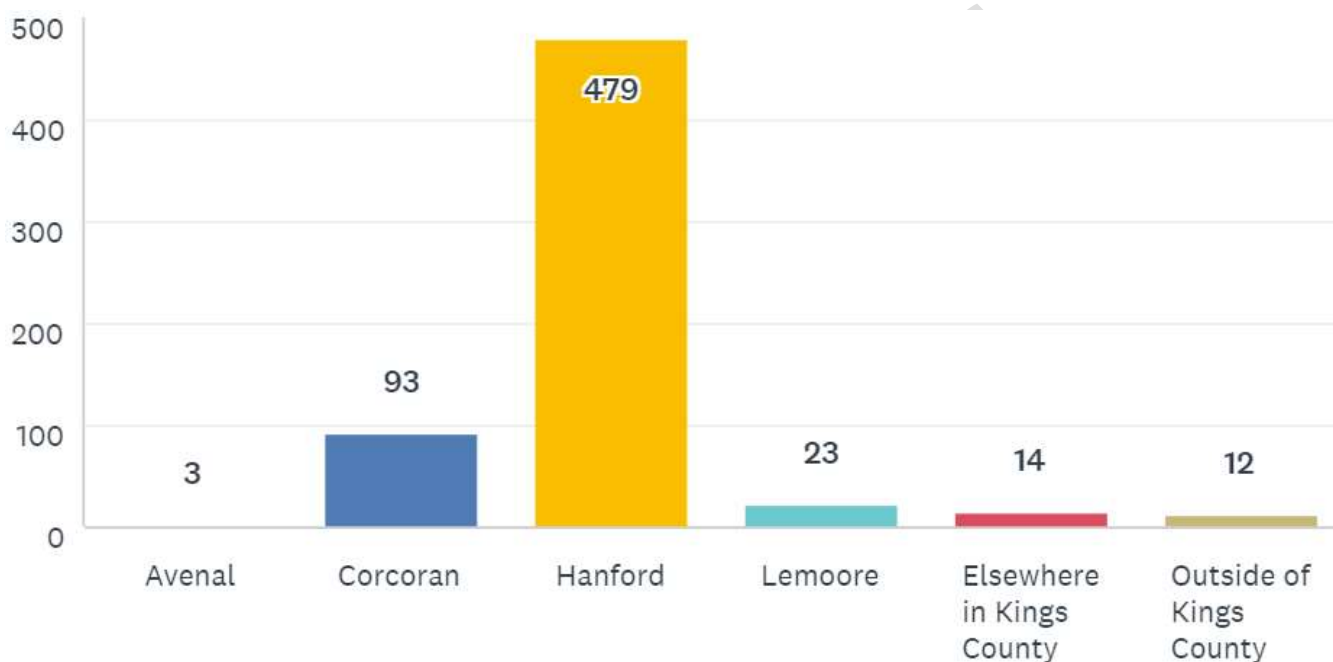


### 3. Place of residence

Question 3 asked, “Where do you live?” 624 people responded to this question. As mentioned earlier,

just over three quarters of respondents (479, or 77%) live in Hanford, while another 93 (15%) live in Corcoran (see the figure below). Small numbers of respondents live in Avenal, Lemoore, elsewhere in Kings County or outside the county.

Figure 4.4 | Where respondents live

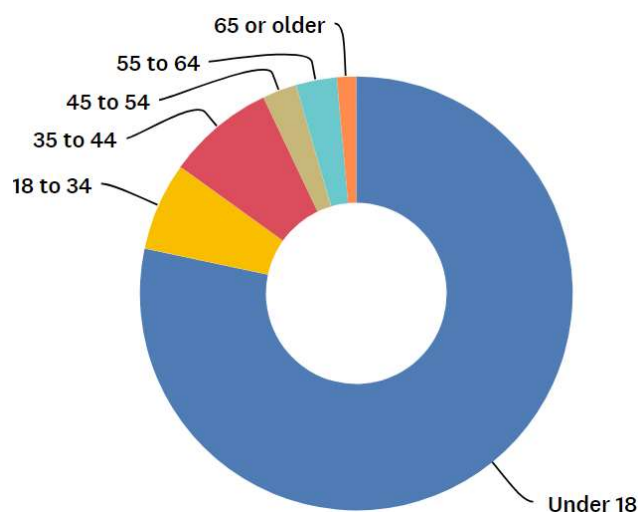


### 4. Age

Question 4 asked, “How old are you?” 623 people responded to this question. The table below and chart to the right show the breakdown of respondents by age group. As mentioned earlier, just over three quarters of respondents (488, or 78%) are under 18 years of age.

	Count	Percent
Under 18	488	78%
18–34	41	7%
35–44	50	8%
45–54	16	3%
55–64	19	3%
65 and older	9	1%
	623	100%

Figure 4.5 | Respondents by age group



## 5. Student, parent/guardian or neither

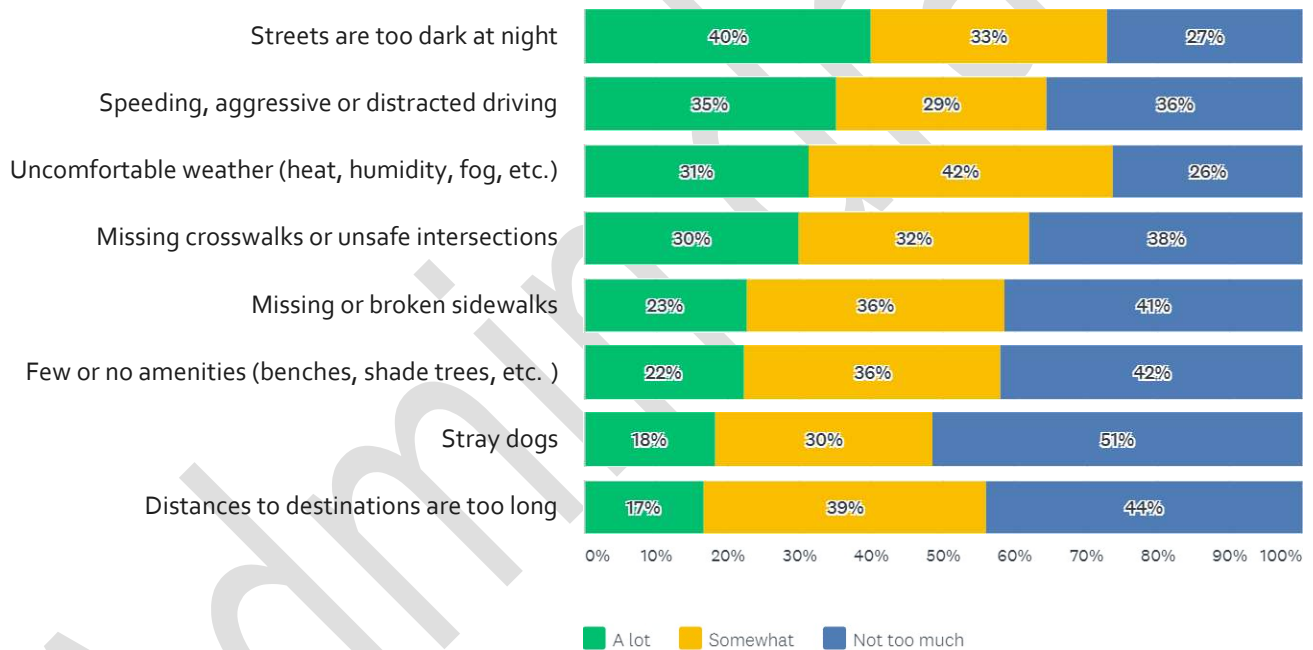
Under Question 5:

- 77% of respondents (482 out of 624) said they are a student at an elementary, middle or high school;
- 12% (76 respondents) indicated that they are the parent or guardian of a student at an elementary, middle or high school; and
- 11% (66 respondents) said they are neither a student nor a parent or guardian.

## 6. Challenges and obstacles to walking

Question 6 listed eight potential challenges and obstacles to walking, and asked respondents, “In your opinion, how much do they discourage you or other people from walking?” (On surveys, the challenges appeared in random order.) The answer choices were “a lot” (shown in the chart below as green) “somewhat” (yellow) and “not too much” (blue). 534 people responded to this question.

**Figure 4.6 | Challenges and obstacles to walking**



As the figure above shows, four challenges are seen by 30% or more of respondents as discouraging people “a lot” from walking. These could be interpreted as the most important or significant obstacles to walking in the county:

- Streets are too dark at night.
- Speeding, aggressive or distracted driving.
- Uncomfortable weather.
- Missing crosswalks or unsafe intersections.

In addition, this question encouraged respondents to discuss any other major challenges to walking, beyond those listed previously. Pertinent comments submitted under this question are listed in Appendix B-1. The only notable additional challenge cited in the comments is personal safety concerns related to the presence of vagrants, strangers and other types of individuals perceived as threatening.

## 7. More about walking

Question 7 asked, “Where (if at all) do you walk for recreation or transportation? What do you most enjoy about walking there? What do you like least?” Appendix B-2 contains the pertinent comments submitted under this question. The places where respondents said they walk most often are:

- To school.
- Around their own neighborhoods.
- To friends’ and relatives’ homes
- To and in parks.
- To neighborhood stores.

The things people most enjoy about walking are:

- Being outside, enjoying the scenery.
- Spending time with friends or family members.
- Having “alone time.”
- The exercise.

Lastly, the things people enjoy least about walking correspond closely to common responses under Question 6:

- Cracked, broken or uneven sidewalks.
- Lack of sidewalks and crosswalks.
- Distracted or speeding drivers, and drivers who don’t yield to pedestrians.
- Streets that are too dark at night.
- Scary dogs, stray dogs.
- Uncomfortably hot or cold weather.

## 8. Pedestrian improvements

Question 8 asked, “What is the one thing (or things) that you would do to improve walking in your area?” Appendix B-3 contains the pertinent comments submitted under this question. The most common suggestions for improving walking generally addressed the main challenges raised under Question 6:

- Sidewalks, walking paths and crosswalks.
- Fixed-up sidewalks, sidewalk maintenance.
- More or brighter street lights.
- Increased police enforcement against unsafe driving, particularly speeding; more stop signs.
- Shade trees.
- Crossing guards around schools.

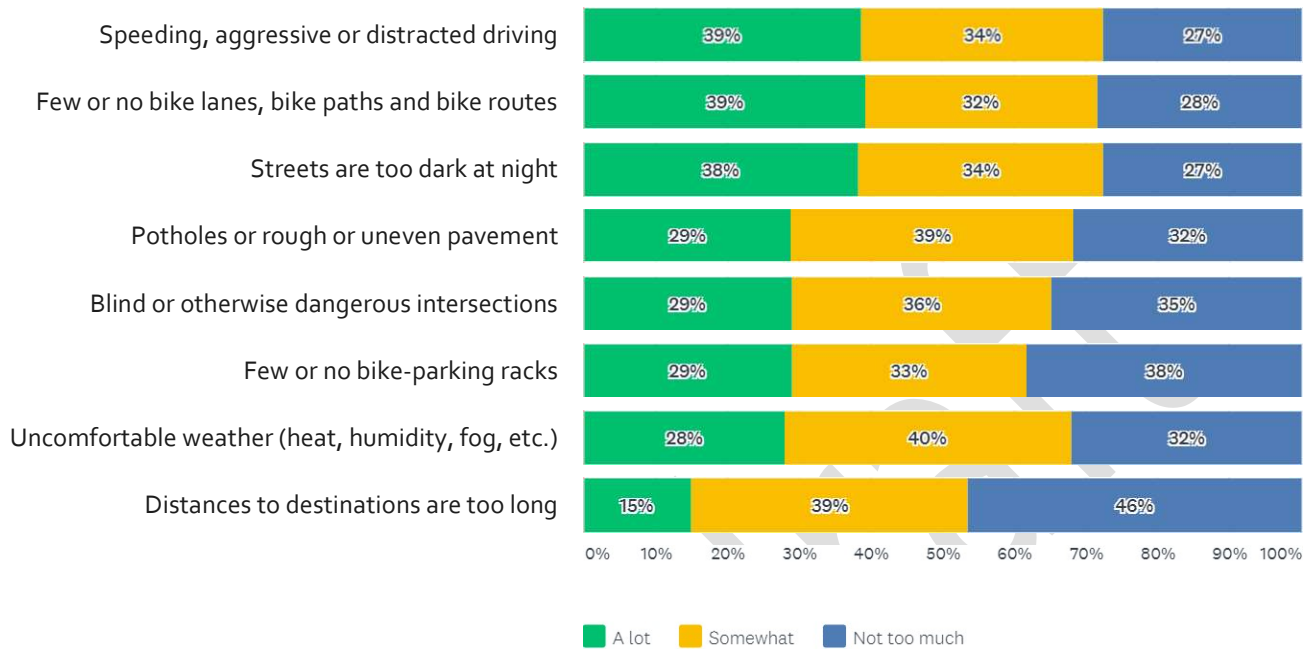
## 9. Challenges and obstacles to biking

Question 9 listed eight potential challenges and obstacles to biking, and asked respondents, “In your opinion, how much do they discourage you or other people from biking?” (The challenges were listed in random order.) The answer choices were “a lot” (shown in the chart on the next page as green) “somewhat” (yellow) and “not too much” (blue). 465 people responded to this question.

As the figure on the next page shows, three challenges are seen by more than 30% of respondents as discouraging people “a lot” from biking. These could be interpreted as the most important or significant obstacles to biking in the county:

- Speeding, aggressive or distracted driving (39% of respondents).
- Few or no bike lanes, bike paths and bike routes (also 39% of respondents).
- Streets are too dark at night (38% of respondents).

In addition, this question encouraged respondents to discuss any other major challenges to biking, beyond those listed previously. Pertinent comments submitted under this question are listed in Appendix B-4. The main additional challenge cited in the comments is the presence on sidewalks of trash, fallen trees, low-hanging branches, weeds and other obstructions. (These responses reflect the fact that children may legally ride their bikes on sidewalks.)

**Figure 4.7 | Challenges and obstacles to biking**

## 10. More about biking

Question 10 asked, “Where (if at all) do you bike for recreation or transportation? What do you most enjoy about biking there? What do you like least?” Appendix B-5 contains the pertinent comments submitted under this question. The places where respondents said they bike most often are almost the same as where they walk most often:

- To school.
- To and in parks.
- To friends’ and relatives’ homes.
- Around their own neighborhoods.
- Around town.

The things people most enjoy about biking are:

- Having a bike lane to ride in.
- Being outdoors, enjoying the scenery.
- The exercise.

Lastly, the things people enjoy least about biking correspond closely to common responses under Question 9:

- Not having a bike lane.
- Fast, heavy traffic
- Distracted or aggressive drivers.
- Potholed streets.
- Cracked, broken or uneven sidewalks.



## 11. Biking improvements

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Question 11 asked, “What is the one thing (or things) that you would do to improve biking in your area?” Appendix B-6 contains the pertinent comments submitted under this question. The most common suggestions for improving biking are:

- More bike lanes; enforcement to keep bike lanes clear of parked cars.
- More bike paths and multi-use trails (separate from traffic).
- Smoother roads, pavement maintenance, pothole repairs.
- More bike-parking racks, particularly at stores.
- More or brighter street lighting.
- More sidewalks, smoother sidewalks, sidewalk maintenance; also, more crosswalks. (These responses reflect the fact that children may legally ride their bikes on sidewalks and on crosswalks.)

- Lower speed limits; more stop signs.
- Signage to make drivers aware of cyclists.
- Bike-to-work, bike-to-school days.

## 12. Drawing for gift cards; sign-ups for updates and announcements

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- 240 people provided their email address to be entered in the drawing for one of three \$25 gift cards for Amazon.com. (The drawing was held using an online service for this purpose called Random.org. Three winners were picked at random. They were notified of having won and were emailed their gift card.)
- 80 people provided their email address to receive future announcements and updates about the Kings County Regional Walk and Bike Plan.

## Interactive map

In addition to the survey, KCAG made available two versions of an online map—one with instructions in English (see the figure below) and one in Spanish—on which people could pin markers with location-specific as well as general comments. The maps, which were administered through a service called ZeeMaps, were open for comments for two months from October 17 through December 17, 2017, the same time period as for the survey.

Thirteen comments were submitted through the English-version map, while no comments were posted on the Spanish version. While the maps are now closed for comment, the comments posted on the English-version map may still be viewed at <http://bit.ly/2kLxi4u>.

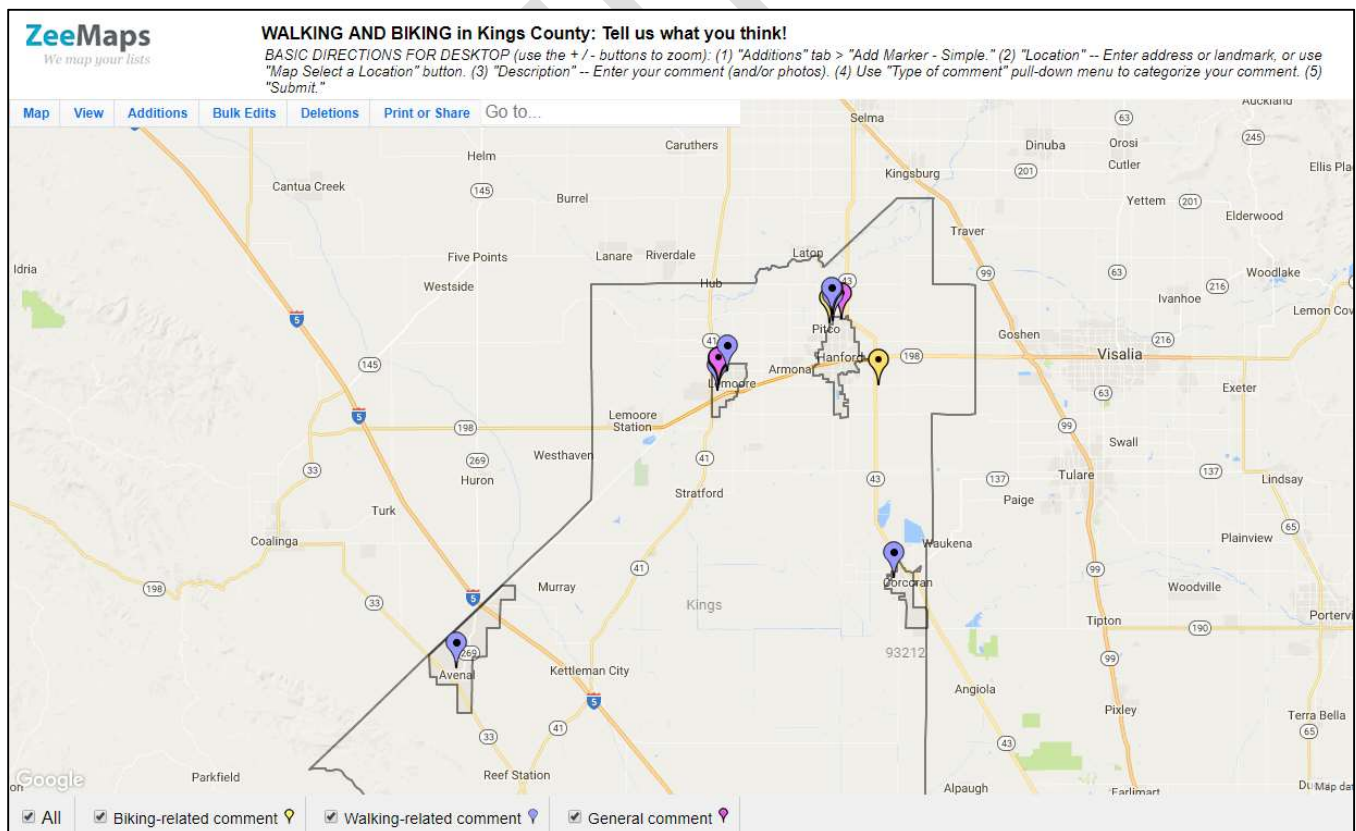
All the comments submitted are listed on the next page, categorized by city or unincorporated county

areas. Text in italics at the beginning of comments clarifies the location of comments where necessary; text in bold indicates any titles or summaries given by commenters to their comments. The comments have been lightly edited for readability.

While the comments focus on specific locations around the county, they reflect many of the same main concerns raised by respondents to the online survey:

- Lack of sidewalks or bike lanes on some key street segments.
- Lack of crosswalks or other crossing improvements at some key intersections.
- Stray dogs scaring and discouraging pedestrians and cyclists.
- Dark streets (for walking or biking at night).
- Speeding traffic.

Figure 4.8 | Screen shot of the interactive map



### Avenal

1. *[Avenal High School.]* **High school stadium:** Usually open to the public to walk and run.

### Corcoran

2. *[Garvey Ave. between Perry and Denton Aves.]* **Perry Heights area:** There are way too many stray dogs in this area. They need to do something about it. It's unsafe for high schoolers walking home and they always scare me and discourage me from walking home.

### Lemoore

3. *[W. Hanford Armona Rd.]* Very dark to run at night, and lots of tree debris make tripping hazards. I end up running with a head lamp. More street lights on the east bound sidewalk between Liberty Drive and Fox Street would be helpful.
4. *[N. 19<sup>th</sup> Ave.]* **Narrow intersection—No bike lane, sidewalk, etc.:** The railroad crossing from D Street towards the soccer fields has no space for the sidewalk or bike lane, and is narrow even for cars. An overgrowth of brush and trash on both sides forces bikers, walkers, parents with strollers, etc., all into the road at this busy intersection as people move to and from the heavily used Soccer/Recreation complex or back and forth from local schools. This needs to be fully paved like the Fox Road/railroad intersection. Bringing this to the City of Lemoore's attention two years ago has had no results other than a promise to "add it to the city plan." Someone is going to be hit with so many types of transit pressed together at this bottleneck.
5. **Bike lane present—one side only:** From Bush Street to Hanford Armona Road, the bike lane on 19<sup>th</sup> Avenue is on one side only (headed toward Hanford Armona Road). This forces bike traffic heading towards Bush Street to

either go against road traffic, or drive in road traffic as there is no shoulder on most parts of this road.

6. **Narrow intersection / No bike lanes:** The bike lanes present on either side of 19<sup>th</sup> Avenue just disappear at the Bush/19<sup>th</sup> intersection, and drivers expect bikes to do the same.
7. **High speeding zone—Heavy pedestrian traffic:** Cedar Lane is used as a pass-through with people speeding on Acacia to Cedar and through to 19-1/2 Ave. to avoid the elementary school zone in the mornings and afternoons, while heavy walking traffic to and from the school tries to avoid the cars. Lemoore Police Department has reported they have collected data needed for speed control and makes repeated speed traps here during the day and night, but speeding continues day and night.

### Unincorporated county next to Hanford

8. **Sidewalks needed:** There are no sidewalks for a portion of Flint Avenue approaching 11<sup>th</sup> Avenue on the south side of Flint.
9. *[Near Flint Ave.]* **Sidewalk needed:** There are no sidewalks on the west side of 11<sup>th</sup> Avenue.
10. *[N. 11<sup>th</sup> Ave. at Pepper Dr.]* **Lighted crosswalk:** There is the need to have a lighted crosswalk or stoplight for kids living in the Stonecrest subdivision walking to Pioneer Middle School.
11. *[2725-2731 Zion Way.]* **Crosswalk needed:** There are no crosswalks to get kids who are attending Pioneer Middle School across the street where the sidewalk goes all the way to the school.
12. *[Fairway Dr. between Merlan and Clubhouse Cts.]* **Middle school crosswalk:** Fairway Drive. Flashing lights at the middle school cross walk.

### Other unincorporated county areas

13. *[Houston Ave. between 7<sup>th</sup> and 8<sup>th</sup> Aves.]* **Biking comment:** Stray dog chases cyclists.

## Community presentations

KCAG staff and its lead consultant on the Walk and Bike Plan made presentations about the plan and solicited input on needs at a series of meetings between mid-October and mid-December 2017:

- Initial meeting of the Project Advisory Committee (PAC) for the Walk and Bike Plan, held on October 11, 2017 at KCAG offices in Lemoore (see photo below). The PAC consists of representatives of city, county and other government agencies and of key stakeholder groups and organizations; meetings are open to the public.



- Monthly meeting of the Kings Partnership for Prevention (KPFP), on October 19, 2017 at Kings County Behavioral Health in Hanford. KPFP is a countywide coalition of community organizations working to create opportunities for healthy life choices; meetings are open to the public. The October meeting was attended by approximately 20 people (see photo below).



- First of two public workshop on the Kings County Regional Transportation Plan / Sustainable Community Strategies (RTP/SCS), held on November 1, 2017, at the Avenal Theater in Avenal.



- Second of two public workshop on the RTP/SCS, held on November 9, 2017, at the Kings County Government Center in Hanford (see photo below).



In addition, the second meeting of the Walk and Bike Plan PAC, scheduled for February 14, 2018, at KCAG offices, focused on key findings and results of the community needs assessment. PAC members and other attendees had an opportunity to provide additional input on needs, challenges and concerns related to walking and biking in Kings County.



# Existing Conditions

## 5.1 | Overview

### Introduction

The Kings County Association of Governments (KCAG) is developing the first Active Transportation Plan for the Kings County region. The plan, referred to as the Kings County Regional Walk and Bike Plan, has several main objectives:

- Advance the pedestrian and bicycle planning efforts of KCAG's five member agencies: the County of Kings plus the cities of Avenal, Corcoran, Hanford and Lemoore.
- Identify the highest-priority proposed pedestrian and bicycle improvements in each of the cities and in the unincorporated areas, and position these improvements to compete well for outside grant funds.
- Inform the pedestrian and bicycle component of the upcoming update of the Kings County Regional Transportation Plan.

The first substantive task in the planning process for the Walk and Bike Plan was an inventory of existing local conditions and issues relevant to walking and biking. This existing conditions inventory establishes the local planning context surrounding non-motorized transportation throughout Kings County, and provides initial insights into the walking and bicycling experience in the county. The task consisted of reviewing, analyzing and summarizing issues and conditions such as the key destinations for pedestrians and cyclists; data on commuting and on traffic collisions; existing and planned pedestrian and bicycle facilities; ongoing programs to support walking and biking; integration with other forms of transportation; and related planning efforts. The existing conditions inventory will inform and be supplemented by an assessment of needs and opportunities to be conducted as part of the next task in the process.

This chapter presents *countywide-level* information gathered through the existing conditions inventory. Five additional chapters provide information specific to each of the four cities and to the unincorporated areas of the County. In addition, immediately below are notes about the methodology for the existing conditions inventory. The notes are presented here rather than in each of the five jurisdiction-specific chapters to avoid repetition.

#### Notes

Population and mode split data is from the 2015 American Community Survey (ACS), which covers 2011–2015, the most recent five-year period for which ACS data is available. (ACS is an ongoing survey conducted by the U.S. Census Bureau.) Population figures have been rounded to the nearest hundred.

Because the numbers of pedestrian and bicycle commuters in Kings County are small, the margins of error for the estimates are quite large. For example, based on the margins of error for the data, the likely true range of Kings County's pedestrian commute share (see Table 5.1.1) was 2.2%–3.2%, representing between 1,173 and 1,701 people. The likely true range of the bike commute share was 0.1%–0.5% (84–266 people).

Collision data is from the California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS), a database of collisions as reported to and collected by local police departments and other law enforcement agencies. Our analysis covers the period from 2012 through 2016, the most recent five-year period for which SWITRS data is available.

## Setting

Kings County is located in the south-central San Joaquin Valley, a subset of the California Central Valley. It is bordered on the west and north by Fresno County; on the east by Tulare County; on the south by Kern County and a small part of San Luis Obispo County; and on its southwest corner by Monterey County. The county has an area of 1,392 square miles, making it the 34<sup>th</sup> largest of California's 58 counties. Its topography and weather make it well suited for walking and biking. With a few minor exceptions, the landscape is flat. The weather is typical of the Central Valley: mild in spring and fall, hot and dry during the summer, and cool and damp—as well as foggy—in winter.

Kings County is largely rural and undeveloped, with two-thirds of the land area consisting of irrigated farmland. There are four incorporated cities in the county: Avenal, Corcoran, Hanford (the county seat) and Lemoore. Other communities include Armona, Grangeville, Hardwick, Home Garden, Kettleman City, Lemoore Naval Air Station, Santa Rosa Rancheria (a tribal reservation) and Stratford. The county has a population of 151,000 people, making it the state's 33<sup>rd</sup> most populous county. The civilian population (in other words, excluding Avenal and Corcoran State Prisons) is 135,700. This includes 29,500 school-age children and teenagers (ages 5–17), representing 22% of the population; and 13,200 seniors (ages 65 and over), or 10% of the population.

## Trip-making

According to the 2015 American Community Survey, 2.7% of Kings County workers (or 1,437 people) commuted primarily on foot while 0.3% (175 people) did so primarily by bike (see the table below). For comparison purposes, Kings County's estimated pedestrian commute share was the same as California's and higher than those of three "peer" counties (Fresno, Kern and Tulare). Conversely, the county's bicycle commute share was lower than California's and those of the three peer counties.

If we assume that each of the 1,437 Kings County pedestrian commuters makes two walking trips a day (one to work and one back home) then there are 2,874 daily walking trips in Kings County for work-commute purposes. Further, the Federal Highway Administration's 2009 National Travel Household Survey found that only 4.5% of walk trips nationally were for commuting to work (the main purposes were social/recreational, family/personal errands and school/church). Applying that ratio to the 2,874 work-commute trips, then the number of all daily walking trips in Kings County is approximately 63,500. Using the same methodology, the number of daily bicycle trips in the county can be extrapolated to 7,700.

Additionally, Table 5.1.2 shows the commute mode split for each of the cities and for the unincorporated areas.

**Table 5.1.1 | Commute mode split, countywide**

	<i>Kings County</i>		<i>Daily trips</i>	<i>Fresno</i>	<i>Kern</i>	<i>Tulare</i>	<i>California</i>
	<i>Commuters</i>	<i>%</i>		<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Drove alone	40,781	76.0%					
Carpooled	8,319	15.5%					
Public transportation	493	0.9%					
Walked	1,437	2.7%	63,500	1.9%	1.4%	1.9%	2.7%
Bicycled	175	0.3%	7,700	0.9%	0.6%	0.6%	1.1%
Worked at home	1,734	3.2%					
Other*	726	1.4%					
<b>Total</b>	<b>53,665</b>	<b>100.0%</b>					

\* Includes taxicab, motorcycle and other means.

**Table 5.1.2 | Commute mode split, by jurisdiction**

	<i>Kings County</i>	<i>Avenal</i>	<i>Corcoran</i>	<i>Hanford</i>	<i>Lemoore</i>	<i>Uninc. County</i>
Drove alone	76.0%	53.4%	72.9%	80.0%	82.5%	70.5%
Carpooled	15.5%	33.5%	20.6%	14.8%	12.6%	13.5%
Public transportation	0.9%	4.5%	0.3%	0.6%	0.1%	1.4%
Walked	2.7%	3.0%	2.3%	1.9%	1.6%	4.8%
Bicycled	0.3%	0.5%*	0.3%	0.4%	0.4%	0.3%
Worked at home	3.2%	2.2%	2.5%	1.7%	1.5%	7.4%
Other**	1.4%	3.4%	1.1%	0.6%	1.3%	2.1%

\* The 2015 ACS reports the bike commute share in Avenal as 0.0%. Given the margin of error in the data, the bike commute share could be as high as 1.0%. For purposes of this plan, we have assumed a share of 0.5%, halfway in the likely true range.

\*\* Includes taxicab, motorcycle and other means.

## Traffic collisions

The table below summarizes the key findings regarding traffic collisions in Kings County involving pedestrians and cyclists during the five-year period from 2012 through 2016. Collisions involving a pedestrian or bicyclist represented 4% of all collisions, while pedestrians and bicyclists killed or severely injured represented 13% of all victims killed or severely injured. These figures are much higher than King County's combined walk and bike commute mode share of 3.0%.

**Table 5.1.3 | Traffic collision summary**

<i>Collisions</i>	
a. Collisions involving a pedestrian	178
b. Collisions involving a bicyclist	138
c. All collisions	7,430
d. Ped / bicyclist collisions as % of all	4%
<i>Fatalities and severe injuries</i>	
e. Pedestrians killed	11
f. Bicyclists killed	6
g. All victims killed	118
h. Pedestrians severely injured	23
i. Bicyclists severely injured	13
j. All victims severely injured	298
k. Peds / bicyclists killed or severely injured as % of all	13%

Each year, the California Office of Traffic Safety (OTS) compares traffic safety statistics across jurisdictions and ranks the counties and cities on various types of collisions. Counties are ranked against all other counties while cities are ranked against cities with populations of similar size. The rankings give varying weights to such factors as population, daily vehicle-miles traveled, crash records and crash trends, and are based on data from several sources, including SWITRS.

Table 5.1.4 shows rankings in 2014—the latest year for which OTS has published rankings—for Kings County as a whole and for each of the cities in three aspects of traffic safety that are especially relevant to this report. These three areas are:

- A composite, or aggregate, of several other rankings, as an indication of overall traffic safety (composite rankings are available for cities but not for counties).
- Collisions in which there were victims killed or injured and a pedestrian was involved.
- Collisions in which there were victims killed or injured and a bicyclist was involved.

The figures in the table appear as two numbers divided by a slash. The first number is Kings County's or a city's ranking in a particular aspect of traffic safety. The second number is the number of counties in the state (58), in the case of figures for Kings County; or the number of cities with similar-sized populations. For example, 42/105 means that a

city ranks 42<sup>nd</sup> in a group of 105 cities of similar size. It is important to note that number 1 in the rankings is the “worst,” typically representing the highest number of a particular type of collision. In a group of 105 cities, for example, a ranking of 1/105 is the worst, 53/105 is the median and 105/105 is the best.

Rankings in the highest—or worst—third within a category are shown in underlined text in the table. As the table shows, Kings County is ranked in the worst third in terms of collisions in which a pedestrian was killed or injured. Corcoran is ranked in the worst third in two of the three traffic safety areas analyzed for this report; Avenal and Lemoore are ranked in the worst third in one of the three traffic safety areas; and Hanford is not ranked in the worst third in any of the three areas.

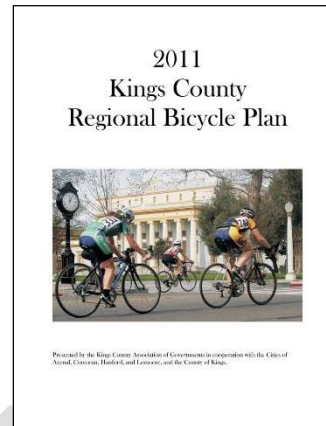
**Table 5.1.4 |** OTS rankings

	<i>Composite</i>	<i>Pedestrian involved</i>	<i>Bicyclist involved</i>
Kings County	n/a	<u>19 / 58</u>	37 / 58
Avenal	<u>18 / 108</u>	67 / 108	66 / 108
Corcoran	46 / 108	<u>25 / 108</u>	<u>26 / 108</u>
Hanford	42 / 105	47 / 105	46 / 105
Lemoore	41 / 89	<u>19 / 89</u>	30 / 89

It should be noted that the rankings are not adjusted for the amount of walking and biking in a given city or county. A high, or “bad,” ranking could mean that there are many collisions involving pedestrians and cyclists because there are many people walking and cycling—and viceversa. Also, OTS notes that its “rankings are only indicators of potential problems” and that “there are many factors that may either understate or overstate a city/county ranking that must be evaluated based on local circumstances.”

## Related plans

### Kings County Regional Bicycle Plan (2011)



This plan, developed by KCAG, updated the 2005 Kings County Regional Bicycle Plan. The document includes both a regional bicycle plan as well as stand-alone plans for each of the five KCAG member agencies. As part of the planning process,

KCAG worked with a Bicycle Advisory Committee to identify potential bicycle routes based on existing bicycle travel patterns, locations of activity centers and road conditions.

The plan includes six goals, each with a number of more-detailed policies, to provide policy support for bicycling. The six goals are:

- Provide a well-developed, safe and convenient, interregionally connected system of bikeways complete with support facilities.
- Future public and private development should support and facilitate the expansion, improvement, connectivity, and maintenance of the bikeway system.
- Encourage on-going bicycle safety education and information programs.
- Bikeways should connect educational facilities, major employers, residential neighborhoods, and recreational areas.
- Encourage partnerships between private, non-profit, governmental, and citizen's groups.
- Encourage the use of bicycles to enhance air quality and improve the health of the rider.

Selected policies from the Regional Bicycle Plan (edited for brevity) include:

- Exploit all available federal, state, local, and grant funding sources to develop and enhance bikeways (Policy 1.2).



- Identify, where possible, desirable alternative routes to those with high traffic volumes and collision numbers (Policy 1.4).
- Define and prioritize logical project limits for bicycle routes, especially across jurisdictional boundaries (Policy 1.6).
- Identify key areas for the placement of bicycle racks and support facilities (Policy 1.7).
- When warranted and possible, identify and preserve right-of-way for identified future bikeways (Policy 2.2).
- Collaborate with law enforcement, school officials, and private organizations to encourage school or public bicycle safety programs (Policy 3.1).
- As resources are available, create for broad distribution a web-based or hard-copy pamphlet which shows bicycle routes (Policy 3.5).
- Cul-de-sacs and gated communities should include pedestrian and bicycle passages to adjoining neighborhoods and major arterials (Policy 4.2).
- Inform employers of options that will increase bicycle usage by employees and potential benefits to their business (Policy 5.1).
- Encourage local jurisdictions to adopt the Complete Streets standards outlined in AB 1358 (Policy 5.2).
- Encourage Caltrans to install “Share the Road” signs on all open state highways in the county, particularly in sections with narrow or absent shoulders (Policy 5.4).
- As resources and opportunities become available, work with the appropriate agencies to establish a public-relation campaign which explains the benefits of bicycling (Policy 6.2).
- Continue to work with the transit providers on placing bicycle racks on buses and at transit stops (Policy 6.3).

The information in the Regional Bicycle Plan was incorporated into the Kings County Regional Transportation Plan (see below) or has been reflected in the chapters on jurisdiction-specific existing conditions.

## Kings County Regional Transportation Plan (2014)

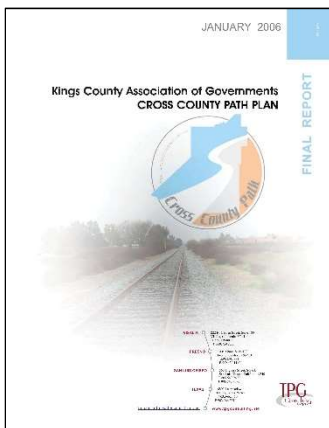
KCAG’s most recent RTP, covering the 26-year period from 2014 to 2040, documents the region’s mobility needs and issues; identifies regional issues and provides policy direction for local transportation plans; documents the region’s goals, policies and objectives for meeting current and future transportation needs; sets forth an action plan to address transportation issues and needs; identifies transportation improvements in sufficient detail to be useful in decision-making; and documents the region’s financial resources needed to meet mobility needs. Also, the RTP incorporates a “Sustainable Communities Strategy” addressing the integration of land use and transportation planning for purposes of lowering emissions of transportation-related greenhouse gases.

Chapter 8 of the RTP is dedicated to walking and biking, and generally reflects the bike routes and bike policies identified in the Regional Bicycle Plan. Figures 8-1 through 8-10 in that chapter are lists and maps of the bike routes planned or proposed by each jurisdiction. In addition, key implementation strategies identified in the chapter include:

- Carry out the recommendations of the Regional Bicycle Plan and the Lemoore Bikeways Plan until KCAG develops an Active Transportation Plan.
- On designated shared-use roads, provide adequate shoulder space, place bike route indicator signs, and maintain a good riding surface.
- Ensure that public and private sectors provide adequate bicycle parking, which can be done by amending each jurisdiction’s zoning ordinance.
- Local police departments should conduct regular safety and enforcement campaigns and enforce traffic laws.
- Seek all available state, federal, and private grant funds to install and maintain bicycle facilities and to conduct educational programs.
- As roads are repaved, wider shoulders should be provided.

- Bicycle parking facilities should be installed at transit stops, park-and-ride lots, and intermodal stations.
- Encourage newly developing areas to incorporate bicycle facilities along appropriate roadways and off-road systems.
- Continue to develop a sidewalk system that facilitates pedestrian and disabled access to public transit.
- The abandonment of rail lines provides an opportunity to establish trails for non-motorized, recreational, or open space uses.

### KCAG Cross County Path Plan (2006)



This is a conceptual plan for a pedestrian and bicycle path extending from West Hills Community College, on the western edge of Lemoore, to State Highway 43, east of Hanford, a distance of approximately 13 miles. The path

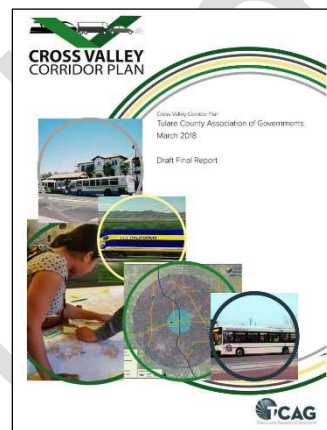
would generally follow surface streets inside the urbanized portions of Lemoore, Armona and Hanford (in the form of bike lanes, marked bike routes) and Union Pacific Railroad right-of-way (ROW) within the more rural areas of the county (in the form of a paved multi-use path). The plan estimated the ROW acquisition and construction costs at \$4.8 million.

The proposed alignment is as follows:

- Segment 1 (West Hills College to Lemoore Avenue in Lemoore): Bike lanes on Bush, D, Olive and E Streets.
- Segment 2 (Lemoore Avenue in Lemoore to Hanford Armona Road in Armona): Path along the railroad right-of-way.
- Segment 3 (Hanford Armona Road to 13<sup>th</sup> Avenue in Armona): Path along Front Street.

- Segment 4 (13<sup>th</sup> Avenue in Armona to 11<sup>th</sup> Avenue in Hanford): Path along the railroad right-of-way.
- Segment 5 (11<sup>th</sup> Avenue to 10<sup>th</sup> Avenue in Hanford): Bike lanes on 6<sup>th</sup> Street to Redington Street, marked bike route to Douty Street and bike lanes again to 10<sup>th</sup> Avenue.
- Segment 6 (10<sup>th</sup> Avenue in Hanford to Highway 43 in unincorporated Kings County): Path along the railroad right-of-way.

### Cross-Valley Corridor Plan (2018)



This plan, sponsored by the Tulare County Association of Governments, evaluated a range of passenger rail service alternatives for the freight rail corridor that crosses Kings County from Huron, in Fresno County, to Porterville, in Tulare County; the corridor

roughly parallels much of Highways 198 and 65. The plan considers Cross-Valley rail service at four stations in Kings County, at the following locations:

- Lemoore Naval Air Station, at the northeast corner of Reeves Boulevard and the railroad.
- Lemoore, at the site of the historic train depot at E and Heinlen Streets in downtown.
- Armona, near Railroad Avenue and Front Street and east of 14<sup>th</sup> Avenue.
- Hanford, along the south side of Sixth Street between Green Street and the railroad.

The plan outlines recommended supportive strategies in the realms of land use, circulation, urban design and economic development for the station sites and for the areas within a quarter-mile radius around the stations. Walking- and biking-related recommendations common to all stations include:

- Encourage urban development that frames the public realm and generates pedestrian activity.
- Discourage development and building orientation that discourages walking, biking and transit use.
- Prioritize bicycle and pedestrian improvements such as sidewalks, crosswalks, bikeways, and ADA-accessible curb ramps in the area within a half-mile radius of the station site.
- Provide sufficient parking at the station for bicycles and consider inclusion of bike maintenance stations and provision of bikeshare systems.
- If space permits, provide for gathering areas with pedestrian amenities.
- Maintain, and where feasible, improve pedestrian-scale short block street grids in the station areas.

In addition, the plan contains the following walking- and biking-related recommendations specific to each of the four stations in Kings County:

#### Lemoore Naval Air Station

- Provide an off-street bike trail from the residential sector of the base to the station.

#### Lemoore

- Improve rail crossings at Follett Street and Fox Street, including for pedestrians and cyclists.
- Complete and improve sidewalks and ADA-compliant curb ramps along E Street/Olive Street between D and Fox Streets; and along Follett Street north of the railroad between E and G Streets.
- Consider mid-block crossings on C, D and E Streets between Fox and Follett Streets.
- Install corner bulb-outs at the intersections of E Street with Heinlein, Follett and Fox Streets.

#### Hanford

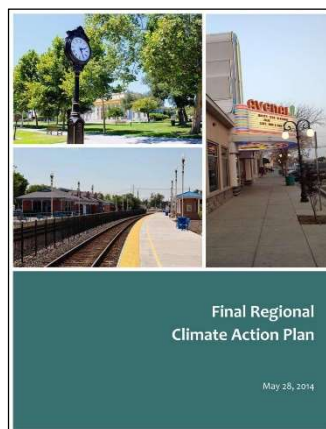
- Encourage connection to the planned Kings/Tulare high-speed rail station east of Hanford with emphasis along Seventh Street and East Lacey Boulevard including sidewalks, ADA-compliant curb ramps, bike lanes, curb and gutter and street trees.

- Improve pedestrian access south of Highway 198 along Phillips and Douty Streets with underpass lighting on Phillips Street, sidewalk and bikeway improvements, new ADA-compliant curb ramps and other improvements. Consider crosswalks at the Third and Fourth Street intersections.
- Improve east-west bicycle and pedestrian access through the city to the rail station site by completing the Sixth Street bike lanes. Improve Sixth Street near the station with sidewalks, curb and gutter, shade trees and bike lanes. Add crosswalks and mid-block crossings where appropriate.
- Install street trees and ADA-compliant curb ramps along Douty Street from the station to downtown.

#### Armona

- Consider the development of multi-use paths with new development south of Front Street that link residential neighborhoods to downtown Armona, the transit station and canals. Canals should be considered as opportunities for future paths.
- Install marked or specialty paving crosswalks at intersections along Front and 6<sup>th</sup> Streets with all new development.
- Plan for complete connectivity of sidewalks along 14<sup>th</sup> Avenue and Front Street as well as street lighting.

### Regional Climate Action Plan (2014)



This plan—a joint planning effort by KCAG and the cities of Avenal and Hanford—identifies cost-effective measures to reduce greenhouse gas emissions to 1990 levels by 2020. The plan includes one reduction measure related to walking and bicycling (“Continue to

expand and improve the bicycle and pedestrian network”), with the following implementation actions:

- Continue to pursue public and private funding to expand and link the regional bicycle and pedestrian network in accordance with the jurisdiction’s general plan and bicycle plan, as well as the Regional Bicycle Plan.
- Incorporate multi-modal improvements into pavement resurfacing, restriping, and signalization operations where safety and convenience of users can be improved within the scope of work.
- Establish minimum design criteria for bicycle and pedestrian circulation and implement through the design review process.
- Encourage the installation of adequate and secure bicycle parking at all multi-family residential, commercial, governmental, and recreational locations throughout the region.
- Support land use planning that will promote pedestrian and bicyclist access to and from new development by encouraging land use and subdivision designs that provide safe bicycle and pedestrian circulation, including bicycle parking facilities and internal bicycle and pedestrian routes, where feasible.
- Continue to collaborate with law enforcement, school officials, and private organizations to encourage school and/or public bicycle safety programs.

### Kings County Community Health Status Report (2008–2009)

This report outlines relevant demographic information for Kings County, followed by the most common health issues affecting the residents of the county. For each health issue, the report provides quantitative measures and recommendations aimed at changing behaviors.

A number of the issues addressed in the report influence, or are influenced by, people’s transportation choices, particularly around walking and biking. These issues include poverty, physical

activity, obesity, diabetes, air quality and asthma. Key findings in the report include:

- Kings County’s per capita personal income is below that of other South Valley Counties and well below that of the state.
- The percentage of county public school students receiving free or reduced-price school meals is significantly higher than for the state as a whole.
- According to 2005 data, the prevalence rate of asthma in Kings County among children 17 and under was 24.7%—the second highest in the state.
- Diabetes-related deaths in the six south valley counties are one and a half times that of the state average.
- Obesity is twice as common in Kings County as in the Bay Area.

### “Got needs? 2017” Kings County Community Survey—Final Report

In 2017, Kings Partnership for Prevention (a countywide coalition of community organizations) in conjunction with Kings Community Action Organization (a non-profit) conducted the first comprehensive community needs assessment for Kings County. Through a series of four public forums—one in each city—and a survey that received 617 responses, residents were asked about the needs they saw in their community and about possible solutions to address the needs. Below are the walking- and bicycling-related needs expressed for various communities through the public forums:

- **Avenal:** The Sports Complex is outside of town, too far to walk.
- **Kettleman City:** Recreational trails or walking paths. Sidewalks are needed to ensure safety for citizens.
- **Corcoran:** Street lights needed to help reduce crime; need speed limits as well.

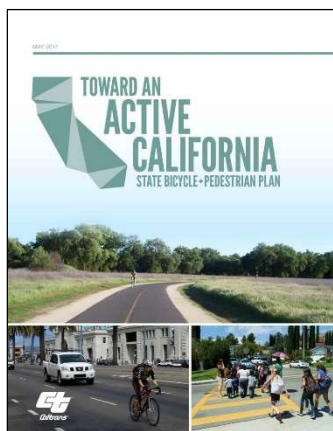
In addition, the survey results produced several findings with potential implications for pedestrian and bicycle planning, at least in terms of recreation:

- 48% of respondents did not feel that there are enough *areas* of recreation in their community.



- Of the 52% who did feel that there are enough *areas* of recreation, 16% responded that these areas are not affordable, 21% responded that they are not safe and 38% responded that they are not high-quality.
- 56% of respondents did not feel that there are enough recreation *activities* in their community.
- Of the 44% who did feel that there are enough recreation *activities*, 23% responded that these activities are not affordable.

### California State Bicycle and Pedestrian Plan (2017)



Subtitled “Toward an Active California,” this recently completed plan is the California Department of Transportation’s (Caltrans) first statewide policy plan to support travel by bicyclists and pedestrians through objectives, strategies,

and actions. As a strongly policy-oriented plan, the document does not propose specific projects. Instead, it lays out four overarching objectives, with 15 supporting strategies and numerous more-specific actions to guide the priorities and operations of Caltrans and encourage partner agencies and organizations to follow suit.

The 15 strategies are:

- Address safety of vulnerable users in roadway design and operations.
- Provide consistent, accessible, and universal education about the rights and responsibilities of all roadway users.
- Invest in the quality, completeness, timeliness, and availability of data on bicycle and pedestrian collisions.
- Focus state and local enforcement of safety laws on highest risk behaviors by all road users.
- Develop local and regional networks of high-quality bicycle and pedestrian facilities for all ages and abilities.
- Integrate bicycle and pedestrian needs in planning and design of multimodal transportation systems and services.
- Support regional and state efforts to integrate land use and transportation planning to maximize the effectiveness of active transportation investments.
- Develop consistent, high-quality data on bicycle and pedestrian travel and facilities.
- Support low-stress or physically separated pedestrian and bicycle trail routes of statewide or regional significance for tourism, recreation, and utilitarian transportation.
- Promote bicycling and walking for everyday transportation, recreation, improved health, and active living.
- Establish and meet an expected quality of condition for bicycle and pedestrian infrastructure.
- Pursue internal and external partnerships to address bicycle and pedestrian needs in maintenance and preservation activities.
- Strengthen engagement with disadvantaged communities by proactively seeking input on needs and providing technical guidance.
- Address social equity when implementing all strategies from this Plan.
- Provide disadvantaged communities with the opportunity to participate in active transportation funding programs.



# Existing conditions

## 5.2 | Avenal

In 2016, the City of Avenal completed its own pedestrian and bicycle plan, called the “Avenal Active Transportation and Safe Routes to School Plan.” Because the Avenal plan is so recent and detailed at the local level, this chapter draws much of its information—particularly on existing and proposed facilities and projects—from the Avenal plan.

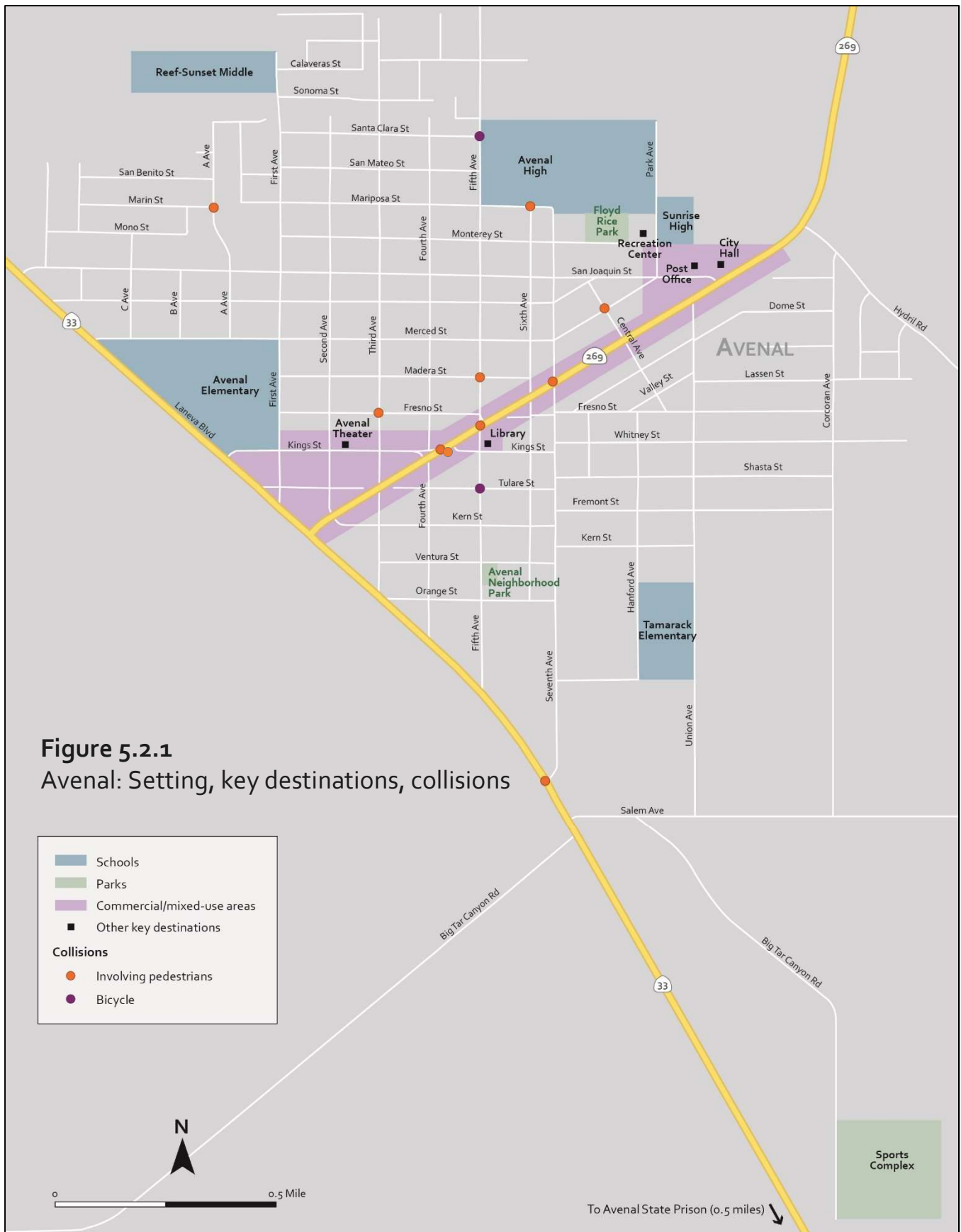
### Setting and key destinations

The city of Avenal is located in southwestern Kings County. It is bordered by unincorporated Kings County on the east and south, and by unincorporated Fresno County on the north and west. A large majority of the city’s area of 19.4 square miles is undeveloped, consisting of agricultural land, open space and mountainous terrain. Three highways provide regional access: Highway 33 and Interstate 5, which run north-south, and Highway 269 (Skyline Boulevard), which runs east-west. The city has a civilian population (excluding Avenal State Prison) of 9,100 people. This includes 2,000 school-age children and teenagers (ages 5–17), representing 22% of the population; and 700 seniors (ages 65 and over), or 8% of the population.

Avenal’s urbanized area, covering only 1.5 square miles, is clustered in the southern part of the city, east of Highway 33 and along both sides of Skyline Boulevard, which is also Highway 269. This area is generally organized on a grid, with straight, well-connected streets, and consists primarily of single-family residences. The main local thoroughfares include First Avenue, Seventh Avenue, Corcoran Avenue, and San Joaquin Street (see the figure on the next page).

Kings Street west of Skyline Boulevard acts as the city’s downtown, with commercial uses including restaurants, liquor stores, markets and the Avenal Theater. Other commercial and civic uses, including City Hall, the post office and the library, are located along or just off Skyline Boulevard, roughly between Hydril Road and S. Sixth Avenue. A large swath of land is taken up by Avenal State Prison, at the city’s southernmost end. Other key destinations in Avenal for pedestrians and cyclists include:

- The two elementary schools (Avenal and Tamarack), middle school (Reef-Sunset) and two high schools (Avenal and Sunrise).
- Floyd Rice Park (located between the two high schools and encompassing the Avenal Recreation Center) and Avenal Neighborhood Park (at the intersection of S. Fifth Ave. and E. Ventura St.).
- Two little-league fields immediately north of Rice Park.
- Avenal Sports Complex, a large recreational area approximately one mile south of the city’s southern border, featuring various sports fields, playground equipment and picnic facilities.





## Trip-making

The table below provides the mode split for trips to work made by Avenal residents. The city's walk mode share (3.0%) is higher than King County's as a whole (2.7%). It is harder to draw a conclusion regarding the city's bike mode share. The 5-year 2015 ACS reports the number of bike commuters in Avenal as zero and the bike commute share as 0.0%. However, given the margin of error in the data, the number of bike commuters could be as high as 19 and the commute share as high as 1.0%.

It should be noted that the Avenal Active Transportation and Safe Routes to School Plan presents very similar, though not identical figures, on mode split as those shown here. The reason for the difference is that this plan has used a slightly more recent and up-to-date dataset from the U.S. Census Bureau.

**Table 5.2.1 | Commute mode split**

	<i>Commuters</i>	<i>%</i>	<i>Daily trips</i>
Drove alone	1,677	53.4%	
Carpooled	1,054	33.5%	
Public transportation	142	4.5%	
Walked	95	3.0%	4,200
Bicycled	0 – 19	0.0 – 1.0%	400
Worked at home	68	2.2%	
Other*	106	3.4%	
<b>Total</b>	<b>174</b>	<b>100.0%</b>	

\* Includes taxicab, motorcycle and other means

## Traffic collisions

The table below summarizes the key findings regarding traffic collisions in Avenal involving pedestrians or cyclists during the five-year period from 2012 through 2016. Collisions involving a pedestrian or cyclist represented 6% of all collisions, while pedestrians and cyclists killed or severely injured represented 14% of all victims killed or severely injured. These figures are much higher than Avenal's combined walk and bike commute mode share of 3.5%.

**Table 5.2.2 | Traffic collision summary**

<i>Collisions</i>	
a. Collisions involving a pedestrian	9
b. Collisions involving a bicyclist	2
c. All collisions	200
d. Ped / bicyclist collisions as % of all	6%
<i>Fatalities and severe injuries</i>	
e. Pedestrians killed	2
f. Bicyclists killed	0
g. All victims killed	3
h. Pedestrians severely injured	0
i. Bicyclists severely injured	0
j. All victims severely injured	11
k. Peds / bicyclists killed or severely injured as % of all	14%

Figure 5.2.1 shows the location of all collisions involving a pedestrian or a cyclist. Four of the collisions involving pedestrians occurred along Skyline Boulevard, including two at Kings Street. An additional two collisions—one each involving a pedestrian and a cyclist—occurred around Avenal High School.

## Bikeways

Figure 5.2.2 is a map from the Avenal Active Transportation and Safe Routes to School Plan showing the existing bikeways (and also the

proposed bicycle improvements) in the city's urbanized area. The existing bike lanes or bike routes as shown in the Avenal plan are listed in the table below.

**Table 5.2.3 | Existing Avenal bikeways**

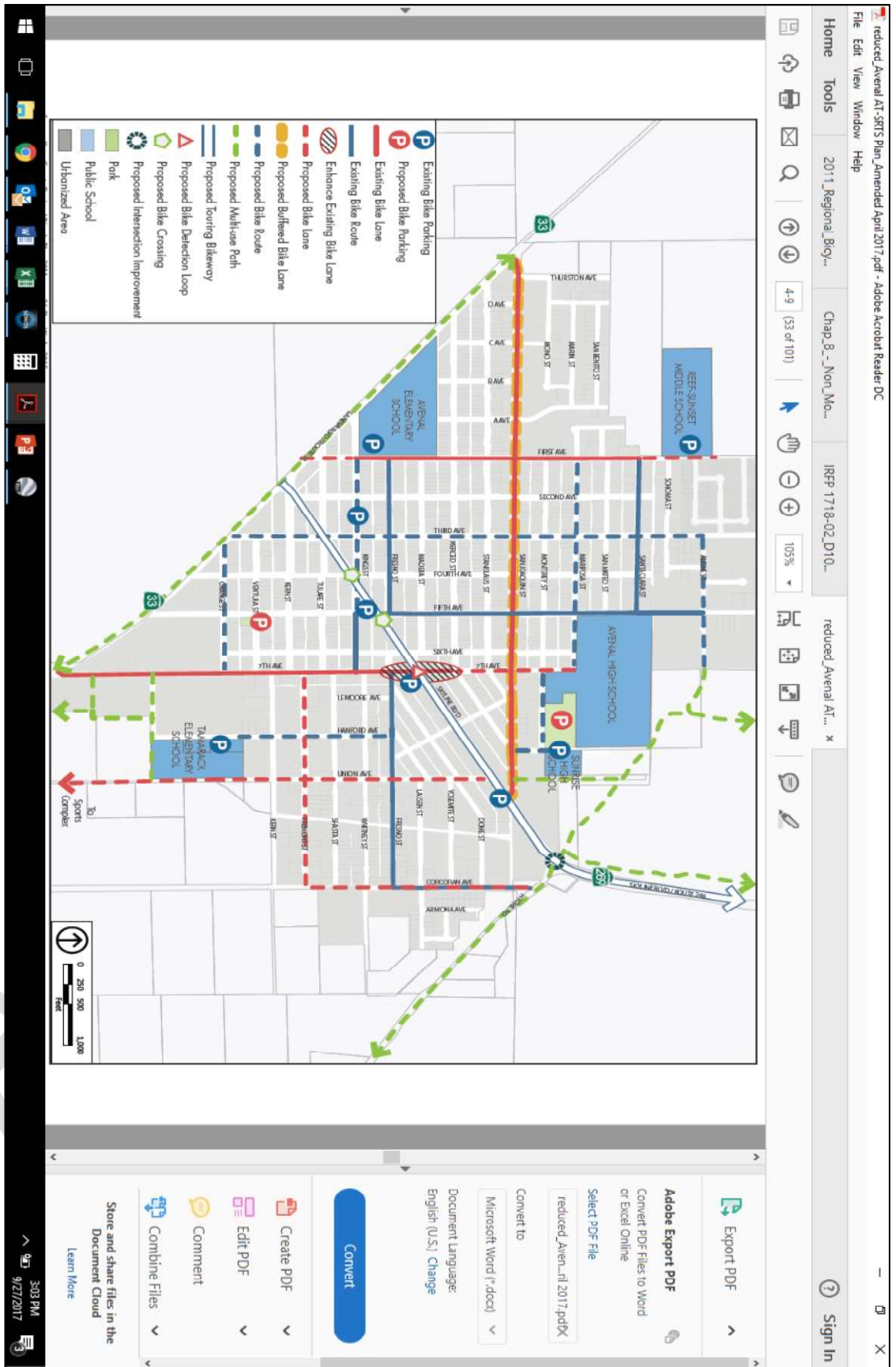
<i>Street / road / route</i>	<i>From</i>	<i>To</i>	<i>Length (mi.)</i>
<b>Bike lanes (Class II)</b>			
1 <sup>st</sup> Ave.	Santa Clara St.	Kings St	0.6
7 <sup>th</sup> Ave.	Merced St.	Laneva Blvd. (Hwy. 33)	0.8
San Joaquin St. <sup>a</sup>	Laneva Blvd. (Hwy. 33)	Skyline Blvd. (Hwy. 269)	1.3
<b>Bike routes (Class III)</b>			
5 <sup>th</sup> Ave.	Alpine St.	Kings St.	0.7
Corcoran Ave. <sup>b</sup>	Hydril Rd.	Fresno St.	0.3
Santa Clara St.	1 <sup>st</sup> Ave.	5 <sup>th</sup> Ave.	0.4
Fresno St.	1 <sup>st</sup> Ave.	5 <sup>th</sup> Ave.	0.4
Fresno St.	7 <sup>th</sup> Ave.	Corcoran Ave.	0.5
Kings St.	5 <sup>th</sup> Ave.	7 <sup>th</sup> Ave.	0.1
<b>Touring bikeways<sup>c</sup></b>			
Skyline Blvd. (Hwy. 269) <sup>d</sup>	Laneva Blvd. (Hwy. 33)	Avenal Cutoff Rd.	5.7
Avenal Cutoff Rd.	Skyline Blvd. (Hwy. 269)	Northern city limits	3.2

<sup>a</sup> Currently, San Joaquin Street has conventional bike lanes (Class II) and the street is shown as such on the map here. The Avenal Active Transportation and Safe Routes to School Plan recommends considering buffered bike lanes, which are separated from the adjacent travel or parking lane by a painted buffer space.

<sup>b</sup> Currently, this segment is an existing bike route (Class III) and is shown as such on the map here. The Avenal plan proposes bike lanes (Class II) for this segment.

<sup>c</sup> "Touring" is not a standard bikeway designation. The 2011 Bicycle Plan, which used this term, describes them as "...streets, county roads, and state highways which cannot be given a formal designation (i.e. Class I, II, or III) because of cost or liability concerns but are used as a primary cycling route by more experienced (and typically long-distance) cyclists. These roads are often narrow, without shoulders, or carry high speed traffic and/or heavy traffic volumes. These streets do not provide the level of protection or comfort necessary for the casual, less experienced cyclists. Therefore, a touring roadway is one on which only experienced cyclists should ride."

<sup>d</sup> Currently, this segment is considered a touring bikeway only. However, the Avenal plan states that "bicycle facilities like bike lanes, signage, and crossings should be provided along Skyline Boulevard because the street runs throughout the entire urbanized area [from Laneva Boulevard to Hydril Road] and provides connections to various activity centers and the regional bus service."



**Figure 5.2.2 | Bicycle improvement projects in the city's urbanized area**

Source: Avenal Active Transportation and Safe Routes to School Plan

## Bicycle parking

Bike parking is available at all of Avenal's public schools except Avenal High as well as outside some businesses on Skyline Boulevard and Kings Street. In addition, the benches at KART bus stops along Skyline are designed to also be used as bike parking. The Avenal Active Transportation Plan proposes bicycle parking at Floyd Rice Park and Avenal Neighborhood Park. The City does not require bike parking as part of development projects.

## Pedestrian facilities

The majority of Avenal's pedestrian facilities are in good condition; there are only a few missing sidewalks and curb ramps, and the infrastructure does not need immediate repair. (In particular, Highway 33 lacks sidewalks, so pedestrians use the shoulders.) Marked crosswalks can be found around schools, in the downtown area and along Skyline Boulevard. Most intersections in the city are controlled by two-way stop signs. There are a few four-way stop intersections and many uncontrolled intersections throughout residential areas.

Skyline Boulevard is the city's most heavily traveled street. Because it runs diagonally through the city's grid system, the intersections along the street are skewed; this presents challenging crossing conditions. The stretch between Seventh and Union Avenues sees relatively heavy pedestrian activity because of nearby Avenal High School, restaurants and other commercial uses; however, this stretch has no marked crosswalks, which results in frequent jaywalking. The downtown area along Kings Street, between Second and Third Avenues, contains pedestrian-friendly amenities such as decorative street lighting, patterned crosswalks, street trees and bulb outs. Most of the residential neighborhoods contain mid-block alleys that run east-west along the rear property lines of residences. These alleys have vehicle restrictions but are open to pedestrians. Lastly, there is an extensive network of unpaved dirt paths north of Avenal High School and Floyd Rice Park, within the Kettleman Hills. These paths are used for walking, running and off-road vehicle use.

In September 2015, the Office of Community and Economic Development (OCED) at Fresno State and Pueblo Unido Mejorando Avenal (PUMA) produced a "walkability audit" report for the City of Avenal. Walking conditions were evaluated along Skyline Boulevard and a few residential streets. According to the report, pedestrian facilities and issues that need improvement include:

- Width, condition, maintenance and buffers of the sidewalks.
- Width and condition of the intersections, including the visibility and exposure of pedestrians (and cyclists).
- Crosswalks and pedestrian islands.
- Streetscape amenities, including lighting.



## Maintenance

The Avenal Active Transportation Plan includes, as one of its explicit goals, to “Maintain bicycle and pedestrian facilities as part of the City’s regular maintenance operations.” The five policies under this goal are:

- Develop a program for routine maintenance of bicycle and pedestrian facilities, including regular sweeping, pavement repairs, restriping, maintenance of traffic control devices, and landscape maintenance.
- Require adjacent property owners to maintain landscaped areas and keep sidewalks and planting strips litter free.
- Minimize disruption to the bicycle and pedestrian environment and/or provide alternate routes when repairing and constructing transportation facilities.
- Develop a maintenance monitoring program that facilitates reporting and responding to maintenance problems on existing bike routes, crosswalks, and sidewalks.
- Require a bicycle and pedestrian maintenance plan upon project construction.

More specifically, the Active Transportation Plan recommends, (i) repairing roads that have uneven, cracked or potholed surfaces, especially those with existing bikeways, and (ii) developing a program for routine maintenance of bikeway and walkway network facilities, including regular sweeping, pavement repairs, restriping crosswalks and trimming vegetation.

## Support programs

The Avenal Police Department (APD) conducts an annual “Bicycle Rodeo” event, through which they give away bicycles to local youth. These bicycles are donated by residents and repaired by inmates at Avenal State Prison. APD is developing a program to also give away bike helmets donated by retailers, along with bike safety information, as part of the Bicycle Rodeos. APD is also planning events at all local schools to teach youth about bike safety and rules of the road.

## Past expenditures

In 2012, the City constructed three high-visibility crosswalks with flashing beacons and in-pavement flashing lights to improve pedestrian safety around the two elementary schools. Two of the crosswalks are located near Avenal Elementary, along First Avenue at the intersections of Fresno and Madera Streets (see screenshot below); the third one is at the intersection of Seventh Avenue and Orange Street, on the way to Tamarack Elementary. The total budget for the projects was approximately \$250,000.



## Integration with other modes

Avenal is served by Kings Area Rural Transit (KART) bus route 12, which connects Avenal, Kettleman City, Stratford, Lemoore, Armona and Hanford. Route 12 North stops at Skyline Boulevard/S. Union Avenue. Route 12 South serves four stops on San Joaquin Street and three on Skyline Boulevard. All KART buses are equipped with wheelchair lifts and with front-mounted racks for two bicycles. In addition, Greyhound buses stop at Hillcrest Travel Plaza just outside the city limits, off Highway 269 near Interstate 5.

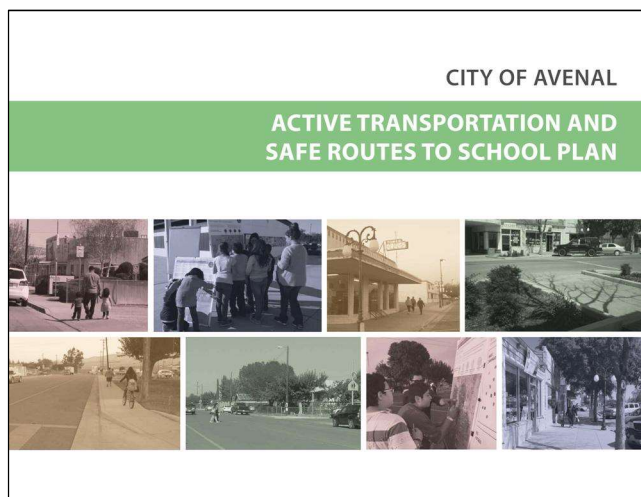




## Related plans

### Avenal Active Transportation and Safe Routes to School Plan (2016)

As mentioned at the beginning of this chapter, the City of Avenal completed its own pedestrian and bicycle plan in 2016. Called the “Avenal Active Transportation and Safe Routes to School Plan,” the plan is intended to guide the development of bicycle, pedestrian, safe routes to school and trail facilities in Avenal. Much of the information in this chapter—particularly on existing and proposed facilities and projects—was derived from, and reflects, the Avenal Plan.



In addition, the Avenal plan includes an extensive list of policies and actions under eight goal areas: General Plan consistency; implementation; design; maintenance; education and encouragement programs; safe routes to school; safety and law enforcement; and monitoring and evaluation. These are found under Chapter 2 of the Avenal plan. Selected policies and actions (edited for brevity) include:

- When updating the KCAG Bicycle Plan and other transportation plans, reflect the proposed networks and projects in the Avenal plan.
- Coordinate with Caltrans, Kings County, and KCAG to improve regional bicycle connections.
- Install bicycle parking at high-activity destinations, such as schools and parks.

- Provide striped crosswalks on all intersection legs where feasible; crossings in high-traffic areas should have high-visibility crosswalks.
- Continue to work with KART to improve access to transit and provide bike parking at bus stops.
- Upgrade sidewalks and curb ramps as part of any substantial roadway construction project.
- Encourage new development to provide streetscape improvements.
- Develop adult and youth bicycle and pedestrian education and safety programs; plan citywide events to help educate the public and promote bicycling and walking.
- Work with the School District to develop programs that encourage more students to walk or bicycle to school.
- Work with the Avenal Police Department to evaluate and enhance training on traffic laws related to bicyclists and pedestrians.
- Increase police presence and crossing guards to control drop-off and pick-up traffic in school zones.

### Avenal General Plan (2005)

The current version of Avenal’s General Plan dates to 2005 (the City is in the process of updating it). The goal of the General Plan’s Circulation Element is “To design and maintain a fully integrated local network that provides for safe and convenient circulation using a variety of transportation modes.” The Circulation Element includes two overarching objectives related to walking and bicycling, listed below. In addition, it includes numerous more-specific relevant policies, which have generally been brought up to date through the Avenal Active Transportation Plan (see above).

- **Objective B:** Enhance the availability and accessibility of alternative modes of transportation, such as walking, bicycling, carpools, buses and rail.
- **Objective D:** Design streets that promote safe and pleasant conditions for residents, pedestrians, bicyclists, and motorists on neighborhood streets, while preserving access for emergency vehicles, buses, and other users.





# Existing conditions

## 5.3 | Corcoran

### Setting and key destinations

The city of Corcoran is situated along the eastern edge of Kings County. It has an area of 7.5 square miles and is bordered by unincorporated Kings County on most sides, and by unincorporated Tulare County east of Corcoran State Prison. The city has a civilian population (excluding the prison) of 13,000 people. This includes 3,000 school-age children and teenagers (ages 5–17), representing 23% of the population; and 1,300 seniors (ages 65 and over), or 10% of the population.

Corcoran's urbanized area is in the northern part of the city, clustered mostly in the area between Orange and Bainum Avenues (on the north and south respectively) and Otis and 6 ½ Avenues (on the west and east). This area consists primarily of residential development, with scattered commercial, civic and institutional uses, and streets here are generally organized in a grid. Highway 43 aligns north–south along the eastern edge of the city and crosses the northern part of the city. The city's main local/regional thoroughfares include the following avenues: 6 ½, Dairy/6<sup>th</sup>, North, Orange, Otis, Patterson, Sherman and Whitley.

The main destinations in Corcoran for pedestrians and cyclists are shown in Figure 5.3.1. Aside from the residential neighborhoods, they include:

- The downtown commercial and civic area, found along Whitley Avenue roughly between Otis and Letts Avenues; it includes City Hall and the Corcoran Amtrak Station and, nearby, the library.
- The three elementary schools (Bret Harte, John C. Fremont and Mark Twain), middle school (John Muir), high school (Corcoran) and Kings Lake Educational Center.
- Burnham Smith Park (which includes the YMCA), Cesar Chavez Park and several smaller neighborhood parks.
- Corcoran State Prison, in the city's southern part.

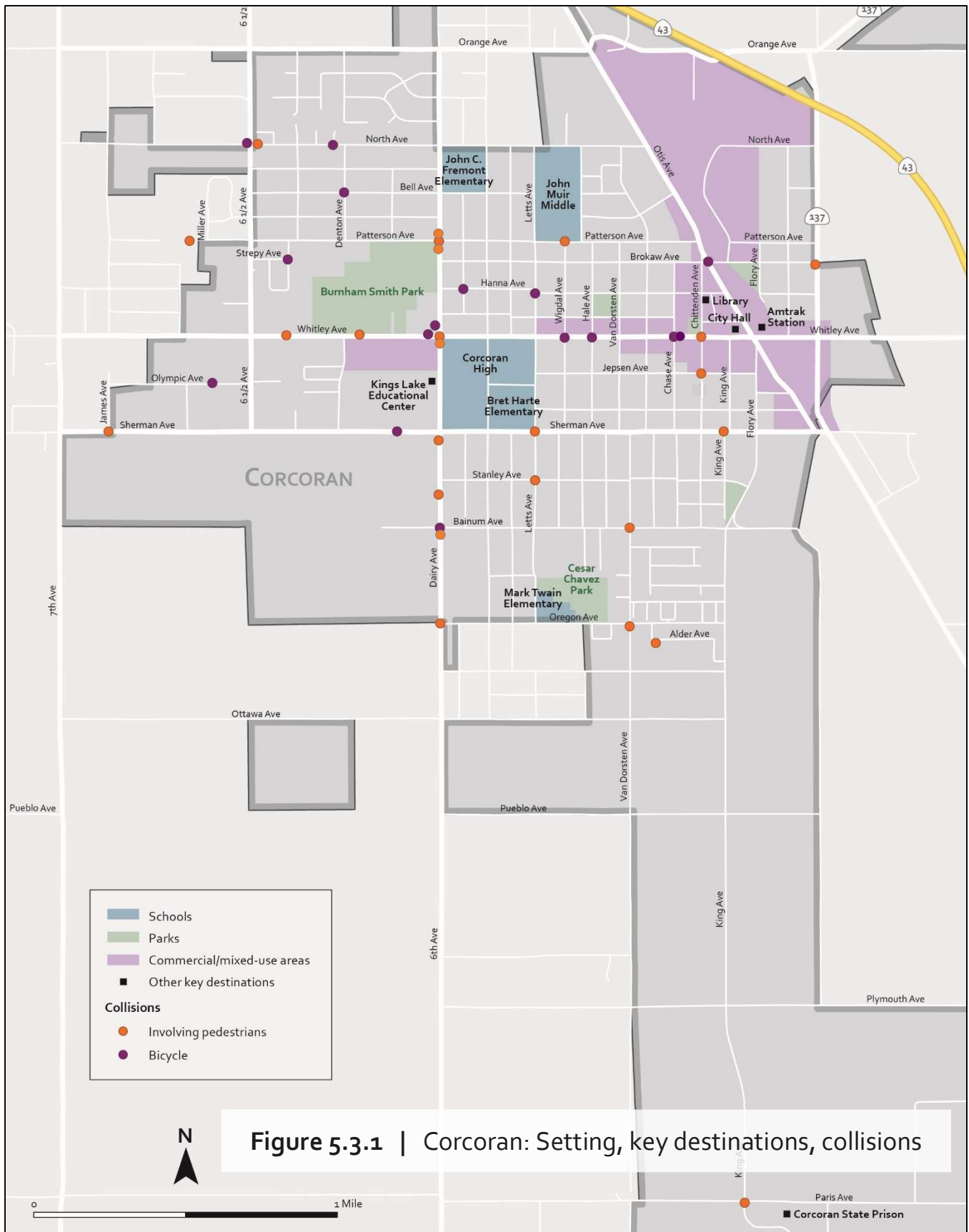
### Trip-making

The table below provides the mode split for trips to work made by Corcoran residents. The city's walk mode share (2.3%) is lower than King County's as a whole (2.7%) while its bike mode share (0.3%) is the same as the county's.

**Table 5.3.1 | Commute mode split**

	<i>Commuters</i>	<i>%</i>	<i>Daily trips</i>
Drove alone	2,869	72.9%	
Carpooled	811	20.6%	
Public transportation	11	0.3%	
Walked	90	2.3%	4,000
Bicycled	13	0.3%	600
Worked at home	99	2.5%	
Other*	44	1.1%	
<b>Total</b>	<b>3,937</b>	<b>100.0%</b>	

\* Includes taxicab, motorcycle and other means



## Traffic collisions

The table below summarizes the key findings regarding traffic collisions in Corcoran involving pedestrians or cyclists during the five-year period from 2012 through 2016.

**Table 5.3.2 | Traffic collision summary**

<i><b>Collisions</b></i>	
a. Collisions involving a pedestrian	25
b. Collisions involving a bicyclist	17
c. All collisions	567
d. Ped / bicyclist collisions as % of all	7%
<i><b>Fatalities and severe injuries</b></i>	
e. Pedestrians killed	0
f. Bicyclists killed	0
g. All victims killed	1
h. Pedestrians severely injured	5
i. Bicyclists severely injured	1
j. All victims severely injured	13
k. Peds / bicyclists killed or severely injured as % of all	43%

As the table shows, collisions involving a pedestrian or cyclist represented 7% of all collisions, while pedestrians and cyclists killed or severely injured represented 43% of all victims killed or severely injured. These figures are much higher than Corcoran's combined walk and bike commute mode share of 2.6%.

The map on the next page shows the location of collisions involving a pedestrian or a cyclist. As can be seen on the map, a high number of collisions happen on the arterials, particularly along Whitley, Patterson and Dairy/6<sup>th</sup> Avenues, with small clusters at the intersections of these streets.

## Bikeways

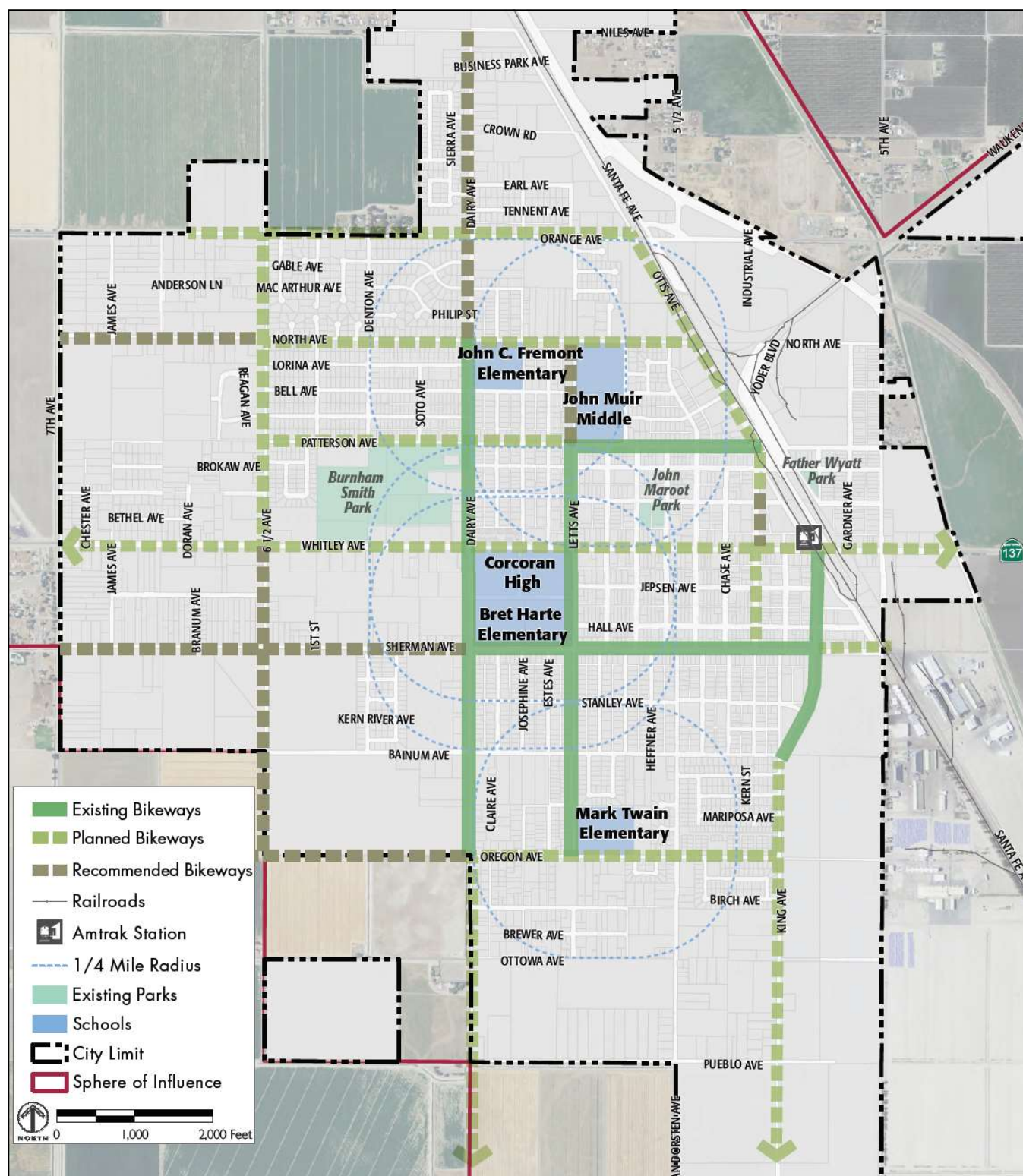
Figure 5.3.2 shows the city's existing bikeways (and also the planned and proposed bikeways) according to the Corcoran Safe Routes to School Plan from 2014 (which itself relied on information from the 2011 Kings County Regional Bicycle Plan). The existing bikeways as shown in the Corcoran plan are listed in the table below.

**Table 5.3.3 | Existing Corcoran bikeways**

<i><b>Street / road</b></i>	<i><b>From</b></i>	<i><b>To</b></i>	<i><b>Length (mi.)</b></i>
<i><b>Existing, north-south</b></i>			
Dairy Ave.	North Ave.	Oregon Ave.	1.3
Letts Ave.	Patterson Ave.	Oregon Ave.	1.0
Flory Ave.	Whitley Ave.	Bainum Ave.	0.5
<i><b>Existing, east-west</b></i>			
Patterson Ave.	Letts Ave.	Otis Ave.	0.4
Sherman Ave.	Dairy Ave.	Flory Ave.	0.8

### Figure 5.3.2 | Corcoran bikeways

Source: Corcoran Safe Routes to School Plan





## Bicycle parking

Bicycle parking is provided at most of the schools and recreational centers in Corcoran, including the Senior Center.

## Pedestrian facilities

As part of the Corcoran Safe Routes to School Plan (see the “Related Plans” section), the City conducted a sidewalk inventory based on field observations of most of the City’s main roads and streets. As shown in Figure 2-1 of that plan, the area best served by sidewalks is the city’s core, which contains the downtown and the older, central neighborhoods. However, many streets—even in the central area, and including streets around the public schools—lack continuous sidewalks. According to the Safe Routes to School Plan, the gaps in the sidewalk networks are the result of incomplete development, limited City funds and historically inconsistent enforcement of the City policy requiring property owners to install sidewalks.

## Maintenance

The Corcoran Safe Routes to School Plan recommends that the City develop a maintenance plan for bicycle and pedestrian facilities, particularly along major school routes, addressing the following items:

- Annual assessment of facility conditions.
- Maintenance budget.
- Checklist of all routine and major maintenance activities, including frequency, cost and responsible party.
- Tracking system to complete maintenance activities in a timely manner.
- Evaluation system to collect residents’ feedback or claims resulting from poor maintenance.

## Support programs

Historically, education and safety programs have been presented by the Corcoran Police Department and the local Optimists Club in the form of bicycle rodeos conducted at least once a year at the

elementary schools. The rodeos teach kids the rules of the road and stress helmet use.

## Past expenditures

In 2012, the City of Corcoran received \$686,000 in Congestion Mitigation Air Quality funds to add shoulders with bikes lanes on recently annexed roadways.

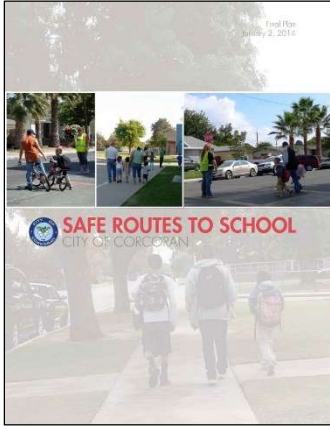
## Integration with other modes

Corcoran is served by Kings Area Rural Transit (KART) buses, Corcoran Area Transit (CAT) buses and Amtrak trains. KART Route 13 connects Corcoran and Hanford, serving the Corcoran Amtrak Station and three stops at the state prison. All KART buses are equipped with wheelchair lifts and with front-mounted racks for two bicycles. CAT, run by the City of Corcoran, provides demand-responsive bus service within the city and to the unincorporated fringe area during daytime hours on weekdays. Customers may request a bus equipped with a bike rack.

Seven Amtrak “San Joaquins” trains stop daily at Corcoran Station. The trains connect Corcoran to Sacramento, the Bay Area, Southern California and points in between, including Hanford. The trains are equipped with a limited number of bicycle racks for use on a first-come, first-served basis.

## Related plans

### Corcoran Safe Routes to School Plan (2014)



The objective of this plan, prepared as part of the update to the Corcoran General Plan, is to improve traffic safety near schools, particularly for children who walk and bike. The plan summarizes key needs, challenges and concerns around each of the five

public schools in the city, and identifies a network of 'major school routes.' The plan then recommends physical improvements as well as educational and encouragement strategies to improve conditions. Below is a summary of the plan's recommendations, to be implemented variously by the City of Corcoran or the Corcoran Unified School District:

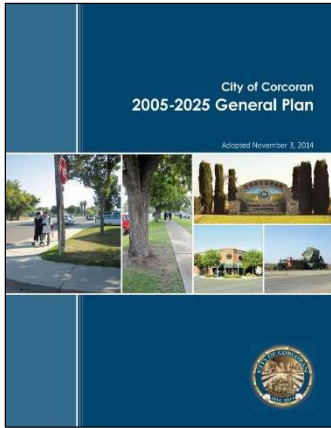
#### Engineering

- Closure of sidewalk gaps on a number of roads, most importantly Letts Avenue and other streets within ¼ mile of a school.
- Improved four-way crosswalks where Letts and Dairy Avenues intersect other major school routes.
- Four-way stop signs at the uncontrolled intersections along Letts and Dairy Avenues (eight intersections).
- New crossing curb ramps and upgraded ones to meet ADA standards, particularly within school zones and along the major school routes.
- Restriped bike lanes and new bikeways to connect key destinations, especially schools to neighborhoods.
- Pedestrian-scaled lighting along the major school routes, around public parks and at several other locations.
- Traffic-calming measures for streets in school zones, including along arterials and collectors.

#### Non-engineering

- Map for each school of recommended and discouraged walking and biking routes.
- Promotional or encouragement special events, such as 'walk and bike to school' days.
- Walking school buses and bicycle trains so that younger students may walk or bike to school as a group under adult supervision.
- Enhanced traffic enforcement by police around schools at times of high pedestrian and bicycle traffic.
- Crossing guards at additional locations.
- Traffic safety programs for school children, parents, drivers and neighbors.
- Various strategies to address the safety, congestion and parking impacts of student drop-off and pick-up, particularly at Bret Harte Elementary and Corcoran High Schools.

## Corcoran General Plan (2014)



The goal of the General Plan's Circulation Element is "To design and maintain a fully integrated local network that provides for safe and convenient circulation using a variety of transportation modes." Policies in

the Circulation Element that are especially relevant to walking and bicycling include:

### General Circulation and Street System

- 2.2 Accommodate the transportation needs of all users, regardless of age or ability, including bicyclists, pedestrians, children, persons with disabilities, seniors, and public transit users when planning, designing, and developing transportation improvements.
- 2.3 Incorporate features such as bus shelters, bicycle storage, bicycle racks and park and ride lots into the design of public and private development projects.
- 2.4 Designate a network of bicycle routes providing safe passage throughout the City; establish linkages between schools, parks and the designated bikeway.
- 2.5 Prioritize installation of bike and pedestrian facilities and include those recommendations in the Capital Improvement Program on an annual basis.
- 2.6 Encourage bicycle storage facilities as a condition of approval for multi-family residential development projects containing 10 or more units and for all commercial and public development proposals.
- 2.11 Ensure all crosswalks provide curb ramps in compliance with the Americans with Disabilities Act (ADA) requirements.
- 2.17 Design the street network with multiple connections and relatively direct routes for pedestrians and bicyclists, as well as motorists.
- 2.18 Require residential streets to be designed with sidewalks on both sides. Sidewalks shall be a minimum width of six feet to provide enough room for two pedestrians to walk side by side. Sidewalks and bike lanes shall be shaded by trees for pedestrian comfort.
- 2.19 Provide pedestrians and bicyclists with shortcuts and alternatives to travel along high volume streets by designing pedestrian and bicycle pass-through pathways at cul-de-sac bulbs adjacent to Arterial roadways.
- 2.45 Locate sidewalks, paths, and appropriate crosswalks to facilitate access to all schools and other areas with significant pedestrian traffic. Develop pedestrian paths to allow for unobstructed pedestrian flow from within a neighborhood, where feasible.

### Pedestrian and Bicycle Modes

- 2.59 Continue to support existing programs and pursue new programs for sidewalk construction in existing developed areas where sidewalks do not exist. Monitor bicycle accidents and establish new bicycle paths and lanes, needed.
- 2.60 Provide safe, aesthetic, and pleasant spaces for pedestrians.
- 2.61 Widen sidewalks above the minimum established Improvement Standards where intensive commercial, recreation, or institutional activity is present and where residential densities are high.
- 2.62 Ensure convenient and safe pedestrian crossings.
- 2.63 Provide pedestrian and bicycle access on Local streets and Minor Collectors to enable pedestrians to have access through a neighborhood to shopping areas, transit stops, schools, and other such facilities.
- 2.64 Locate sidewalks, pedestrian paths, and appropriate crosswalks to facilitate access to all schools and other areas with significant pedestrian traffic. Develop pedestrian paths to

allow for unobstructed pedestrian flow from within a neighborhood, where feasible.

- 2.65 Require, where security walls or fences are proposed for residential developments along Arterial or Collector streets, that pedestrian access be provided between the Arterial or Collector and the subdivision to allow for access to transit vehicles operating on an Arterial or Collector Street.
- 2.66 Promote safe, convenient, and accessible pedestrian access ways within the community, except where there is no demonstrated need, such as in industrial and rural residential areas.
- 2.67 Encourage the inclusion of greenbelts and common open space for pedestrian use within residential development areas.
- 2.68 Require Collectors, which are identified to function as links for the bicycle transportation system, be provided with Class II bikeways (bike lanes) or show an alternative route.
- 2.69 Provide Class I or Class II bike routes on Arterials by widening the street or eliminating on-street parking, where possible.
- 2.70 Design bicycle and pedestrian paths to minimize interaction with vehicular traffic.
- 2.71 Require the provision for safe bicycle circulation in all new developments, including bicycle parking facilities and internal bicycle and pedestrian routes.
- 2.72 Provide for the safe and convenient use of the bicycle as a means of transportation and recreation.
- 2.73 Eliminate hazards on designated bikeways.
- 2.74 Prevent bicycle accidents by promoting bicycle safety education and improving traffic enforcement related to bicycle use.
- 2.75 Provide adequate and secure bicycle storage facilities at all governmental, commercial, and parks throughout the City.





# Existing conditions

## 5.4 | Hanford

In 2016, the City of Hanford completed its own active transportation plan, called the “Hanford Pedestrian and Bicycle Master Plan.” Because the Hanford plan is so recent and detailed at the local level, this chapter derives much of its information—particularly on existing and proposed facilities and projects—from the Hanford plan.

### Setting and key destinations

The city of Hanford is located in northern Kings County, east of Lemoore. It has an area of 16.8 square miles and is surrounded by unincorporated Kings County, including the communities of Armona, Grangeville and Home Garden. It is the county seat and the most populous city in the county. The city has a population of 54,800 people. This includes 12,200 school-age children and teenagers (ages 5–17), representing 22% of the population; and 6,100 seniors (ages 65 and over) or 11% of the population).

The city has an older, central area with a fairly regular and well-connected street grid, and newer areas outside the core with a more curvilinear street pattern, including many cul-de-sacs (see Figure 5.4.1). Both the core and areas outside the core have a mix of land uses, but single-family residential neighborhoods predominate. Highway 198 is a grade-separated highway running east-west through the center of the city, while Highway 43 runs along the eastern edge in a north-south direction and is not grade-separated. (Highway 43 is open to bicycle travel while Highway 198 is open east of Highway 43 and west of Lemoore Naval Air Station.) The main local/regional arterials are, in a north-south direction, 12<sup>th</sup> Avenue, 11<sup>th</sup> Avenue, Douty Street and 10<sup>th</sup> Avenue; and, in an east-west direction,

Fargo Avenue, Grangeville Boulevard, Lacey Boulevard and Hanford Armona Road.

The main destinations in Hanford for pedestrians and cyclists are shown in Figure 5.4.1. In addition to the residential neighborhoods, they include:

- The downtown commercial/civic center, located along W. 7<sup>th</sup>, N. Irwin and N. Douty Streets; it includes City Hall, Kings County Library, Civic Center Park, Civic Auditorium/Teen Center, Veterans Memorial Building, Hanford Fox Theater and, slightly further out, the post office, the Plunge and the Hanford Amtrak Station.
- Kings County Government Center.
- 4<sup>th</sup> and 5<sup>th</sup> Streets area, south of downtown.
- Commercial developments at the corner of W. Lacey Boulevard and 12<sup>th</sup> Avenue, including Hanford Mall and Centennial Plaza.
- Hanford Towne Centre, at the corner of W. Lacey Boulevard and N. 11<sup>th</sup> Avenue.
- Fifteen elementary schools, three junior high schools, three high schools and a College of the Sequoias campus.
- Hidden Valley Park, Coe Park and several smaller neighborhood parks.
- Longfield Center (gymnasium and game room), Soccer Complex, Skate Park and Youth Athletic Complex.
- Kings County Fairgrounds.

## Trip-making

The table below provides the mode split for trips to work made by Hanford residents. The city's walk mode share (1.9%) is lower than King County's as a whole (2.7%) while its bike mode share (0.4%) is slightly higher than the county's (0.3%).

**Table 5.4.1 | Commute mode split**

	<i>Commuters</i>	<i>%</i>	<i>Daily trips</i>
Drove alone	16,904	80.0%	
Carpooled	3,119	14.8%	
Public transportation	126	0.6%	
Walked	403	1.9%	17,800
Bicycled	85	0.4%	3,800
Worked at home	361	1.7%	
Other*	134	0.6%	
<b>Total</b>	<b>21,132</b>	<b>100.0%</b>	

\* Includes taxicab, motorcycle and other means

It should be noted that the Hanford Pedestrian and Bicycle Master Plan presents similar, though not identical figures, on mode split as those shown here. The reason for the difference is that this plan has used a slightly more recent and up-to-date dataset from the U.S. Census Bureau.

## Traffic collisions

The table below summarizes the key findings regarding traffic collisions in Hanford involving pedestrians and cyclists during the five-year period from 2012 through 2016. Collisions involving a pedestrian or bicyclist represented 8% of all collisions, while pedestrians and bicyclists killed or severely injured represented 37% of all victims killed or severely injured. These figures are much higher than Hanford's combined walk and bike commute mode share of 2.3%.

**Table 5.4.2 | Traffic collision summary**

<b><i>Collisions</i></b>	
a. Collisions involving a pedestrian	85
b. Collisions involving a bicyclist	77
c. All collisions	2,040
d. Ped / bicyclist collisions as % of all	8%
<b><i>Fatalities and severe injuries</i></b>	
e. Pedestrians killed	2
f. Bicyclists killed	3
g. All victims killed	12
h. Pedestrians severely injured	12
i. Bicyclists severely injured	7
j. All victims severely injured	53
k. Peds / bicyclists killed or severely injured as % of all	37%

Figure 5.4.1 shows the location of collisions involving a pedestrian or a bicyclist. As shown on the map, most collisions happen in the downtown area; on the regional arterials (Lacey Boulevard, Grangeville Boulevard, Hanford Armona Road, Douty Street and 12<sup>th</sup>, 11<sup>th</sup> and 10<sup>th</sup> Avenues); and, of particular concern, around several schools. The main clusters of collisions occur:

- In front of Hanford High School along Grangeville Boulevard (all pedestrian collisions).
- At the intersection of 11<sup>th</sup> Avenue and Lacey Boulevard.
- At the intersections of Lacey Boulevard with Greenfield Avenue and with Garner Avenue.
- On Greenfield Avenue near the Youth Athletic Complex and Hanford West High School.
- At the intersection of 11<sup>th</sup> Avenue and Sixth Street (all bicycle collisions).
- Around Civic Center Park, particularly just south of it.
- At and approaching the intersection of Douty and Seventh Streets.
- Around Roosevelt Elementary School.



**Figure 5.4.1** | Hanford: Setting, key destinations, collisions



## Bikeways

Figure 5.4.2 shows the city's existing bikeways according to the Hanford Pedestrian and Bicycle Master Plan. The plan states that there are

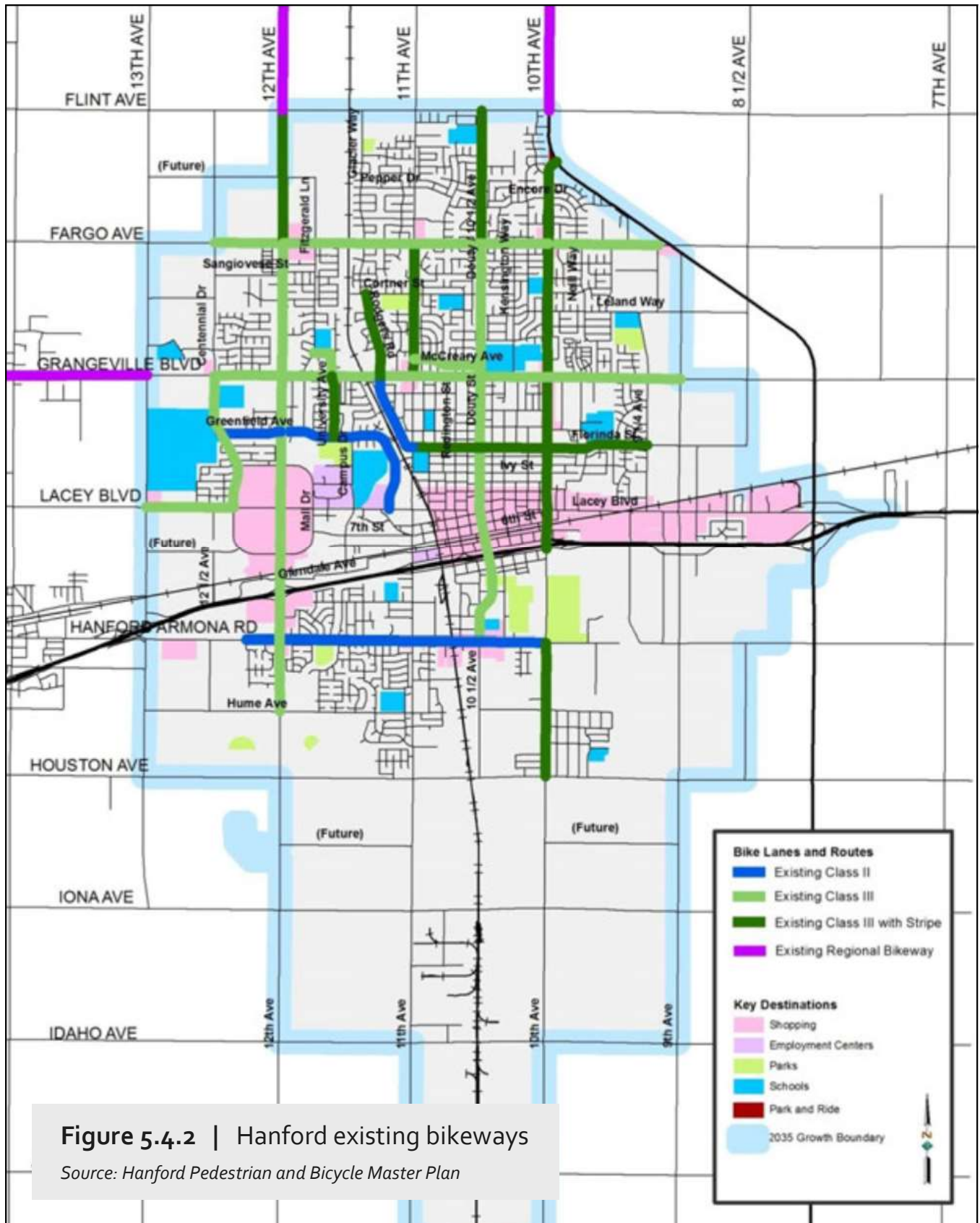
approximately 31 miles of existing bikeways in the city, including 6 miles of bike lanes and 25 miles of bike routes. The existing bikeways are listed in the table below.

**Table 5.4.3 | Existing Hanford bikeways**

<i>Street / road</i>	<i>From</i>	<i>To</i>
<b>Existing bike lanes (Class II)</b>		
Rodgers Rd.	Grangeville	Florinda
11 <sup>th</sup> Ave.	Fargo	Grangeville <sup>a</sup>
Greenfield Ave..	Centennial	Lacey
Hanford Armona Rd.	Greenbrier	Airport entrance
<b>Existing bike routes (Class III)</b>		
Centennial Dr.	Grangeville	Lacey <sup>b</sup>
12 <sup>th</sup> Ave.	Flint	Grangeville <sup>b</sup>
12 <sup>th</sup> Ave.	Grangeville	Hume
Kings Rd. / Berkshire Way	Fitzgerald	Grangeville
University Ave.	Grangeville	Greenfield <sup>b</sup>
Rodgers Rd.	Mallard	Grangeville
10 ½ Ave. (Douty St.)	Flint	Grangeville <sup>b</sup>
10 ½ Ave. (Douty St.)	Grangeville	Hanford Armona
Kensington Way	Fargo	Grangeville
10 <sup>th</sup> Ave. (Hwy. 43)	Hwy. 43	Mission
10 <sup>th</sup> Ave. (Hwy. 43)	Mission	Third <sup>b</sup>
Fargo Ave.	Centennial	9 ¼
McCreary Ave.	11 <sup>th</sup>	Douty
Grangeville Blvd.	Centennial	12 <sup>th</sup> <sup>b</sup>
Grangeville Blvd.	12 <sup>th</sup>	9 <sup>th</sup>
Florinda St.	11 <sup>th</sup>	9 ¼
Lacey Blvd.	13 <sup>th</sup>	Centennial

<sup>a</sup> The Hanford plan proposes converting the existing Class II facility on 11<sup>th</sup> Ave. from Fargo to Grangeville to Class III by removing the striping and adding signs and sharrows.

<sup>b</sup> Planned to become Class II facilities (bike lanes).



## Bicycle parking

Bicycle parking racks are available at Hanford's public schools, parks and other key destinations such as College of the Sequoias, Hanford Mall, County Civic Center, Kings County Library, KART Transit Center, the Amtrak Station and various other downtown locations. The City does not have a bicycle parking ordinance requiring the provision of bicycle parking. There are showers and locker facilities provided for employees at various schools, health clubs and hospitals.

The Hanford Pedestrian and Bicycle Master Plan recommends that the City consider adopting an ordinance with bicycle parking requirements for new commercial buildings, existing buildings undergoing major renovations, building change of use, City-owned and leased buildings, and public and privately owned parking lots. The plan also recommends that the City provide bicycle parking in the public right-of-way at the request of businesses.

## Pedestrian facilities

Curb, gutter and sidewalk are required for all new development in the City. The City requires sidewalks to be at least 4' 6" wide in residential areas and at least 7' 6" in commercial areas. Most downtown sidewalks are 10 feet wide. The City installs approximately 30,000 square feet of sidewalks each year. However, there are areas within the city where there are gaps in the sidewalk network. Also, there are many instances where the sidewalks are not up to standard because they have cracked or uneven surfaces, or because they are obstructed by signs, poles, benches and other streetscape elements.

Shoulders serve pedestrians on many roadways outside the city limits and in unincorporated county islands that lack sidewalks. Examples include Lacey Boulevard east of 10<sup>th</sup> Avenue; Fairview Place and Fargo Place northeast of the city; Kings Road in the central portion of the city; Furlong Drive in the north central area; the streets in Home Garden; and several roadways located east of 10<sup>th</sup> Avenue and north of Lacey Boulevard. Many of the public schools in the city have some pedestrian-crossing

signage, marked crosswalks at the primary entrance to the school grounds, and reduced-speed zones within 500 feet of the school.

## Maintenance

The City engages in annual maintenance efforts to repair cracked or heaved sidewalks and to address sidewalk improvements based on citizens' requests and on needs at specific locations as budget allows. Street overlay and street re-construction projects include repair of sidewalk and construction of ADA-compliant curb ramps. Other capital improvement projects with ADA components are completed every year, and when applicable the City works with developers to ensure that accessibility is included in the scope of their project.

The Hanford Pedestrian and Bicycle Master Plan recommends that the City's street maintenance and repair operations incorporate a number of pedestrian- and bicycle-oriented practices. These include repairs to cracked, potholed or uneven sidewalk and bikeway surfaces; frequent sweeping of bikeways; debris removal on bikeways and sidewalks; clearing overgrown vegetation; regular restriping of bike lanes; replacement of drainage grates that can catch bicycle tires; and various bicycle-friendly mitigation measures in construction zones and as part of roadway improvement projects.

The City's ADA Transition Plan (see later in this section) establishes several provisions related to the maintenance of pedestrian facilities and pedestrian access:

- When public right-of-way improvements are contracted by the City, the contractor will be directed to maintain an accessible path of travel for pedestrians during the entire period of construction.
- An encroachment permit is required any time work is done in the public right-of-way. The permit process includes a requirement for limiting the extent of the disruption of a pedestrian route and notification of affected adjacent property owners. The contractor must also identify and maintain a continuous

pedestrian path of travel when work disrupts passage along a public sidewalk.

- The City engages in annual maintenance efforts to repair cracked or heaved sidewalks, and to address sidewalk improvements based on public requests or on needs at specific locations as budget allows.
- Street overlay and reconstruction projects include repair of sidewalk and construction of ADA-compliant curb ramps. Other capital improvement projects with ADA components are completed regularly and, when applicable, the City works with developers to ensure that accessibility considerations are included in project scopes.
- The public may request sidewalk repairs by completing an online request form.

## Support programs

Hanford Police Department officers visit schools in the Hanford Elementary School District to teach kids about basic bicycle safety laws and the importance of wearing a helmet every time they ride. In addition, the Police Department in 2015 bought 400 bicycle helmets to provide to minors. Through this program, riders younger than 18 who are caught riding without a helmet will be issued a warning citation and given an application for a free helmet. Lastly, the Police Department is considering a course to demonstrate basic riding skills, as well as bicycle inspections to ensure students have properly adjusted seats, handlebars and safety features like brakes and reflectors.

To supplement these programs, the Hanford Pedestrian and Bicycle Master Plan suggests a wide range of possible future programs, including:

- Additional bicycle safety and education programs for school children and their parents.
- After-school bicycle maintenance and repair classes.
- Promotional events such as Bike to Work Day.
- Community events such as charity bike rides, costume rides, bike fairs and bicycle rodeos.

- Informational materials and programs specifically addressing the cycling needs of seniors.
- Adult-targeted “Effective Cycling” courses, offered at bike shops and community centers.
- Special enforcement days, when officers focus on enforcing bicycle laws.
- Traffic school for cyclists, to parallel conventional driver traffic schools.
- Driver education courses, including on their responsibility to share the road with bicyclists.
- “Share the Road” signs and roadway stencils.
- Public awareness campaigns targeting drivers.
- Police officer training on the laws regarding bicyclists’ rights and responsibilities.

There are currently no pedestrian-oriented programs or initiatives in place in Hanford. To fill this gap, the Hanford Pedestrian and Bicycle Master Plan recommends:

- A neighborhood traffic-calming program;
- Monthly community walking days;
- Employer lunchtime walks;
- Walk-to-school and walk-to-transit campaigns;
- Citywide pedestrian guide and map; and
- Pedestrian safety stings and speed radar trailers.

## Past expenditures

In 2013, the City of Hanford received \$66,000 in Congestion Mitigation Air Quality (CMAQ) funds to add bike lanes and pedestrian improvements at various locations throughout the city.

In 2018, the City received \$877,000, also in CMAQ funds, for additional bicycle and pedestrian improvements. The scope of work focuses on the medium- and high-priority projects identified in Hanford’s Master Plan, including signage and striping of Class II bike lanes and signage of Class III bike routes. Also, the project will provide ADA-compliant ramps, high-visibility crosswalks and pedestrian safety signage around schools.



## Integration with other modes

Hanford is served by several Kings Area Rural Transit (KART) bus routes. Almost all routes begin and end at the KART Terminal in downtown Hanford. Nine local routes provide service throughout Hanford. Additional routes connect Hanford to Armona, Avenal, Corcoran, Grangeville, Hardwick, Kettleman City, Lemoore and Stratford, and beyond Kings County to Fresno, Laton, Selma and Visalia. All KART buses are equipped with wheelchair lifts and with front-mounted racks for two bicycles. Also, KART provides door-to-door dial-a-ride service during normal operating hours to eligible certified individuals with disabilities.

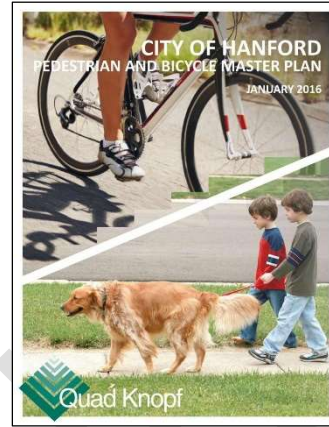
Seven Amtrak “San Joaquins” trains stop daily at Hanford Station. The trains connect Hanford to Sacramento, the Bay Area, Southern California and points in between, including Corcoran. The trains are equipped with a limited number of bicycle racks for use on a first-come, first-served basis. In addition, daily Amtrak thruway buses connect Hanford to Visalia, Santa Maria and points in between, including Lemoore, Lemoore Naval Air Station and Kettleman City. Passengers may put bicycles in the bin under the buses. In addition, buses operated by Orange Belt Stages, which offers daily trips to Las Vegas and to areas along the Central Coast, stop in Hanford.

Lastly, the California Department of Transportation (Caltrans) manages a 37-space park-and-ride lot for carpoolers at the intersection of 10<sup>th</sup> Avenue and Highway 43 (see screenshot below). This is the only formal park-and-ride facility in the county.



## Related plans

### Hanford Pedestrian and Bicycle Master Plan (2016)



As mentioned at the beginning of this chapter the City of Hanford completed its own active transportation plan in 2016. Called the “Hanford Pedestrian and Bicycle Master Plan,” the plan assessed existing and proposed walkways, bikeways and

programs; developed a feasible and comprehensive plan to meet the City’s pedestrian and bicycle transportation needs; provided recommendations for pedestrian and bicycle facilities with a five-year priority outlook; and identified potential funding sources. Much of the information in this chapter—particularly on existing and proposed facilities and projects—was derived from, and reflects, the Hanford Plan.

In addition, Section 5.2 of the Hanford plan includes an extensive list of objectives and implementation policies. Selected policies (edited for brevity) include:

- Schedule pedestrian and bicycle network improvements in annual updates to the Capital Improvement Program.
- Establish a spot improvement program for low-cost, small-scale improvements, such as pavement maintenance, hazard removal, or bicycle rack installation.
- Assign a project coordinator to oversee implementation of the Pedestrian and Bicycle Master Plan.
- Require secure bicycle parking at shopping, employment, and recreational centers.
- Develop and distribute pedestrian/bicycle safety material and education programs.

- Continue the enforcement of traffic laws with respect to pedestrian and bicyclists' rights and responsibilities.
- Prioritize safety improvements in the vicinity of schools, public transit, and other high-priority pedestrian destinations.
- through incentive/awareness programs.
- Develop education, awareness, incentive and encouragement programs to promote bicycling and walking.
- Consider a program for installing shade trees along streets where currently little or none exist.
- Encourage multi-jurisdictional funding applications to implement the regional pedestrian and bicycle system.

### **Hanford General Plan (2017)**

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The Transportation and Circulation Element of the City's General Plan includes several sections relevant to walking and biking, each with several implementing policies. The main sections are 4.2.9 (Complete Streets Program), 4.2.10 (Safe Routes to School), 4.2.12 (Traffic Calming and Trip Reduction) and especially 4.5.1 (Bicycle Routes and Facilities) and 4.5.2 (Pedestrian Facilities). The policies in the Transportation and Circulation Element were developed before the Hanford Pedestrian and Bicycle Master Plan (see above), so the Pedestrian and Bicycle Plan was able to generally reflect and provide greater specificity to these policies.

### **Hanford ADA Self-Evaluation and Transition Plan (2011)**

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The Americans with Disabilities Act (ADA) of 1990 provides comprehensive civil rights protections to qualified individuals with disabilities in both employment and the provision of goods and services. Except under certain cases, Title II of the act requires that programs, services or activities conducted by a public agency be accessible to and usable by individuals with disabilities. To comply with these requirements, the City's ADA plan describes the process by which policies, programs and facilities were evaluated for compliance with

the ADA; presents the findings of that evaluation; and provides recommendations to improve access.

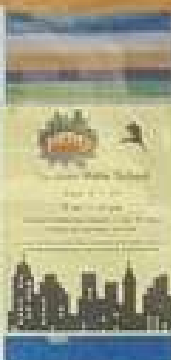
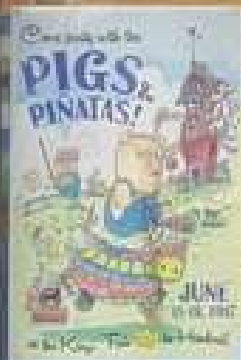
As part of the ADA planning process, in 2010–11 the City evaluated its policies, programs and procedures to determine current levels of service and the extent of barriers for persons with disabilities; and conducted a physical survey of City facilities and selected pedestrian rights-of-way to identify physical barriers and recommendations for improvements. Facilities surveyed included City parks, municipal buildings, and selected sidewalks and curb ramps in high-priority pedestrian areas, particularly in the City's downtown area.

The ADA plan determined to prioritize sidewalk and curb ramp repairs in the following order, based on the types of facilities or areas they would serve: 1. government offices and facilities; 2. bus stops and transportation facilities; 3. places of public accommodation such as commercial and business areas; 4. facilities containing employers; 5. other areas such as residential neighborhoods and underdeveloped regions of the City. Additional criteria for prioritization may include: repair of hazardous conditions; distance from a City-operated program or building; distance from a bus stop; proximity to a facility serving disabled clients; level of pedestrian traffic; and lack of feasible alternate routes. The City established a 20-year timeframe to remove barriers in the public right-of-way.

INFORMATION



LEMOORE



# Existing conditions

## 5.5 | Lemoore

### Setting and key destinations

Lemoore is located in northwestern Kings County, west of Hanford and east of Lemoore Naval Air Station. It has an area of 8.5 square miles and is surrounded by unincorporated Kings County. The city has a population of 25,000 people. This includes 5,200 school-age children and teenagers (ages 5–17), representing 21% of the population; and 1,900 seniors (ages 65 and over), or 7% of the population.

The city's urbanized area is found mostly east of Highway 41 and north of Highway 198. This area consists primarily of residential development, with scattered commercial, civic and institutional uses. The city has a small older, central area with a fairly regular and well-connected street grid; newer areas outside this core have a more curvilinear street pattern, including many cul-de-sacs (see Figure 5.5.1). The main local/regional thoroughfares are 19<sup>th</sup> Avenue, 18<sup>th</sup>/Lemoore Avenue, Hanford Armona Road and Bush Street.

The main destinations in Lemoore for pedestrians and cyclists are shown in Figure 5.5.1. In addition to the residential neighborhoods, they include:

- The downtown commercial/civic center along W. D Street and, slightly further south, City Hall and Lemoore Branch Library.
- The four elementary schools, two middle/junior high schools and three high schools.
- West Hills College campus.
- City, Lions and Heritage Parks.
- Lemoore Plaza Shopping Center, at the intersection of 18<sup>th</sup>/Lemoore Avenue and Hanford Armona Road.

### Trip-making

The table below provides the mode split for trips to work made by Lemoore residents. The city's walk mode share (1.6%) is lower than King County's as a whole (2.7%) while its bike mode share (0.4%) is slightly higher than the county's (0.3%).

**Table 5.5.1 | Commute mode split**

	<i>Commuters</i>	<i>%</i>	<i>Daily trips</i>
Drove alone	9,491	82.5%	
Carpooled	1,450	12.6%	
Public transportation	12	0.1%	
Walked	179	1.6%	7,900
Bicycled	41	0.4%	1,800
Worked at home	176	1.5%	
Other*	149	1.3%	
<b>Total</b>	<b>11,498</b>	<b>100.0%</b>	

\* Includes taxicab, motorcycle and other means

### Traffic collisions

The table below summarizes the key findings regarding traffic collisions in Lemoore involving pedestrians and cyclists during the five-year period from 2012 through 2016. Collisions involving a pedestrian or bicyclist represented 7% of all collisions, while pedestrians and bicyclists killed or severely injured represent 23% of all victims killed or severely injured. These figures are much higher than Lemoore's combined walk and bike commute mode share of 2.0%. Figure 5.5.1 shows the location of collisions involving a pedestrian or a bicyclist. A high number of collisions happen along the arterials, particularly 18<sup>th</sup>/Lemoore Avenue, 19<sup>th</sup> Avenue, Bush Street, Cinnamon Drive and Hanford Armona Road. In addition, clusters of collisions can be seen at the intersections of Fox Street/Cinnamon Drive and Hanford Armona Road/Beverly Drive, and



where Lemoore Avenue intersects Bush Street and Cinnamon Drive.

**Table 5.5.2 | Traffic collision summary**

<i><b>Collisions</b></i>	
a. Collisions involving a pedestrian	36
b. Collisions involving a bicyclist	30
c. All collisions	943
d. Ped / bicyclist collisions as % of all	7%
<i><b>Fatalities and severe injuries</b></i>	
e. Pedestrians killed	1
f. Bicyclists killed	0
g. All victims killed	4
h. Pedestrians severely injured	3
i. Bicyclists severely injured	2
j. All victims severely injured	22
k. Peds / bicyclists killed or severely injured as % of all	23%

**Table 5.5.3 | Lemoore bikeway segments**

<i>Street / road</i>	<i>From</i>	<i>To</i>
<i><b>Existing north–south bikeways</b></i>		
19 <sup>th</sup> Avenue	Cinnamon Drive	D Street
Liberty Drive	Hanford Armona Road	Cinnamon Drive
Creekside path	Fallenleaf Drive	Cinnamon Drive
Fox Street	Hanford Armona Road	Bush Street
Lemoore Avenue	Northern city limit	Golf Links Drive
Path around Heritage Park		
Olive Street	E Street	Bush Street
<i><b>Existing east–west bikeways</b></i>		
Hanford Armona Road	Liberty Drive	Lemoore Canal
Fallenleaf Drive	Liberty Drive	Fox Street
Cinnamon Drive	19 <sup>th</sup> Avenue	Lemoore Avenue
E Street	Fox Street	Olive Street
D Street	Lemoore Avenue	Bush Street
B Street (entire length)	Olive Street	Lemoore Avenue
Golf Links Drive (entire length)	Iona Avenue	Lemoore Avenue

## Bikeways

Figure 5.5.2 shows Lemoore’s existing (and also proposed) bikeways according to the City’s 2030 General Plan. The existing bikeways (shown in the figure as solid orange lines) are listed in the table on the next page.

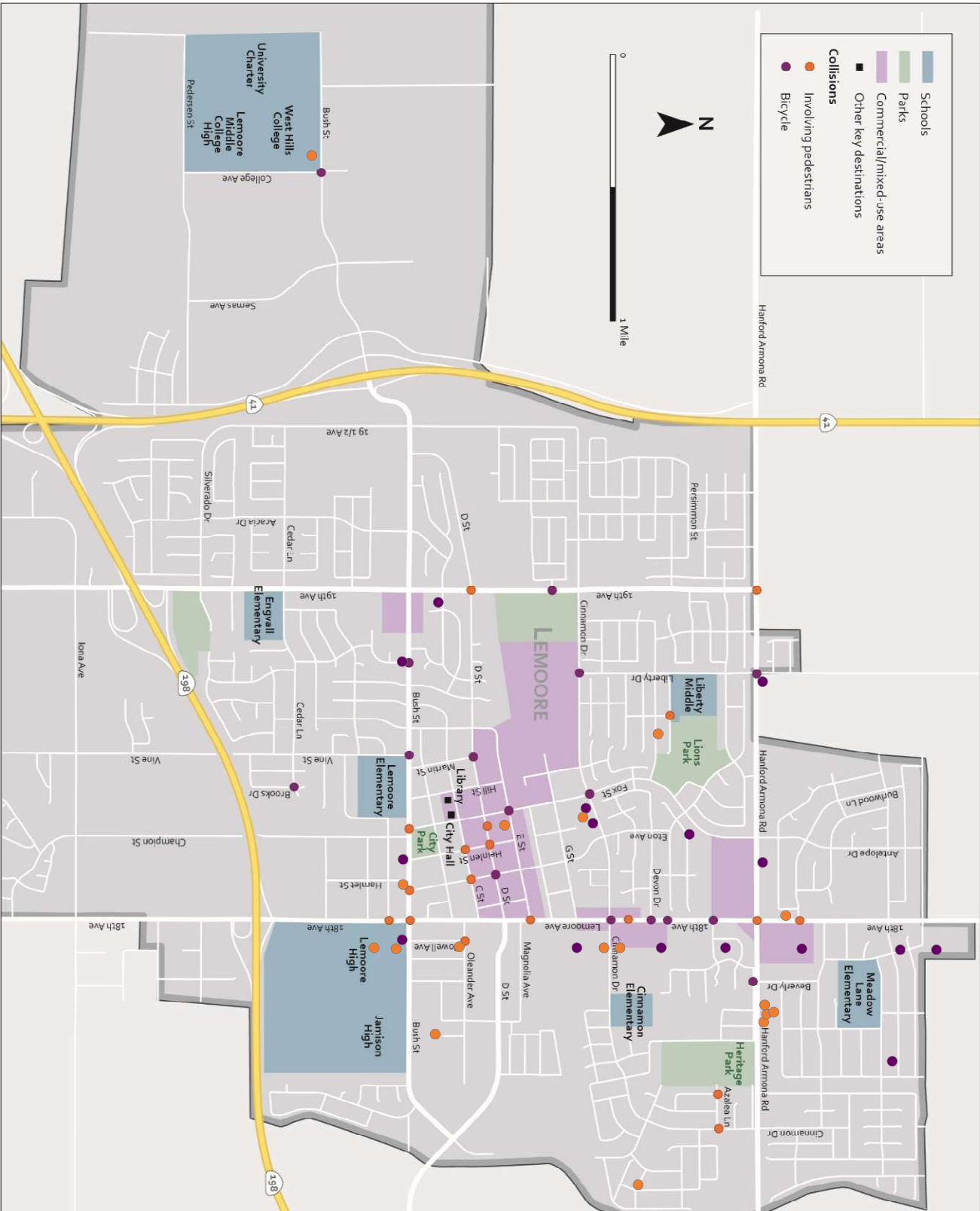
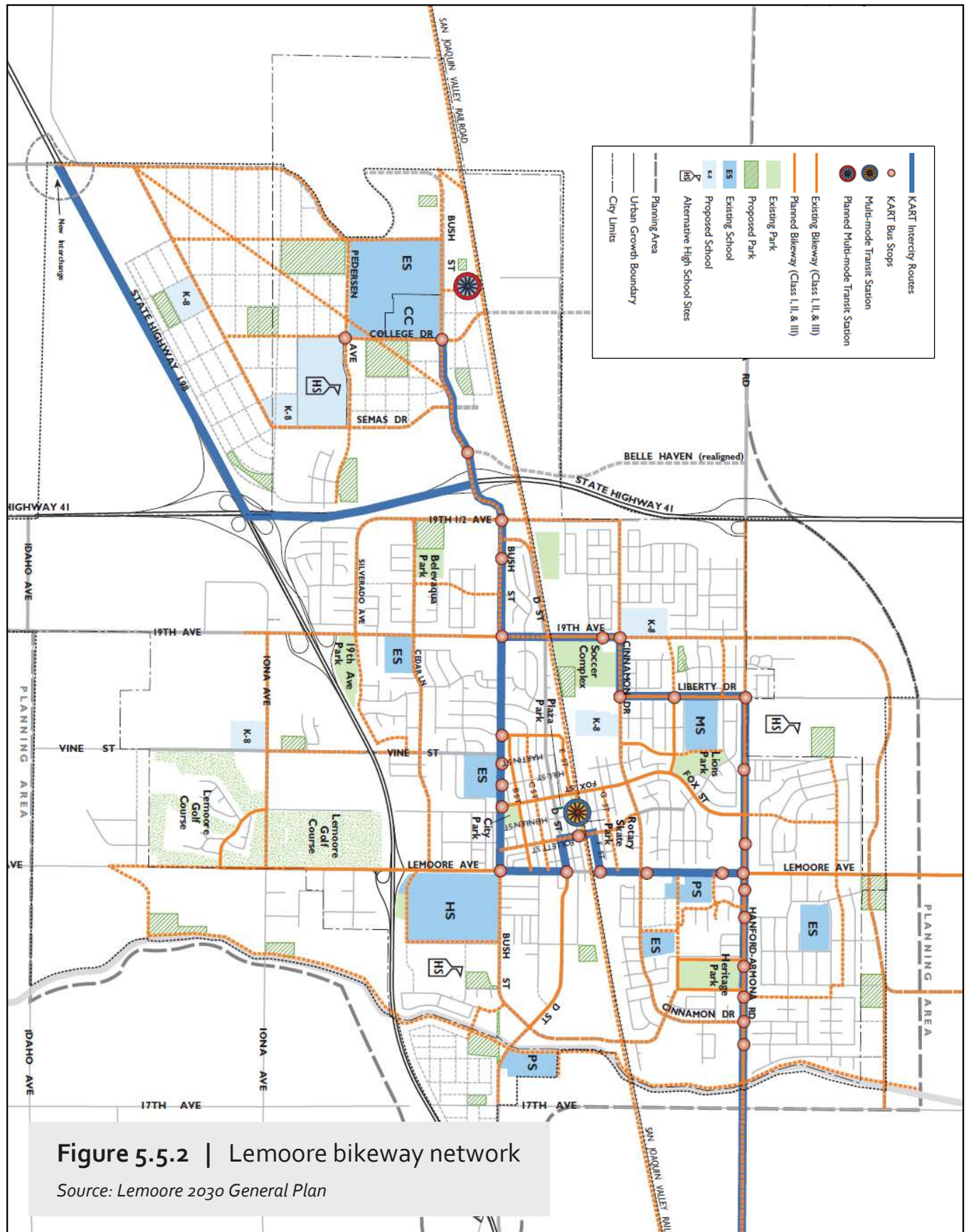


Figure 5.5.1 | Lemoore: Setting, key destinations, collisions



**Figure 5.5.2 | Lemoore bikeway network**

Source: Lemoore 2030 General Plan

## Bicycle parking

Most schools in Lemoore provide bicycle parking for use by students and staff. Implementation actions in the Circulation Element of the City's General Plan call for amending the Zoning Ordinance to (i) require bicycle parking facilities at large commercial and industrial employer sites, including racks and lockers that are integrated into the overall site and building design (action C-I-4) and (ii) include standards in all new development for pedestrian circulation including bicycle parking and lockers integrated with parking areas (action C-I-8).

## Pedestrian facilities

In general, the streets in the downtown area offer sidewalks and crosswalks, and the short blocks and grid network provide easy connectivity for pedestrians. The newer neighborhoods feature more curvilinear street patterns, including many cul-de-sacs. These designs provide fewer street connections, which force pedestrians to have to travel longer, more circuitous distances.

The Circulation Element states that "improvements in areas within the City that currently have undersized or no pedestrian facilities should be made a priority... The new neighborhood centers should also be designed to be "pedestrian friendly... Pedestrian-friendly facilities should also be provided near transit stops and adjacent to medium and higher density residential areas."

## Maintenance

Implementation action C-I-3 of the Circulation Element of the City's General Plan calls for increasing bicycle safety by, among other actions:

- Sweeping and repairing bicycle lanes and paths on a regular basis.
- Ensuring that bikeways are delineated and signed in accordance with Caltrans standards.
- Ensuring that lighting is provided where needed.
- Ensuring that all new and improved streets have bicycle-safe drainage grates and are kept free of hazards such as uneven pavement, gravel and other debris.
- Providing adequate signage and markings warning vehicular traffic of the existence of merging or crossing bicycle traffic where bike routes and paths make transitions into or across roadways.

## Support programs

In the past, educational and safety programs were presented by "Perfection on Wheels," a bicycle stunt team, to the students of the elementary schools once a year. The program stressed helmet usage and rules of the road. Implementation action C-I-3 of the Circulation Element of the City's General Plan calls for increasing bicycle safety by, among other actions, working with the Lemoore Union School districts to promote classes on bicycle safety in the schools.





## Past expenditures

**2013:** The City installed 20 disabled-access ramps at various intersections in the area of Meadow Lane School and new sidewalk on the west side of Vine Street between Cedar Lane and Vine Court. The project was paid from the Safe Routes to School grant along with the City's local match, which was paid from the Local Transportation Funds (LTF) program. Also, the City received \$75,000 in Congestion Mitigation and Air Quality (CMAQ) funds in Fiscal Year (FY) 2012/2013 and \$424,000 in FY 14/15 for pedestrian facilities on 19 ½ Avenue from Bush Street to Cinnamon Drive.

**2015:** The City undertook the Cinnamon Drive Canal project, which consisted of undergrounding the last section of above-ground canal along Cinnamon Drive and constructing new sidewalk, curb, gutter, and bike lane in its place. The engineering for this project was completed using a Community Based Transportation Planning grant. Construction was funded with \$419,000 in State Transportation Improvement Program (STIP) funds and a local contribution of \$267,000 paid from the LTF program.

**2017:** The City undertook a project to provide in-roadway warning lights (IRWLs). These amber lights embedded in the pavement alert motorists to the presence of a pedestrian crossing, or preparing to cross, the street. When a pedestrian activates the system, the lights begin to flash in unison, warning the motorist that a pedestrian is in the vicinity of the crosswalk ahead. The IRWLs will be located on Lemoore Avenue at Skaggs Street and Larish Street, where crosswalks are used by high school students. The engineer's estimate for this project was \$170,775.00. Also, the City received \$154,000 in CMAQ funds in FY 17/18 for a multi-use trail on Vine Street from Green Lane to Caddie Loop.

## Integration with other modes

Lemoore is served by Kings Area Rural Transit (KART) buses. Two KART local bus routes provide service within Lemoore, while several additional KART routes connect Lemoore to Armona, Avenal, Hanford, Kettleman City, Lemoore NAS and

Stratford. All KART buses are equipped with wheelchair lifts and with front-mounted racks for two bicycles. Also, KART provides door-to-door dial-a-ride service during normal operating hours to eligible certified individuals with disabilities.

In addition, daily Amtrak "thruway" buses connect Lemoore to Visalia, Santa Maria and points in between, including Hanford, Lemoore Naval Air Station and Kettleman City. Passengers may put bicycles in the bin under the buses. Buses operated by Orange Belt Stages, which offers daily trips to Las Vegas and to areas along the Central Coast, also stop in Lemoore.

## Related plans

### Lemoore Bikeway Plan

The Lemoore Bikeway Plan (which does not provide a year of completion) outlines three goals, each with several clarifying objectives. The goals can be summarized as seeking to develop a safe, continuous and convenient system of bikeways throughout the city and its vicinity.

The plan consists of six chapters.

1. Describes the city's bikeway needs and opportunities, and lists the goals and objectives for the plan.
2. Identifies potential destinations, and existing and previously proposed bikeways.
3. Formulates a network of bikeways between existing bikeways, residential neighborhoods and key destinations.
4. Includes design and construction standards for bikeways and bicycle signage, markings and parking.
5. Discusses considerations related to funding and implementation of the bikeway network.
6. Reviews consistency of the plan with other elements of the former General Plan and outlines a strategy for ongoing bikeway planning.

### Lemoore 2030 General Plan (2008)

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This plan articulates the vision of what Lemoore aspires to be in the year 2030. The plan translates residents' ideas about development and conservation into a set of policies and actions that will help decision-makers shape how Lemoore looks, provides services and manages resources. Key themes and initiatives include promoting compact development; creating a safe, efficient, and attractive circulation system with an emphasis on connectivity; supporting economic development by providing a range of sites for both small businesses and large employers; providing new parks; protecting natural and environmental assets; and planning for environmental justice.

Section 4.5 of the General Plan's Circulation Element addresses non-motorized transportation. Key implementation actions under this section include:

- C-I-1: Implement the Lemoore Bikeway Plan in coordination with the County's Regional Bicycle Plan.
- C-I-2: Establish bicycle lanes, bike routes, and bike paths consistent with the General Plan. This would include establishing a new, more specific, Lemoore Bike Map.
- C-I-3 Increase bicycle safety by, among other actions, providing bicycle paths or lanes on bridges and overpasses, and installing large sidewalks along arterial and median parkway streets such as Lemoore Avenue and Hanford Armona Road, so that children may ride safely away from traffic.
- C-I-5: Develop continuous walkways to connect new office parks, commercial districts and residential neighborhoods.
- C-I-6 Provide for pedestrian-friendly zones in conjunction with the development, redevelopment, and design of mixed-use neighborhood core areas, the Downtown area, schools, parks, and other high use areas.
- C-I-7: Establish specific standards for pedestrian facilities to be accessible to physically disabled persons, and ensure that roadway improvement

projects address mobility or accessibility for bicyclists or pedestrians.

- C-I-8: Amend the Zoning Ordinance to include standards in all new development for pedestrian circulation including: patterned concrete sidewalks across streets, crossing signalization, bulb-outs and street lighting.

### Lemoore Americans with Disabilities Act Transition Plan (2013)

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The Americans with Disabilities Act (ADA) of 1990 provides comprehensive civil rights protections to qualified individuals with disabilities in both employment and the provision of goods and services. Except under certain cases, Title II of the act requires that programs, services or activities conducted by a public agency be accessible to and usable by individuals with disabilities. To comply with these requirements, the City's ADA plan identifies physical barriers to accessibility, develops solutions for the removal of these barriers and provides recommendations to ensure compliance with the law.

As part of the ADA planning process, the City conducted a physical audit of (i) City-owned facilities (namely buildings and parks) and (ii) a representative sample of City-maintained pedestrian facilities in the public right-of-way. Because the majority of services provided to the public by the City occur within buildings and parks, the plan determined to prioritize the mitigation of barriers in facilities ahead of those in the right-of-way. Moreover, the plan determined that barriers in the right-of-way will be removed mainly when repairs are performed on the adjacent roadway; and that barriers will be mitigated in the following order: 1. adjacent to City buildings and parks; 2. within commercial and professional zones; 3. adjacent to schools; 4. within residential zones; 5. within industrial zones.

# Existing conditions

## 5.6 | Unincorporated Kings County

### Setting and key destinations

The unincorporated areas of Kings County have 2% of the county's population (or 33,900 people) while encompassing 96% of its land area (1,340 square miles). The population includes 7,000 school-age children and teenagers (ages 5–17), representing 21% of the total; and 3,300 seniors (ages 65 and over), or 10% of the total.

The main activity centers and destinations for pedestrians and cyclists in unincorporated Kings County are shown in Figure 5.6.1. They include Lemoore Naval Air Station (located west of Lemoore), Burris and Hickey Parks, and the following communities:

- Armona, Grangeville and Home Garden, all of which are on the outskirts of Hanford.
- Hardwick, north of Hanford, near the Fresno County border.
- Kettleman City, east of Avenal, along Highway 41.
- Stratford, south of Lemoore.
- Santa Rosa Rancheria, a tribal reservation, located between Lemoore and Stratford.

The main thoroughfares serving these communities are Highway 198 (Armona and Lemoore Station); Hanford Armona Road (Armona); Grangeville Boulevard (Grangeville); 10 ½, 10<sup>th</sup> and Houston Avenues (Home Garden); 14<sup>th</sup> and Excelsior Avenues (Hardwick); Brown Street (Kettleman City); and Highway 41 (Stratford).

### Trip-making

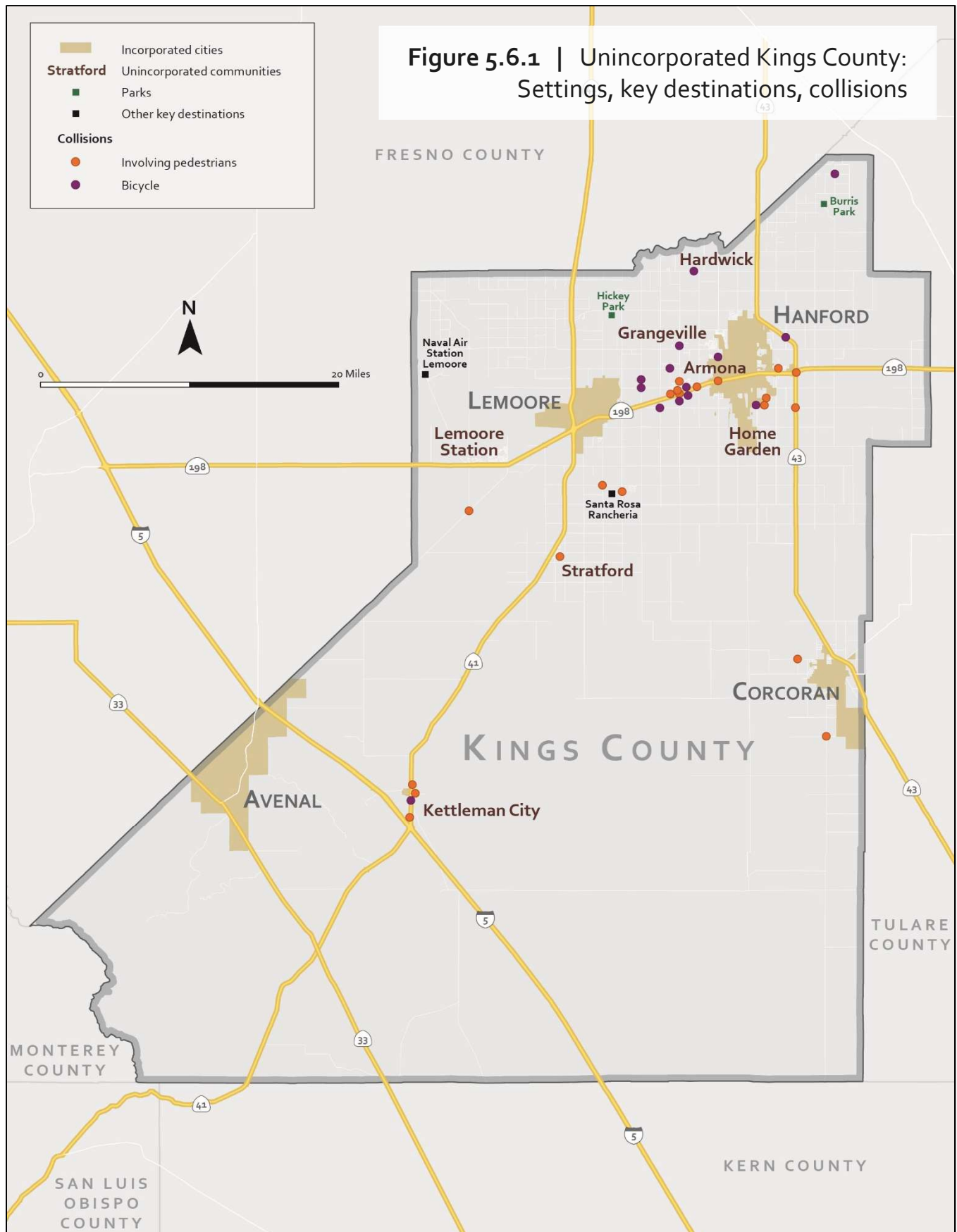
The table below provides the mode split for trips to work made by residents of unincorporated Kings County. The walk mode share of the unincorporated areas (4.8%) is quite a bit higher than King County's as a whole (2.7%) while the bike mode share (0.3%) is the same as the county's.

**Table 5.6.1 | Commute mode split**

	<i>Commuters</i>	<i>%</i>	<i>Daily trips</i>
Drove alone	9,840	70.5%	
Carpooled	1,885	13.5%	
Public transportation	202	1.4%	
Walked	670	4.8%	29,600
Bicycled	36	0.3%	1,600
Worked at home	1,030	7.4%	
Other*	293	2.1%	
<b>Total</b>	<b>13,956</b>	<b>100.0%</b>	

\* Includes taxicab, motorcycle and other means





## Traffic collisions

The table below summarizes the key findings regarding traffic collisions in unincorporated Kings County involving pedestrians or cyclists during the five-year period from 2012 through 2016.

**Table 5.6.2 | Traffic collision summary**

<b><i>Collisions</i></b>	
a. Collisions involving a pedestrian	23
b. Collisions involving a bicyclist	12
c. All collisions	3,680
d. Ped / bicyclist collisions as % of all	1%
<b><i>Fatalities and severe injuries</i></b>	
e. Pedestrians killed	6
f. Bicyclists killed	3
g. All victims killed	98
h. Pedestrians severely injured	3
i. Bicyclists severely injured	3
j. All victims severely injured	199
k. Peds / bicyclists killed or severely injured as % of all	5%

Collisions involving a pedestrian or cyclist represent 1% of all collisions, while pedestrians and cyclists killed or severely injured represent 5% of all victims killed or severely injured. These figures compare against a combined walk and bike commute share of 5.1% in the unincorporated areas.

The map on the next page shows the location of collisions involving a pedestrian or a cyclist. Three roadways experienced three or more collisions involving pedestrians: Highway 198 (7 collisions), Highway 41 (4 collisions) and 14<sup>th</sup> Avenue (3 collisions). The roadways experiencing the most collisions involving cyclists were Hanford Armona Rd. and 14<sup>th</sup> Avenue, each with three collisions.

## Bikeways

Figure 5.6.2 shows the existing and proposed bikeways in the unincorporated areas according to

the Kings County 2014 Regional Transportation Plan (which itself relied on information from the 2011 Kings County Regional Bicycle Plan). The existing bikeways are listed in the table below.

**Table 5.6.3 | Existing bikeways in unincorporated Kings County**

<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Length (mi.)</i>
<b>Existing, north-south</b>			
12 <sup>th</sup> Avenue	Excelsior Ave.	Hanford city limit	3.3
14 <sup>th</sup> Avenue	Flint Ave.	Hanford Armona Rd.	4.0
18 <sup>th</sup> Avenue	Grangeville Blvd.	Lemoore city limit	1.4
<b>Existing, east-west</b>			
Avenal Cutoff Road	Jackson Ave.	Avenal city limit	15.1
Grangeville Boulevard	Lemoore Naval Air Station	Hanford city limit	13.6
Hanford Armona Road	Lemoore city limit	Hanford city limit	4.6
<b>Touring bikeways<sup>a</sup></b>			
Douglas Avenue	12 ¾ Ave.	12 <sup>th</sup> Ave.	0.6
12 <sup>th</sup> Avenue	Douglas Ave.	Excelsior Ave.	1.6
Highway 43	Fresno County line	Hanford city limit	5.0

<sup>a</sup> "Touring" is not a standard bikeway designation. The 2011 Bicycle Plan, which used this term, describes them as "...streets, county roads, and state highways which cannot be given a formal designation (i.e. Class I, II, or III) because of cost or liability concerns but are used as a primary cycling route by more experienced (and typically long-distance) cyclists. These roads are often narrow, without shoulders, or carry high speed traffic and/or heavy traffic volumes. These streets do not provide the level of protection or comfort necessary for the casual, less experienced cyclists. Therefore, a touring roadway is one on which only experienced cyclists should ride."

The Kings County General Plan incorporates more specific "community plans" for the unincorporated communities of Armona, Home Garden, Kettleman City and Stratford. Below are the main findings related to bicycle facilities in each of these plans:

### Armona

Signs designate Class III bicycle routes along 12<sup>th</sup> Avenue, 14<sup>th</sup> Avenue and Hanford Armona Road; however, road surfaces do not contain striping to designate bicycle lanes.

### Home Garden

Bicycle infrastructure within the community is incomplete. A bicycle sign is posted on 10<sup>th</sup> Avenue

and residents occasionally use bicycles along this busy stretch of roadway.

### Kettleman City

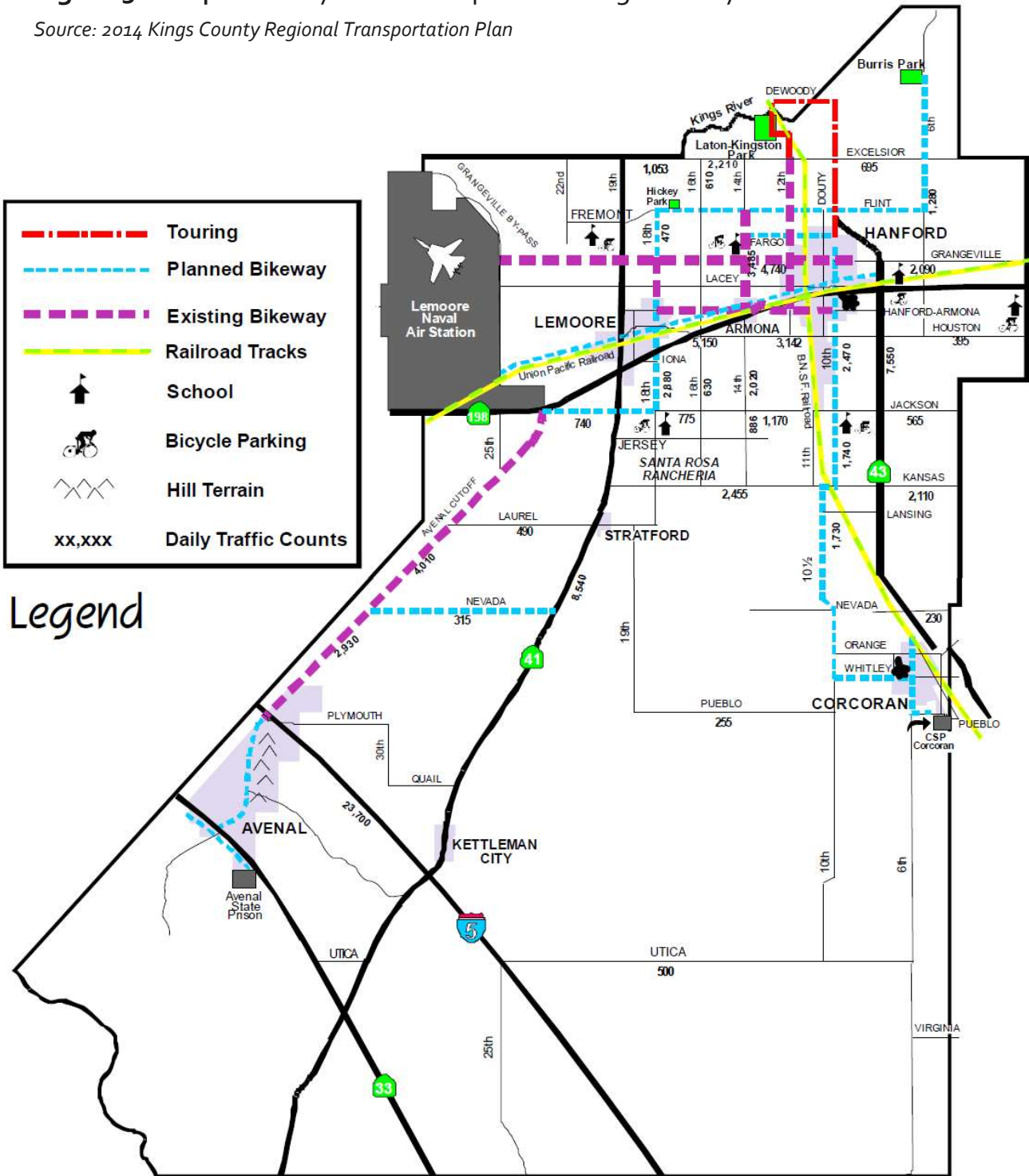
There are no bike lanes or paths in the community, particularly between the residential community and the highway commercial area.

### Stratford

20 ½ Avenue south of 6<sup>th</sup> Street should incorporate a bicycle and pedestrian facility to provide access to the Empire Pool, a temporary irrigation water storage holding basin that also provides opportunities for fishing, boating, swimming and camping.

### Figure 5.6.2 | Bikeways in unincorporated Kings County

Source: 2014 Kings County Regional Transportation Plan





## Bicycle parking

Frequently used destinations, such as stores and public facilities, have limited bicycle parking. Each of the four community plans under the Kings County General Plan includes a policy stating that “Downtown commercial and public facility uses shall be required to provide bicycle parking facilities [and] provide safe bicycle locking areas...”

## Pedestrian facilities

Below are the main findings related to pedestrian facilities, and to walking more generally, found in the community plans under the Kings County General Plan:

### Armona

- Sidewalks are inconsistent along the major corridors, most notably 14<sup>th</sup> Avenue. In addition, while pedestrian crossings in the community are currently found at most of the busy intersections along 14<sup>th</sup> Avenue, there are no crosswalks in the immediate vicinity of the schools, and many of the existing crossings are in need of re-striping.
- Sidewalk segments south of Hanford Armona Road are mostly complete, with the exception of two separate sections on the east side of 14<sup>th</sup> Avenue. The sidewalks north of Hanford Armona Road are less frequent and have no infrastructure crossing along the railroad right-of-way or along sections north of Locust Street.
- Dirt paths crossing the railroad—linking Ambrose Street to C Street and Railroad Street to D Street—are used by school children living north of the railroad tracks to reach the elementary and middle schools and the Community Park.
- Front Street has sidewalks along the north side just west of Oak Avenue that were constructed as part of the Armona North Subdivision project. Development patterns, however, did not provide for cut-throughs from the cul-de-sacs, so school children and pedestrians must either travel by car or meander through long subdivision streets to exit onto Front Street.

- The remnant of Mussel Slough in the northwest portion of the community has been identified as a possible pedestrian connection from Armona to Hanford’s regional commercial area and future College of Sequoias campus.

### Home Garden

- Pedestrian infrastructure is incomplete and in most locations forces pedestrians to share the roadway with cars. Residents have expressed considerable concern over traffic and pedestrian circulation, and desire improvements that increase community connectivity.
- Sidewalks have been incorporated into small non-contiguous segments of streets, mostly in newer developments west of 10<sup>th</sup> Avenue.
- Pedestrian crosswalks are not clearly marked and contribute toward driver and pedestrian uncertainty in the roadways and intersections.

### Kettleman City

- The residential area has little to no pedestrian infrastructure. Existing roadways are open with pavement meeting dirt shoulders, leaving no separation between pedestrians and cars. Without sidewalks, residents often feel uncomfortable using the streets.
- There are no paths between the residential community and the highway commercial area. However, residents currently use a remote route through the fields to the southwest, over a bridge across the aqueduct, and through the Chevron utility area in order to reach the commercial area.

### Stratford

- Pedestrian infrastructure within the community is incomplete and in some locations forces pedestrians to share the roadway with cars.
- The primary circulation improvements desired by residents relate to roadway conditions, traffic regulation, traffic calming, street cleaning, curbs and gutters, lighting and sidewalk improvements.
- The Stratford School had recently constructed sidewalks along the entire eastern boundary of the school site.

## Support programs

The Kings County Sheriff's Department, in collaboration with the California Highway Patrol, holds biking-related educational and safety programs for elementary and middle school students at least once a year. These programs focus on teaching students about traffic rules of the road and wearing a bicycle helmet.

## Past expenditures

In 2010, Kings County was awarded \$628,670 in state funds to construct pedestrian facilities in Home Garden. The following year, Kings County staff, with collaboration from KCAG staff, wrote successful Safe Routes to School grant proposals for \$453,600 in federal funds for sidewalks, curbs, gutters, lighted crosswalks and drainage in Kettleman City (in front of the elementary school) and for \$320,900 in state funds for similar improvements in Armona.

## Integration with other modes

The unincorporated areas of Kings County are served by Kings Area Rural Transit (KART) bus routes 12, 14, 20 and 21. Route 12 connects Hanford, Armona, Lemoore, Stratford, Kettleman City and Avenal. Route 14 connects Hardwick and Hanford. Route 20 provides service between Hanford and Lemoore through Armona. Route 21 serves Hanford, Lemoore and Lemoore NAS. All KART buses are equipped with wheelchair lifts and with front-mounted racks for two bicycles.

KART provides door-to-door dial-a-ride service during normal operating hours to eligible certified individuals with disabilities. Two paratransit programs are operated by the California Vanpool Authority (CalVans): Agricultural Industries Transportation Services (AITS), primarily for agricultural farmworkers; and a general vanpool program for general-workforce commuters.

In addition, buses operated by Orange Belt Stages, which offers daily trips to Las Vegas and to areas

along the Central Coast, stop in Kettleman City and at Lemoore Naval Air Station.

## Related plans

### 2035 Kings County General Plan (2010)

This plan defines goals, objectives and policies to guide the physical growth, use and development of land under the County's jurisdiction through the year 2035. According to the plan, the County's overarching priorities are to protect prime agricultural land, direct urban growth to existing cities and community districts, and increase economic and community sustainability. Non-motorized transportation is addressed in Section V of the plan's Circulation Element; information from that section has been incorporated into this report.

As mentioned earlier, the County's General Plan incorporates more specific "community plans" for the unincorporated communities of Armona, Home Garden, Kettleman City and Stratford. Each of these community plans also addresses transportation. All of the plans generally have policies for:

- Integrating pedestrian and bicycle facilities and connections in new growth areas.
- Enhancing pedestrian and bicycle access and safety through the use of traffic-calming street design measures at key crossings.
- Implementing pedestrian-oriented streetscape features in the downtowns or commercial areas.
- Requiring sidewalks, tree lined streets and traffic calming crossings on neighborhood streets.
- Evaluating the need, and seeking funds, for Safe Routes to School improvements.

In addition, below are more community-specific objectives and policies related to walking and biking in each of the plans.

#### Armona

- 6A.3.1: Coordinate with the City of Hanford to plan for a multi-use pathway extending from Front Street in Armona that connects to job

centers and higher education/vocational training facilities in west Hanford.

- 6A.5.1: Plan for the complete connectivity of sidewalks along 14<sup>th</sup> Avenue and Front Street, and seek funding to construct prioritized missing segments.
- 6C.1.2: Residential developments east of 14<sup>th</sup> Avenue and north of Front Street shall establish streets and rights of way that integrate pedestrian pathways that will connect to the Downtown Commercial Core and North Expansion Area Mixed Use developments.
- 6C.1.4: Implement crosswalks and pedestrian crossing signs at suitable locations along busy roadways (namely along 14<sup>th</sup> Avenue north of Highway 198 and at intersections near schools).

#### Home Garden

- 3B.1.3: New commercial and residential development in the Northwest Growth Area shall integrate pedestrian and bicycle pathways that will connect residents to the community's new commercial core at the intersection of 10<sup>th</sup> Avenue and Home Avenue.
- 6B.1.1: Develop a traffic-calming pedestrian-friendly street design at the intersection of 10<sup>th</sup> and Home Avenues that integrates diagonal parking and pedestrian bulbouts.

#### Kettleman City

- 6A.3.3: Plan for a multi-use bicycle/pedestrian pathway extending south from Ninth Street to the California Aqueduct and veering eastward (parallel to the highway) to the Highway Commercial Area. Work with Caltrans to consider the integration of a pedestrian bridge across the aqueduct when planning for the widening of the Highway 41 bridge.

#### Stratford

- 3B.1.4: Community accessibility along 20 ½ Avenue south of 6<sup>th</sup> Street should be enhanced to increase safe pedestrian and bicyclist connection to the Empire Pool. Development of the open space buffer along 20 ½ Avenue can integrate the first segment of the pathway.

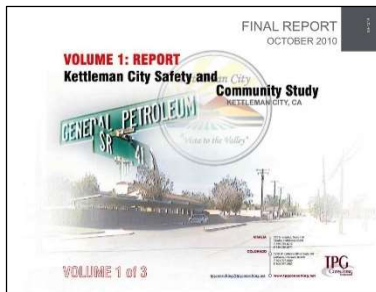
- 6A.3.1: Plan for the complete connectivity of sidewalks in the community and seek funding to construct prioritized missing segments.

### County of Kings Americans with Disabilities Act Transition Plan (2016)

The Americans with Disabilities Act (ADA) of 1990 provides comprehensive civil rights protections to qualified individuals with disabilities. Except under certain cases, Title II of the act requires that programs, services or activities conducted by a public agency, when viewed in their entirety, be readily accessible to and usable by individuals with disabilities. To comply with these requirements, the County's ADA plan identifies physical obstacles in its facilities that limit their accessibility, and outlines the methods, costs, specific steps, schedule and priorities for achieving ADA compliance.

Section B of the ADA plan addresses barriers and obstacles in sidewalks mid-block. The plan evaluates almost 200 sidewalk stretches around the county and estimates a total cost of \$9.4 million to mitigate barriers at these locations. Similarly, Section B evaluates the lack of curb ramps at approximately 200 intersections, with a total mitigation cost of half a million dollars, while Section D assesses the lack of pedestrian signals at seven intersections, with a mitigation cost of \$21,000. The plan provides an implementation schedule for these improvements, giving priority to pedestrian routes that serve government facilities (including schools and parks), downtowns, transit stops, places of public accommodation and places of employment.

## Kettleman City Safety and Community Study (2010)



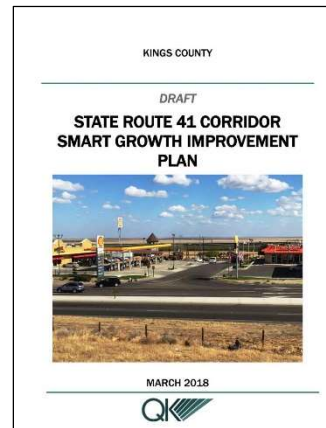
The purpose of this study was to develop community-identified design concepts for the two main thoroughfares in Kettleman City

that would improve access and safety for drivers, pedestrians and cyclists. The roadways addressed by the study area are a one-mile segment of State Route 41 (Highway 41) extending north from 25<sup>th</sup> Avenue, and a 6-block segment of General Petroleum Avenue from Highway 41 west to 5<sup>th</sup> Street.

The proposed conceptual design for General Petroleum Avenue features 10-foot sidewalks on both sides of street, street trees, street lights, high-visibility pedestrian crossings at intersections, enhanced visibility for pedestrians at the Highway 41 intersection, and designated student pick-up/drop-off zone and school bus-loading zone. Meanwhile, the proposed design for Highway 41 features 9-foot-wide sidewalks on both sides of the street, street lights, landscaped median with left-turn lane, bike lanes, on-street parking, high-visibility pedestrian crossings at intersections, landscaped gateway elements north and south of town, designated bus stops and radar speed feedback signs at the entrances to the town. The proposed sidewalks, curbs and gutters on Highway 41 are dimensioned so as to preserve the option of accommodating four travel lanes at some future point.

The study document describes existing conditions in detail, the community outreach efforts and public feedback, and the process undertaken to arrive at the identified design concepts. The document also includes an “action plan,” with estimated costs and potential funding sources to implement the design concepts.

## State Route 41 Corridor Smart Growth Improvement Plan (Draft; 2018)



This plan proposes priority infrastructure improvements to address four identified transportation-related deficiencies along Highway 41 in the unincorporated community of Kettleman City. The deficiencies are poor

traffic flow; lack of pedestrian and bicycle infrastructure; speeding traffic; and limited crossings of Highway 41 over the California State Aqueduct.

The plan outlines three tiers of recommended improvements. The first-priority tier includes two pedestrian- and/or bicycle-oriented improvements: (i) Bike path or traffic-separated bikeway to link the residential and highway commercial areas (a distance of approximately 1 ¼ mile), including a bridge across the aqueduct; and (ii) flashing pedestrian-crossing beacon at General Petroleum Avenue. The second-priority tier includes traffic signals at Milham and General Petroleum Avenues



# Proposed improvements

## 6.1 | Overview

As mentioned in the introductory chapter, for people to choose active transportation as a way of getting around, communities must provide a transportation system that accommodates cyclists and pedestrians. This means providing a network of sidewalks, bike lanes, paths and trails, safe crossings, traffic-calmed streets and other pedestrian and bicycle facilities that connect the places where people live, work, study, shop, play and visit. The several chapters that follow this section outline a wide range of proposed bicycling and pedestrian projects for each of the four cities in the county (chapters 6.2 through 6.5) and for the county's unincorporated areas (chapter 6.6).

### Bikeways in Kings County

With one exception, cyclists are allowed on any public street or road in Kings County. The exception is an 18-mile stretch of Highway 198 that runs through Lemoore and Hanford, from 25<sup>th</sup> Avenue at Lemoore Naval Air Station to Highway 43 (8<sup>th</sup> Avenue) just east of Hanford. Despite the fact that cyclists may be found on any other street in the county, the Kings County Regional Walk and Bike Plan designates a coordinated network of bikeways that integrate the facilities in the unincorporated county area with those in each of the county's four cities. The purpose of this countywide network is to focus the jurisdictions' and KCAG's efforts and investments on a subset of streets that will provide a higher level of service for cyclists in terms of convenience or safety.

The network seeks to address the main biking-related need expressed by the community: the lack of bikeways providing direct, continuous and more convenient connections within and between the county's cities and unincorporated areas. As explained throughout this chapter, the network in the Walk and Bike Plan was not developed from scratch. Instead, it reflects very closely networks

developed as part of earlier bicycle planning efforts. These efforts include the 2011 Kings County Regional Bicycle Plan, the 2014 Regional Transportation Plan and a number of local plans. In identifying bikeways, these plans generally took into consideration such criteria as:

- The potential to improve cyclists' safety.
- Connection to other bikeways, completion of regional links and elimination of gaps in facilities.
- Connection to activity centers and important destinations.
- Connection to other transportation modes.
- Public and stakeholder support.
- Cost effectiveness.
- Funding and technical feasibility.

As is the case with those earlier plans, the bikeway network in the Walk and Bike Plan consists primarily of four types of bicycle facilities:

- **Class I** bikeways are paved paths separated from cars and for use exclusively by bicyclists and, in the case of multi-use paths, also by pedestrians. Bike paths are typically found in parks, through open space, on abandoned and converted railroad corridors, or along surplus easements and rights-of-way.
- **Class II** bikeways are conventional bike lanes, designated by painted white stripes, stenciled bike symbols and signage. Bike lanes are usually 4-7 feet wide and are placed next to car lanes. They are recommended only on certain streets that are sufficiently wide to accommodate them.

- **Class III**

bikeways, are designated bike routes on lanes

shared with drivers. (These are typically narrow lanes on which there is no room for bike lanes unless parking or traffic lanes were removed.) Bike routes may be signed with “Bike route”



plaques and also with signs reminding drivers and cyclists that bikes may use the full lane (see top image on the next page). On street segments where the speed difference between cyclists and

cars is low—for example, on neighborhood streets or on downhill—“sharrows” may be added. These are

stencils that indicate a travel lane to be shared by cars and cyclists. They alert drivers to the potential presence of cyclists, suggest to cyclists where in the lane they

should ride and, more generally, they encourage sharing of the road and reinforce the legitimacy of bike traffic.



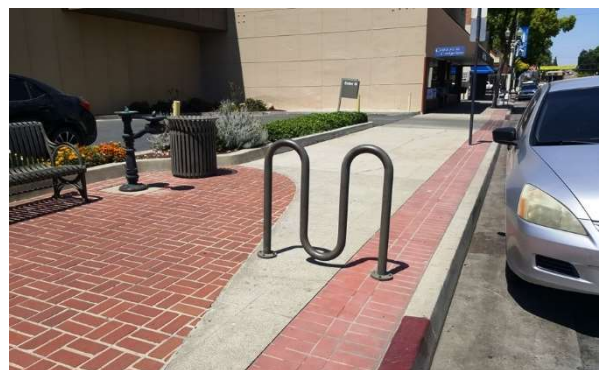
- **Other shared-use roadways, with no bikeway designation.** These are other recommended bike commuter routes, in recognition that most bicycle travel in Kings County occurs on roads that are not designated bikeways, even in areas where bikeways are provided. These shared-use roadways may be considered for reclassification as Class II or III bikeways, if warranted by bicycle usage.

As appropriate, every segment of the bikeway network should incorporate improvements for cyclists’ convenience and safety. Examples of improvements include wider shoulders; smoother roadway and shoulder pavement; solid white “fog lines” demarcating the shoulder from the travel lane; non-slip pavement markings; and safety signage.

## Other types of bicycling improvements

While bikeways are critical to cyclists’ travel experience, bicycle facilities consist of more than just bike paths and bike lanes. The toolbox of improvements that local jurisdictions can use to improve conditions for bicyclists also includes the following:

- **Bicycle parking:** Parking racks for bikes are a low-cost yet effective way to encourage cycling and improve the functionality of a bikeway network. Parking reduces the threat of theft, makes bicyclists feel welcome and increases the visibility of bicycling. Local jurisdictions should install bicycle parking at all community facilities (especially libraries, parks, schools, community centers and administrative offices) and on sidewalks in downtown areas. Also, through the design review and permitting process, jurisdictions should require that all new commercial and institutional development and redevelopment projects meeting certain size criteria provide adequate bicycle parking.



- **Bicycle-activated signal detectors:** These are used at signalized intersections, especially along designated bikeways, to trigger a green light for bicyclists and provide them with sufficient time in the signal phase to clear the intersection. These devices may be in the form of in-pavement loop detectors or video detectors. They should be accompanied by pavement stencils showing bicyclists where to place themselves in order to be detected.
- **Signage:** The effectiveness of bikeways is enhanced through signage. Most importantly, signs can direct bicyclists to suitable routes, make motorists aware of cyclists' presence and rights and plant in some non-cyclists the idea to begin bicycling. Common bicycle signs show a stylized bicycle on a white background (indicating a bike lane), a green background (bike route) or a brown background (trail). Other options are directional and distance signage; signs for numbered bike routes (the design of which is customizable by local jurisdictions); "Share the Road" signs (which should be in full view of drivers); and signs with the legend "Bikes Allowed Use of Full Lane," which remind drivers of cyclists' right to the road.



- **Direct connections:** Obstacles and barriers such as freeways, railroad tracks, fences and canals undermine the usefulness of bicycle facilities on either side. Such obstacles can be overcome using cut-throughs, overcrossing, undercrossings and other shortcuts that create direct connections.
- **Showers and changing rooms:** For commuters who dress formally, travel longer distances or bicycle during wet or hot weather, the ability to shower and change clothing can be as important as bicycle storage. Showers and changing rooms are sometimes provided for employees at office parks, office buildings and buildings with fitness centers.
- **Maintenance:** Local jurisdictions should protect their investment in bicycle facilities by maintaining and rehabilitating them properly. Common tasks associated with the maintenance of bikeways include repaving, crack sealing, filling potholes, restriping lanes and re-painting stencils, tuning loop detectors and signals, sweeping and trash removal, weed abatement, and clearing plant overgrowth.

## Types of pedestrian improvements

In most communities, the main walking-related concerns are missing or discontinuous sidewalks, the lack of footpaths and trails, and the challenge of crossing busy streets resulting from long crossing distances, fast traffic and drivers failing to see or yield to pedestrians. The main types of pedestrian-oriented infrastructure projects that municipalities may consider implementing are listed below.

- **Walkways.** Sidewalks, trails and other types of walkways are the basic elements of a pedestrian network. These facilities should, at a minimum, have a clear path wide enough to accommodate the widest wheelchair or baby stroller; in busier areas, they should be wide enough to allow people to walk side by side and to pass other pedestrians and wheelchair users. Sidewalks along arterial streets should, ideally, have a landscaped strip to serve as a buffer from fast-moving traffic and to enhance the aesthetics of the corridor. Driveways across walkways should be minimized and should be made safer through the use of adequate sight distances, signage, "speed tables" where appropriate (these raise the driveway to the level of the sidewalk) and other methods; in older, pedestrian-friendly districts, new development provides opportunities to group driveways, particularly on arterials.
- **Curb ramps.** These are essential for disabled access and should be part of every new sidewalk



installation at street crossings. Crossings that lack curb ramps should be retrofitted as part of a comprehensive municipal program to bring public facilities into compliance with the American with Disabilities Act (ADA).

- **Safer intersections.** The design of intersections is critical since this is where most traffic collisions involving pedestrians occur. There are numerous devices and strategies to make crossings safer and easier to navigate, many of which are relatively inexpensive. These include:
  - High-visibility crosswalk markings.
  - Sidewalk bulb-outs or extensions (which shorten the crossing distance and reduce the curb radius, making drivers slow down as they turn the corner).
  - “Speed tables,” which raise the crossing surface to the level of the sidewalk.
  - Flashing signs and other safety signage to warn motorists of the presence of crossing pedestrians.
  - Pedestrian refuges or islands in the center of the street.
  - Specially colored and textured pavement.
  - Advanced yield or stop lines (which encourage drivers to stop further back from the crossing).
  - Removing sight obstructions, such as parked cars, signs and overgrown landscaping.
  - Longer, more frequent and automatic (rather than pedestrian-activated) traffic-signal crossing phases.
- **Traffic calming.** Traffic calming is meant to improve conditions for pedestrians and bicyclists, especially in residential areas, by reducing traffic speeds and volumes. There are many different types of traffic calming devices and measures, geared toward various needs and applications. Common ones include: traffic circles or roundabouts; mid-block and intersection bulb-outs or curb extensions; traffic diverters; raised crosswalks or speed tables; and visual street-narrowing techniques. Traffic calming measures should be implemented district-wide rather than in isolation. Specific measures should be designed carefully so that they do not impede access by fire trucks, ambulances, buses, delivery

trucks and other large vehicles, or interfere with bicycle travel.



- **Direct connections.** Most of the neighborhoods built after World War II segregate land uses, have limited access points and are often separated from each other by walls, freeways and other barriers. Providing direct pedestrian connections by way of cut-throughs, overcrossings, undercrossings and other shortcuts makes walking (and bicycling) more convenient and, in some cases, viable to begin with.
- **Streetscape improvements.** In downtowns and other areas with higher pedestrian activity, a higher level of attention should be paid to the pedestrian environment. Potential streetscape improvements include street trees and other landscaping, special paving for sidewalks and crosswalks, public art, benches, trash receptacles and bus shelters. Pedestrian-oriented streetlights are important, not only to provide comfort and convenience but also to increase traffic safety and pedestrians’ sense of personal security with respect to real or perceived crime hazards. Sidewalk bulb-outs, mentioned above, provide opportunities to incorporate streetscaping, landscaping and other street beautification measures.





## Support programs

Infrastructure and facilities, while critical, are only one way to improve conditions for pedestrians and cyclists. Also important are safety, education, encouragement and enforcement efforts that invite more people to walk and bike for both recreation and transportation, and that make it safer and more convenient to do so. Below is a range of support programs that KCAG and the member agencies may consider providing.

### Promotion and encouragement

Promotion programs can help people overcome their mental, behavioral and logistical barriers to walking and bicycling. Some people, for example, might not think of walking to transit as a viable commute alternative; others might want to give bicycle commuting a try but do not know where to turn for basic information. Below are some of the promotion activities that local jurisdictions can support with financial and logistical backing—or even organize themselves, ideally in partnership with other agencies and community organizations:

- Walk/bike-to-work and walk/bike-to-school days, combined with prizes and giveaways to encourage participation.
- Marketing campaigns, including bumper stickers, buttons, street banners and ads on buses.
- Commute fairs.
- Walk-to-lunch days (for employees).
- Street fairs and seasonal street closures in downtowns for informal, unprogrammed congregation and recreation.
- Bicycling races, guided walking tours and targeted group activities that promote walking and biking among seniors, youth, people with physical disabilities and other demographics.
- Free maps of bicycling and walking routes.
- Giveaways of bicycle helmets, bells, lights and reflectors.
- Public bike repair station at a transit hub in one of the downtowns, and bicycle repair and maintenance workshops.
- Dedicated section on KCAG's website for resources and news related to walking and biking in Kings County.
- Bicycle tourism guide to Kings County.

### Traffic safety and educational activities

- Regional traffic safety campaign aimed at drivers, bicyclists and pedestrians. Campaign activities could include educational presentations at schools and community events; public service announcements; newsletter articles and social-media posts; storybook poster contest for elementary school students; and teen driving campaign for high school students.
- Posters, ads, bumper stickers and giveaway items with Kings County-specific traffic safety messages; messages could appear on buses, at bus stops, in public buildings and on fleet vehicles.
- Courses and booklets—including in Spanish—on safe bicycling practices and techniques.
- Curricula for children on walking and bicycling in their neighborhood and to school.
- Training bike rides, workshops on bicycle commuting and bike rodeos for children.
- Digital speed signs or speed trailers on streets with a history of speeding complaints (as awareness and educational tools).
- Rotating traffic safety and educational messages on KCAG's and the member agencies' websites.
- Training courses and attendance at conferences for planning and public works staff.



### Enforcement

Some of the most serious concerns expressed by Kings County residents during the Walk and Bike planning process related to illegal or careless driver behavior (and also to stray or unleashed dogs). Common traffic enforcement issues are drivers speeding and turning right at red lights in front of pedestrians; distracted or aggressive driving; drivers and bicyclists failing to yield to pedestrians at



crossings, running red lights and not stopping fully at stop signs; pedestrians jaywalking and crossing where not permitted; and bicyclists riding at nighttime without lights.

Through their police department, and in cooperation with community groups, local jurisdictions can implement enforcement programs to improve the environment for pedestrians and bicyclists. The term “enforcement” is not limited to the issuance of tickets for traffic violations. It includes a variety of activities that overlap with safety and education efforts. Law-enforcement programs can be used to educate and remind drivers, bicyclists and pedestrians about the rules of the road, discourage unsafe behaviors while encouraging safe ones, and reinforce educational programs and messages. Potential activities and actions in the realm of enforcement include:

- Additional patrol officer resources for traffic enforcement.
- Regular traffic enforcement campaigns, announced in advance to raise awareness and to give residents an opportunity to modify their behavior.
- Online form on the member agencies’ websites for the public to report chronic traffic violations (and also dangerous or intimidating dogs) and to request enforcement action.
- Patrol bicycle for city officers to use occasionally in the downtowns, around schools, in parks and at community events.
- Safety education courses for traffic offenders.

### Bicycle and pedestrian counts

In addition to the above programs and activities, KCAG and the member agencies should consider implementing a bicycle and pedestrian count program at selected locations. Counts offer snapshots of bicycle and pedestrian activity and usage trends across time and geographically; may be used to gather before-and-after data at proposed and then newly built facilities; and provide data that can be used to support grant-funding applications.

Counts should be conducted regularly, every six months or a year, at a consistent set of locations, so

that data can be compared across time. Typically, counts are performed over a single day in the spring or fall while schools are in session (May or September; recreational uses at a location may warrant a weekend count). Counts may be conducted manually by volunteers, by automated video counters (which allow for data collection on a 24-hour basis) or by permanently installed automated counters (which can provide data on an annual basis).

## “Safe routes to school” improvements

As in other communities, much of the walking and biking activity in Kings County consists of children going to and coming from school. At the same time, children are among the most vulnerable users of the transportation system. “Safe routes to school” (SRTS or SR2S) is an approach for making it safer and easier for children to walk and bike to school. Creating safe routes typically involves both physical and non-physical improvements. The SRTS approach has gained prominence in recent years as a way of addressing multiple concerns: traffic safety, physical inactivity and obesity among children, and traffic congestion in school areas at the start and end of the school day.

Potential SRTS projects and programs are as varied as the problems they try to address and the communities they are designed to serve. The projects and programs may be categorized under the “four E’s” — engineering, enforcement, education and encouragement — and primarily include the following types of improvements:

- **Infrastructure projects** such as new sidewalks, traffic-calming measures and street-crossing enhancements.
- **Operational improvements**, such as adjustments to the timing of traffic signals, and the posting of school crossing guards.
- **Law-enforcement efforts** aimed at unsafe drivers, cyclists and pedestrians.

- **Educational activities and campaigns** such as traffic-smarts training on the rules of the road, “bike rodeos,” bike “skills drills” clinics and other types of traffic safety education aimed at school children; and workshops for parents on such topics as traffic safety and personal security for pedestrians and cyclists, and the logistics of walking and biking to school.
- **Promotional or encouragement activities and campaigns** such as “walking school buses” and “bike trains” (in which children walk or bike to school in a group, escorted by parents or guardians); and “walk and roll to school” days, supported with special activities and incentives.



SRTS projects and programs are usually developed and implemented through a collaborative planning process that includes school administrators and teachers, students and their parents, the local police department, and staff at local public agencies such as the planning and public works departments. The involvement of municipalities is essential when projects in the public right-of-way are involved. Steps in an SRTS planning process for a particular school typically include:

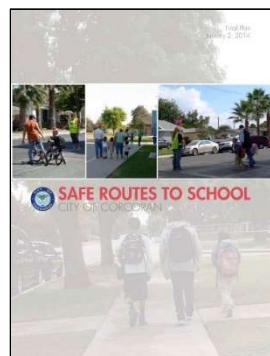
- Organizing a task force of relevant interested parties.
- Conducting walk and bike audits to examine in detail the access characteristics and the state of transportation facilities along popular commute routes to school and in the immediate school area: walkways and bikeways, gaps and barriers, crossing patterns, crosswalks, intersections, traffic

controls, lighting, signage, traffic speeds and collision data.

- Identifying and prioritizing specific issues and areas of concern to be addressed.
- Identifying and prioritizing specific projects and programs to address the problems and concerns identified earlier.
- Identifying costs, potential funding sources, responsible parties and implementation timeline for each improvement project and program; also, for capital projects, developing preliminary plans and designs to assess a project’s complexity and cost.

### Safe Routes to School Plans

SRTS projects and programs are most often developed at the level of individual schools. Some municipalities have gone further, often in partnership with local school districts, by preparing jurisdiction-wide SRTS plans that consider improvements and enhancements to serve all public schools in a municipality, and incorporating recommended improvements in the public right-of-way. Two examples of jurisdiction-wide SRTS plans in Kings County include the Corcoran Safe Routes to School Plan, adopted in 2014, and Avenal’s Active Transportation and Safe Routes to School Plan, adopted in 2016.



Corcoran’s plan summarizes key needs, challenges and concerns around each of the five public schools in the city, and identifies a network of “major school routes.” The plan then recommends engineering as well as educational and encouragement strategies

to improve conditions for children who walk and bike to school. The plan’s recommendations, to be implemented variously by the City of Corcoran and the Corcoran Unified School District, include:



- Closure of sidewalk gaps near schools.
- Crossing enhancements and street lighting along key school routes.
- Restriped bike lanes and new bikeways connecting schools to residential areas.
- Traffic-calming measures in school zones.
- Enhanced traffic enforcement around schools.
- Crossing guards at additional locations.
- School-specific maps of walking and biking routes.
- Promotional or encouragement events, such as walk and bike to school days.

The Avenal plan is intended to guide the development of bicycle, pedestrian, SRTS and trail facilities throughout the city. In addition, the plan includes an extensive list of policies and actions under eight goal areas: General Plan consistency; implementation; design; maintenance; education and encouragement programs; safe routes to school; safety and law enforcement; and monitoring and evaluation. The SRTS recommendations in the Avenal plan are similar to those in the Corcoran plan. These plans, including their recommendations, are described in more detail earlier in this document, in the respective “Existing Conditions” chapters. Both plans may serve as models for the development of SRTS plans by the other KCAG member agencies.

## Access improvements for people with disabilities

Accommodating people with disabilities should be a primary objective of any newly planned pedestrian facility. Wheelchair users and other persons with disabilities are particularly sensitive to conditions of the public right-of-way. Also, facilities that accommodate the disabled improve the walking experience for all. Curb ramps, for example, are helpful to parents with strollers, delivery persons pushing carts and children on bicycles; wide walkways allow people to stroll side-by-side and to pass others; and smooth surfaces reduce the risk of people tripping, a hazard particularly for seniors.

The access needs of people with mobility and cognitive mobility impairments are recognized by Title II of the Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973, landmark pieces of legislation that require that public facilities be accessible to persons with disabilities. Court decisions have ruled that this protection extends to walkways. As one result, cities, counties and other government agencies now routinely include curb ramps in all new sidewalk construction and have undertaken programs to retrofit existing sidewalks that do not have curb ramps.

## Americans with Disabilities Act

The federal Americans with Disabilities Act (ADA), signed into law in July 1990, generally prohibits discrimination based on disability. Public rights-of-way and facilities are required to be accessible to persons with disabilities under Title II of the ADA and section 504 of the Rehabilitation Act of 1973. Using these laws, disability advocates have challenged public agencies on the accessibility of public rights-of-way. In the pioneering case of *Barden v. Sacramento*, a circuit court of appeals ruled that sidewalks are a “program” under the ADA and must be made accessible to persons with disabilities. (The defendant in that case, the City of Sacramento, settled the lawsuit in 2003 by assigning 20 percent of its annual transportation fund for the following 30 years to improve sidewalks, crosswalks and curb ramps.)



## ADA guidelines for public rights-of-way

Developing guidelines to implement the ADA is the responsibility of the U.S. Access Board, an independent federal agency. The board’s guidelines

are not requirements; rather, they are the basis for standards issued by other federal agencies and used to enforce the law. (In this way, ADA guidelines are similar to model building codes.) Standards for most ADA-covered facilities are issued and enforced by the U.S. Department of Justice (DOJ), with the exception of certain transportation facilities, which are subject to standards issued by the Department of Transportation (DOT).

Among other topics, the Access Board's guidelines address disabled access to elements commonly found in public rights-of-way, including sidewalks, crosswalks, curb ramps and street furnishings. Chapters 2-4 of the guidelines are of particular relevance, as they cover the design of pedestrian access routes, pedestrian crossings, curb ramps and "blended transitions," accessible pedestrian signals, "protruding objects," pedestrian signs, street furniture, bus stops, on-street parking and detectable warning surfaces, among other elements. The guidelines provide valuable direction to local agencies on the design of accessible public rights-of-way. The Federal Highway Administration (FHWA), the agency responsible for ensuring ADA compliance in the public right-of-way, has adopted the guidelines as "currently recommended best practices."

### ADA Transition Plans

In response to requirements under the ADA, many cities and counties develop ADA Transition Plans. These plans identify physical barriers in municipal buildings, facilities, programs, activities and rights-of-way (such as sidewalks), and outline ways to ensure that these are fully accessible to individuals with disabilities. In Kings County, the County and the cities of Hanford and Lemoore have developed ADA Transition Plans. The City of Hanford adopted its plan in 2011, the City of Lemoore in 2013 and Kings County in 2016. These plans are described earlier in this document, in the respective "Existing Conditions" chapters.

Hanford's Transition Plan determined to prioritize sidewalk and curb ramp repairs in the following order, based on the types of facilities or areas they would serve: 1. government offices and facilities; 2.

bus stops and transportation facilities; 3. places of public accommodation such as commercial and business areas; 4. facilities containing employers; 5. other areas such as residential neighborhoods and underdeveloped regions of the City. The City established a 20-year timeframe to remove barriers in the public right-of-way.

The County's plan evaluated almost 200 sidewalk stretches around the county and estimated a total cost of \$9.4 million to mitigate barriers at these locations. It also evaluated the lack of curb ramps at approximately 200 intersections, with a total mitigation cost of half a million dollars, and the lack of pedestrian signals at seven intersections, with a mitigation cost of \$21,000. The plan provides an implementation schedule for these improvements, giving priority to pedestrian routes that serve government facilities (including schools and parks), downtowns, transit stops, places of public accommodation and places of employment.

Because the majority of services provided to the public occur within buildings and parks, Lemoore's plan determined to prioritize the mitigation of barriers in facilities ahead of those in the right-of-way. Moreover, the plan determined that barriers in the right-of-way will be removed mainly when repairs are performed on the adjacent roadway; and that barriers will be mitigated in the following order: 1. adjacent to City buildings and parks; 2. within commercial and professional zones; 3. adjacent to schools; 4. within residential zones; 5. within industrial zones.

A related planning effort is the "ADA Transit Design Standards Manual" developed by the Kings County Area Public Transit Agency (KCAPTA). The manual provides the agency with guidance on the accessible design of transit facilities such as bus boarding and alighting areas, bus shelters, pedestrian access routes (including sidewalks, street crossings, curb ramps and pedestrian signals) and wayfinding.

# Proposed improvements

## 6.2 | Avenal

The City of Avenal completed its own bicycle and pedestrian plan in 2016. Called the Avenal Active Transportation and Safe Routes to School Plan, it designates a citywide network of bikeways and proposes numerous bicycle and pedestrian improvement projects, both location-specific and citywide. Because the Avenal plan is recent, detailed at a local level and specific to the city, the recommendations from that plan have been adopted here.

### Bicycle improvements

The bikeway network in the Avenal plan is based on the earlier networks for Avenal included in the 2011 Regional Bicycle Plan and the 2014 Regional Transportation Plan. However, the new network is more extensive, as it includes bikeways “to other key destinations beyond the city’s urbanized area such as the Kettleman Hills, the Sports Complex, the Sand Drags and future industrial areas.”

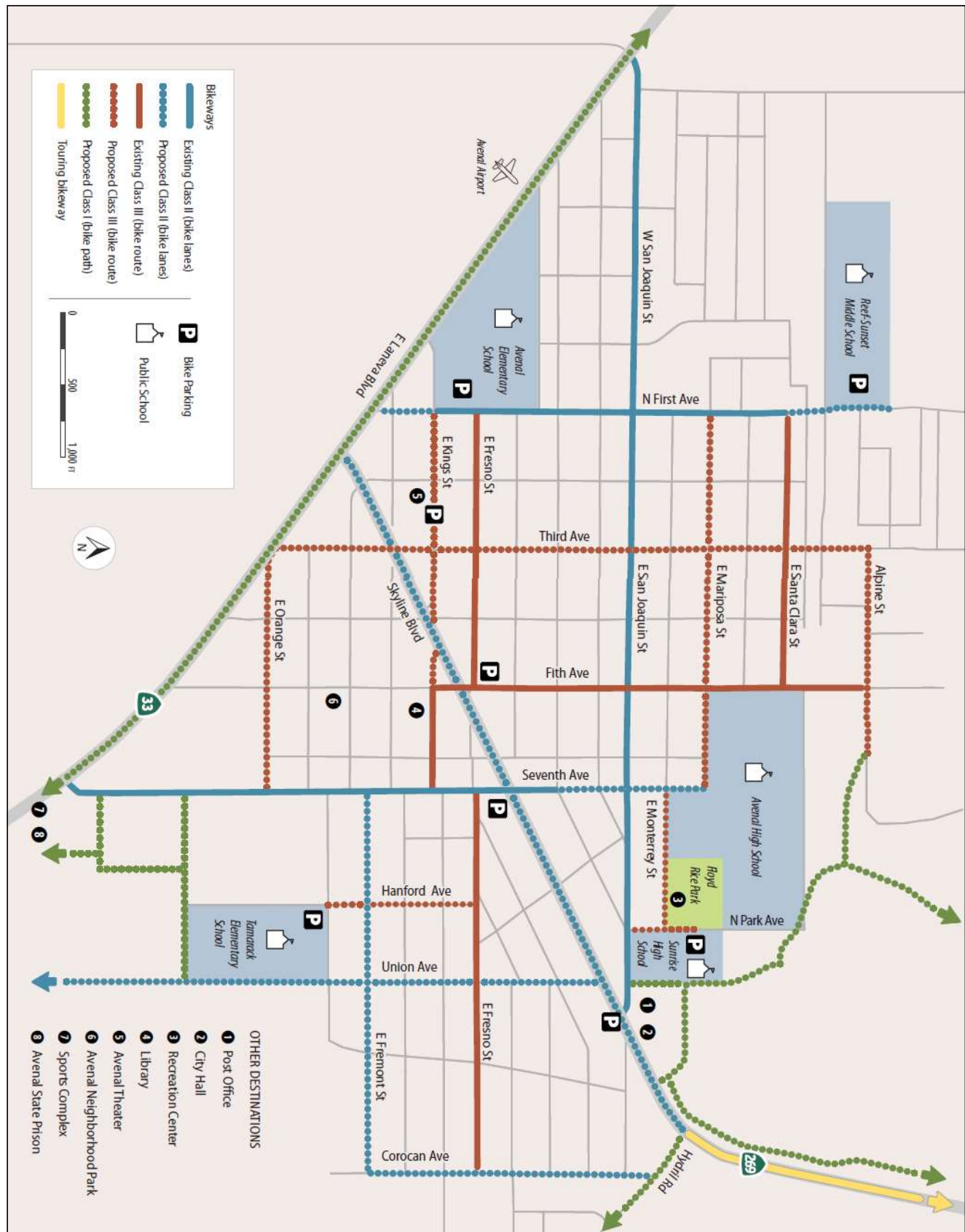
The recommended network totals approximately 29 miles in length, and consists of facilities of various classifications: bike lanes, bike routes, multi-use paths and “touring” bikeways (see the box on this page for the definition of touring bikeways). On the following pages are a map of the network and a table listing the proposed bikeway segments. In the

table, the segments are organized by bikeway classification and, generally, by north–south streets followed by east–west streets. Some of the segments do not appear on the map here, as the map covers only the urbanized area of Avenal. The bikeways in the non-urbanized area are shown in Figure 4-3 of the Avenal Active Transportation and Safe Routes to School Plan.

#### Touring bikeways

In addition to the four main bikeway types described above, the network includes a few segments of touring bikeways. “Touring” is not a standard bikeway designation. The 2011 Bicycle Plan, which used this term, describes them as “...streets, county roads, and state highways which cannot be given a formal designation (i.e. Class I, II, or III) because of cost or liability concerns but are used as a primary cycling route by more experienced (and typically long-distance) cyclists. These roads are often narrow, without shoulders, or carry high speed traffic and/or heavy traffic volumes. These streets do not provide the level of protection or comfort necessary for the casual, less experienced cyclists. Therefore, a touring roadway is one on which only experienced cyclists should ride.”

Figure 6.2.1 | Recommended Avenal bikeway network





**Table 6.2.1 | Proposed Avenal bikeways**

<i>Street / road / route</i>	<i>From</i>	<i>To</i>
<b>Multi-use paths / trails</b>		
Northern hillside	W. of Skyline Blvd. (Hwy. 269); see map for alignment	
Horse Canyon	E. of Villa Esperanza (E. of 5 <sup>th</sup> Ave.); See map for alignment	
Big Tar Canyon Rd.	Salem Ave.	Sports Complex
Hydril Rd.	Skyline Blvd. (Hwy. 269)	W. side of Avenal City Office
Behind Sunrise H.S.	See map for alignment	
Laneva Blvd. (Hwy. 33)	Western city limit	Avenal State Prison
Btwn. Tamarack E.S. and Salem Ave.	Various short segments; see map for alignments	
Salem Ave.	E. of Laneva Blvd. (Hwy. 33)	Big Tar Canyon Rd.
Salem–Big Tar Canyon connector	Salem Ave.	Big Tar Canyon Rd.
<b>Bike lanes (Class II)</b>		
1 <sup>st</sup> Ave.	N. side of Reef-Sunset M.S.	Santa Clara St.
1 <sup>st</sup> Ave.	Kings St.	Laneva Blvd. (Hwy. 33)
7 <sup>th</sup> Ave	Mariposa St.	Merced St.
Union Ave.	Skyline Blvd. (Hwy. 269)	Salem Ave.
Corcoran Ave. <sup>a</sup>	Hydril Rd.	Fremont St.
Ave. 36	Hydril Rd.	Salem Ave.
Fremont St.	7 <sup>th</sup> Ave.	Corcoran Ave.
Hydril Rd.	W. side of Avenal City Office	Ave. 36
Salem Ave.	Big Tar Canyon Rd.	Ave. 36
San Joaquin St. <sup>b</sup>	Laneva Blvd. (Hwy. 33)	Skyline Blvd. (Hwy. 269)
Skyline Blvd. (Hwy. 269) <sup>c</sup>	Laneva Blvd. (Hwy. 33)	Hydril Rd.
<b>Bike routes (Class III)</b>		
3 <sup>rd</sup> Ave.	Alpine St.	Laneva Blvd. (Hwy. 33) / Orange St.
Park Ave.	N. of Monterey St.	San Joaquin St.
Hanford Ave.	Fresno St.	N. side of Tamarack Elem. School
Alpine St.	3 <sup>rd</sup> Ave.	E. of Villa Esperanza (E. of 5 <sup>th</sup> Ave.)
Mariposa St.	1 <sup>st</sup> Ave.	7 <sup>th</sup> Ave.
Monterey St.	7 <sup>th</sup> Ave.	Park Ave.
Kings St.	1 <sup>st</sup> Ave.	Skyline Blvd. (Hwy. 269)
Kings St.	Skyline Blvd. (Hwy. 269)	5 <sup>th</sup> Ave.
Orange St.	3 <sup>rd</sup> Ave.	7 <sup>th</sup> Ave.

<sup>a</sup> Currently, this segment is an existing bike route (Class III) and is shown as such on the map here. The Avenal plan proposes bike lanes (Class II) for this segment.

- <sup>b</sup> Currently, San Joaquin Street has conventional bike lanes (Class II) and the street is shown as such on the map here. The Avenal Active Transportation and Safe Routes to School Plan recommends considering buffered bike lanes, which are separated from the adjacent travel or parking lane by a painted buffer space.
- <sup>c</sup> Currently, this segment is considered a touring bikeway only. However, the Avenal plan states that “bicycle facilities like bike lanes, signage, and crossings should be provided along Skyline Boulevard because the street runs throughout the entire urbanized area [from Laneva Boulevard to Hydril Road] and provides connections to various activity centers and the regional bus service.”

The Avenal plan states that the existing bikeway network is “in need of improvement. Some of the bikeways are faded and lack adequate signage and stencil markings that indicate the striping is for bike use.” The Avenal plan makes the following operational and maintenance recommendations for the network facilities:

- Appropriate signage and markings such as sharrows and “bike lane” stencils at periodic intervals on both sides of the road.
- Separation between on-street parking and bike lanes to prevent “doorings,” by stenciling door-zone marks or, if the bike lane is too narrow, by installing “no parking” signs.
- Possibly, upgrading of the bike lanes on San Joaquin Street to buffered bike lanes, which are separated from the adjacent travel or parking lane by a painted buffer space.
- Bicycle detection loops and stencils at the intersection of Skyline Boulevard (Highway 269) and Seventh Avenue.
- Bicycle crossing warning signs at the intersections of Skyline Boulevard (Highway 269) with Kings and Fresno Streets.
- Repair of roads that have uneven, cracked or potholed surface conditions, especially on roads with existing or planned bikeways.
- Program for the routine maintenance of bikeways (and walkways), including regular sweeping, pavement repairs, restriping of crosswalks and trimming of vegetation.

Lastly, regarding bicycle parking, the Avenal plan proposes short-term parking racks at every park; at schools without existing bicycle parking, including Avenal High School; in front of businesses or activity centers along Skyline Boulevard and Kings Street; and at the future Avenal transit hub. The plan

also recommends that long-term bicycle parking and shower facilities be considered for large recreational facilities and other destinations outside of the urbanized area. Floyd Rice Park is slated to receive bicycle parking to supplement a proposed bike path connecting the park and Avenal High School.

## Pedestrian improvements

The Avenal Active Transportation and Safe Routes to School Plan recommends the following pedestrian improvements. These are described in more detail in Chapter 4 of that plan. The main physical recommendations are illustrated in Figure 6.2.2.

### Crosswalks

- High-visibility crosswalks at every leg of various intersections along five high-traffic streets: Skyline Boulevard, San Joaquin Street and First, Seventh and Hanford Avenues; and also at the intersection of Mariposa Street and Fifth Avenue.
- Standard marked crosswalks at every leg of various intersections along Third Avenue in particular but also along A, Second, Fifth and Sixth Avenues.
- Standard marked crosswalks along other popular walking routes to school, including Stanislaus, Merced, Madera, Fresno, Kings, Whitney, Shasta, Fremont, Kern, Sonoma, Santa Clara, Mariposa, and Monterey Streets.
- Flashing pedestrian-crossing beacons and/or in-pavement lighting near schools, including on Kern Street at Seventh and Hanford Avenues and on Union Avenue at Kern Street (near Tamarack Elementary School); and on First Avenue at Sonoma Street (at Reef-Sunset Middle School). Also, the City is planning to install a flashing beacon on Seventh Avenue at Monterey Street.

- City policy to install marked crosswalks at all controlled intersections.
- Four-way stops at Kings Street/Second Avenue; Hanford Avenue/Fremont Street; Seventh Avenue at Kern/Ventura Streets and at Fresno Street; and Union Avenue at Kern and Fremont Streets.

#### **Sidewalks**

- Continuous sidewalks along Laneva Boulevard (Highway 33) and on east-west street segments connecting to it.
- Sidewalk widenings around schools, and continuous sidewalks on Fresno Street near Avenal Elementary School.
- Sidewalk and curb-ramp audit for the entire city to identify locations that need to be updated to meet minimum requirements.
- Repair of cracked sidewalks and upgrading of curb ramps that are identified in the audit, prioritizing locations around key destinations.

#### **Safe Routes to School**

- Speed bumps or speed tables around school sites to calm traffic.
- Reconfigured parking (currently angled) on First Avenue and Fresno Street at Avenal Elementary School.
- Speed trailers along high-traffic streets, including San Joaquin Street, Skyline Boulevard and First, Seventh and Hanford Avenues.
- “School zone” signs around schools.
- Signs or pavement markings designating student drop-off/pick-up areas.
- Educational and promotional events to inform students about traffic safety and to promote walking and biking (for example, a Walk-and-Roll to School Day).
- Safe Routes to School map that identifies school zones and walking zones.
- Crossing guards at every elementary and middle school at key crosswalks and during drop-off and pick-up times.
- “Walking school bus” program, which enables students to walk together to school in a group, led by adults.

#### **Streetscaping / traffic calming**

- Streetscape improvements along the urbanized stretch of Skyline Boulevard, between Laneva Boulevard (Highway 33) and Hydril Road.
- Reconfigured traffic median on Skyline Boulevard (Highway 269) between Central and Fifth Avenues to include landscaping and/or a pedestrian crossing island.
- Traffic-calming features at the intersections of Skyline Boulevard (Highway 269) with Hydril Road, San Joaquin Street and Sixth, Fifth and Fourth Avenues. Also, the City is planning to install bulb-outs (curb extensions) at the intersections of Skyline with 5<sup>th</sup> and 7<sup>th</sup> Avenues.
- Curb extensions, landscaped traffic islands and other features to reduce excess pavement on San Joaquin Street at Central Avenue/Stanslaus Street and at Merced Street; and on Fresno Street at Valley Street/Hanford Avenue.

#### **Other recommendations**

- Citywide sidewalk lighting program, especially around downtown, schools and other high-activity areas.
- Program to maintain and improve the public alleyways located between the back sides of homes, particularly to serve as routes for school students.
- Periodic temporary closure of Kings Street for community events.
- Program for the routine maintenance of walkways (and bikeways), including regular sweeping, pavement repairs, restriping of crosswalks and trimming of vegetation.
- City policy to require that future development around Tamarack Elementary and Reef-Sunset Middle Schools provide streets with adequate walking and biking connectivity to the schools.

### Figure 6.2.2 | Recommended Avenal pedestrian improvements

Source: Avenal Active Transportation and Safe Routes to School Plan





# Proposed improvements

## 6.3 | Corcoran

### Bicycle improvements

The City of Corcoran does not have its own bicycle master plan. Instead, the bikeway network recommended here for Corcoran reflects the network that appears in the Corcoran Safe Routes to School (SRTS) Plan from 2014.

The objective of the Corcoran SRTS Plan is to improve traffic safety near schools, particularly for children who walk and bike to school. The plan summarizes key needs, challenges and concerns around each of the five public schools in the city, and identifies a network of major school routes. The plan then recommends physical improvements as well as educational and encouragement strategies to improve conditions. One of the recommendations is for “a comprehensive bike network to connect major destinations, especially schools, to neighborhoods.”



The bikeway map in the SRTS Plan (Figure 3-5 in that plan) is based on the map developed earlier for Corcoran as part of the 2011 Kings County Regional Bicycle Plan. The SRTS Plan refined that earlier map by inserting a few additional bikeway segments to fill in gaps and extend bikeways to the city limits so as to create a more complete network.

The recommended bikeway network for Corcoran is shown on the map on the next page. With one minor exception, the network is the same as the one in the SRTS Plan. (The exception is that the SRTS Plan shows the bikeway on Orange Avenue beginning just east of Benrus Avenue; this plan has the bikeway beginning at 7th Avenue, at the western city limits.) Following the map is a table that lists the proposed bikeway segments, organized by north-south and east-west roadways. The street length of the network is approximately 18 miles.

The 2011 Regional Bicycle Plan classified all the Corcoran bikeways (both the existing and planned ones) as Class III, meaning bike routes. The 2014 SRTS Plan did not assign classifications to the bikeways. Instead, the SRTS explained that the classification of “the planned/recommended bikeways [is] subject to change due to existing conditions, for instance limited rights-of-way.”

In addition to the map of the bikeway network, the SRTS Plan included a couple of recommendations regarding maintenance and design of the network. According to the SRTS Plan, “...the existing bicycle network has gaps and faded striping. The City should prioritize repainting the existing striping because it can be a cost effective project to increase the visibility of bicyclists to drivers and can be implemented immediately without extensive study or engineering. Where rights-of-way are available, the City should consider installing separated bike paths that are buffered from traffic to provide a safer bike route for children who do not have experience biking alongside traffic.”

Figure 6.3.1 | Corcoran bikeway network



**Table 6.3.1 | Proposed Corcoran bikeways**

<i>Street / road</i>	<i>From</i>	<i>To</i>
<b>Proposed, north-south</b>		
6 ½ Ave.	Orange Ave.	Oregon Ave.
6 <sup>th</sup> (Dairy) Ave.	Niles Ave.	North Ave.
6 <sup>th</sup> (Dairy) Ave.	Oregon Ave.	Pueblo Ave.
Letts Ave.	North Ave.	Patterson Ave.
Otis Ave.	Orange Ave.	Patterson Ave.
Chittenden Ave.	Otis Ave.	Sherman Ave.
King (5 ¼) Ave.	Bainum Ave.	Corcoran State Prison
<b>Proposed, east-west</b>		
Orange Ave.	7 <sup>th</sup> Ave.*	Otis Ave.
North Ave.	7 <sup>th</sup> Ave.	Otis Ave.
Patterson Ave.	6 ½ Ave.	Letts Ave.
Whitley Ave.	7 <sup>th</sup> Ave.	East city limit
Sherman Ave.	7 <sup>th</sup> Ave.	6 <sup>th</sup> (Dairy) Ave.
Sherman Ave.	Flory Ave.	Otis Ave.
Oregon Ave.	6 ½ Ave.	King (5 ¼) Ave.

\* The SRTS Plan shows this bikeway as beginning just east of Benrus Avenue.

## Pedestrian improvements

The City of Corcoran does not have a pedestrian master plan. Instead, the recommendations in this section for pedestrian improvements are taken from the Corcoran SRTS Plan. (See the section on bicycle improvements earlier in this chapter for more information about the SRTS Plan.)

The SRTS Plan focuses on walking (and biking) to school and is not a citywide plan. Still, it is fairly safe to assume that the plan addresses most of Corcoran's key pedestrian needs, for several reasons:

- Much of the walking activity in Corcoran consists of children walking to and from school.
- Children, especially the younger ones, are among the most vulnerable users of streets and roads.
- The engineering recommendations in the SRTS Plan for new sidewalks and improved street

crossings would benefit *all* pedestrians, not only school children.

- The five public schools are all located in the central part of the city. This is where most people live and where many other key destinations are located. This means that the SRTS Plan covers the same area where most walking in Corcoran—regardless of purpose—takes place.

The SRTS Plan recommends a variety of engineering improvements. The main ones—and the ones that are location-specific—are (i) new sidewalks to fill gaps and (ii) improved street crossings.

### Sidewalk improvements

The sidewalks around the schools in Corcoran are discontinuous. (Figure 2-1 of the SRTS Plan shows where the sidewalk gaps occur.) The SRTS plan recommends that the City and the School District work together to fill the sidewalk gaps, with priority

generally given to Dairy Avenue, Letts Avenue and other street segments within ¼ mile of the schools. These gaps are referred to as “Priority I” sidewalk gap improvements in the SRTS Plan. It is worth noting that attendees of the community workshop held on May 1, 2018, at the Corcoran City Council Chambers, confirmed the importance of filling in these sidewalk gaps.

The table below lists the street segments where the Priority I gap improvements are found. Most of these street segments have some existing sidewalk but they are separated by multiple gaps, sometimes on just one side of the street and sometimes on both. The maps on the following pages show the locations of sidewalk gaps around the schools. The Priority I gaps are shown in dark pink-red.

The SRTS Plan explains that “new sidewalk segments should follow standard practice for sidewalk design: 4 to 6 feet in width, with a buffer, preferably planted strips, between the sidewalk and the road, if possible.” The plan also states that all sidewalk surfaces must meet ADA standards by having “a continuous surface that is not interrupted by steps or abrupt changes in grade” and a slip-resistant surface.

**Table 6.3.2 |** Street segments with Priority I sidewalk gaps

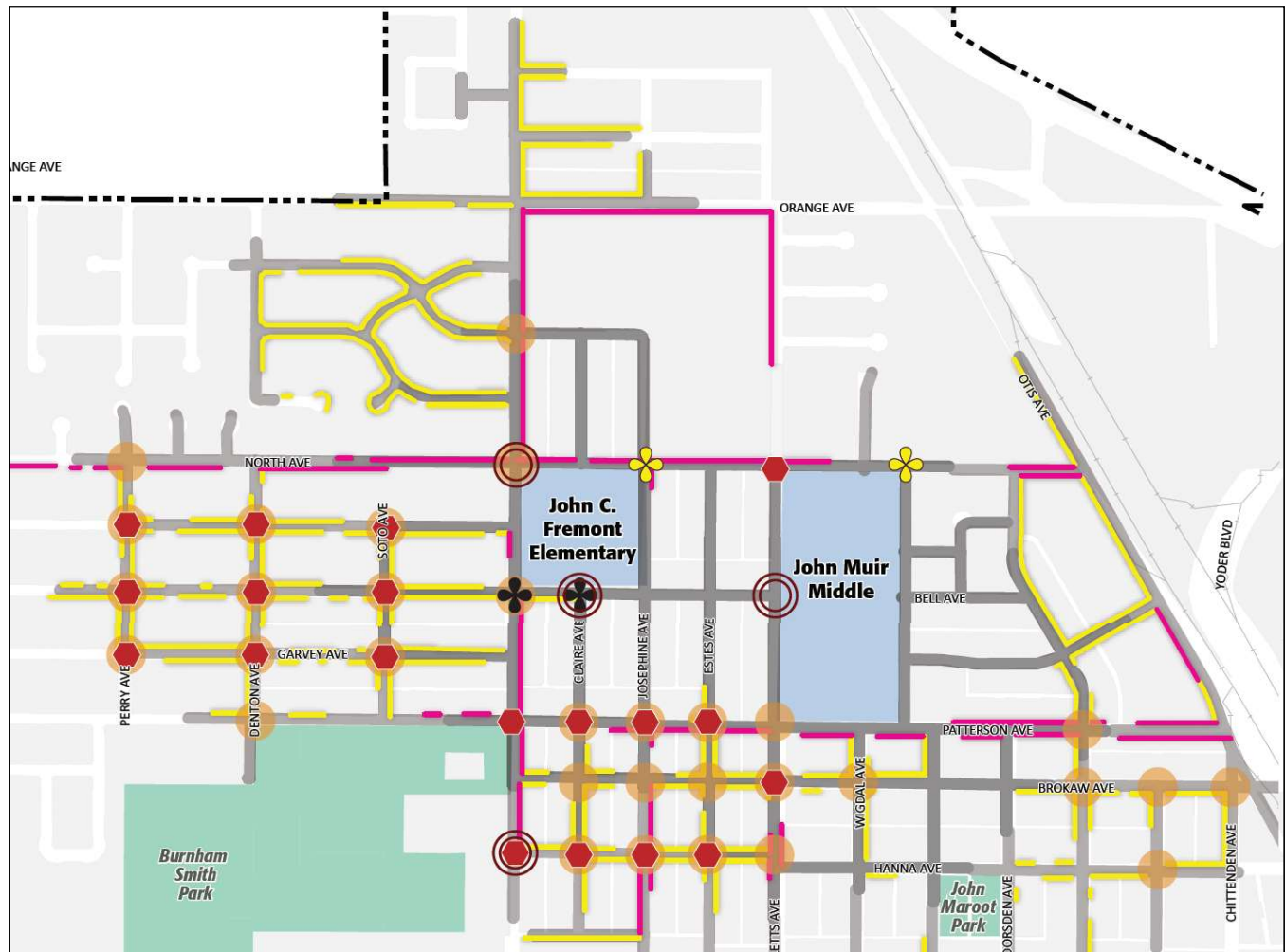
<i>Street / road</i>	<i>From</i>	<i>To</i>
<b>North-south streets</b>		
Dairy Ave.	Orange Ave.	Whitley Ave.
Dairy Ave.	Bainum Ave.	Oregon Ave.
Josephine Ave.	North Ave.	S. of North Ave.
Josephine Ave.	Patterson Ave.	S. of Hanna Ave.
Letts Ave.	Orange Ave.	S. of Aurand Ct.
Letts Ave.	N. of Hanna Ave.	S. of Hanna Ave.
Letts Ave.	Jepsen Ave.	Oregon Ave.
Otis Ave.	Cardoza Ave.	N. of Patterson Ave.
<b>East-west streets</b>		
Orange Ave.	Dairy Ave.	Letts Ave.
North Ave.	W. of Rickover Ct.*	John Muir M.S.
North Ave.	Norboe Ave.	Otis Ave.

Patterson Ave.	E. of Soto Ave.	Otis Ave.
Whitley Ave.	W. of Denton Ave.	Dairy Ave.
Sherman Ave.	W. of 1 <sup>st</sup> St.*	Dairy Ave.
Sherman Ave.	Estes Ave.	Kings Ave.
Bainum Ave.	Dairy Ave.	Norboe Ave.
Oregon Ave.	Dairy Ave.	Mark Twain E.S.

\* North and Sherman Avenues are cut off on the maps in the SRTS Plan, so it is unclear exactly where the sidewalk gaps on these streets begin.



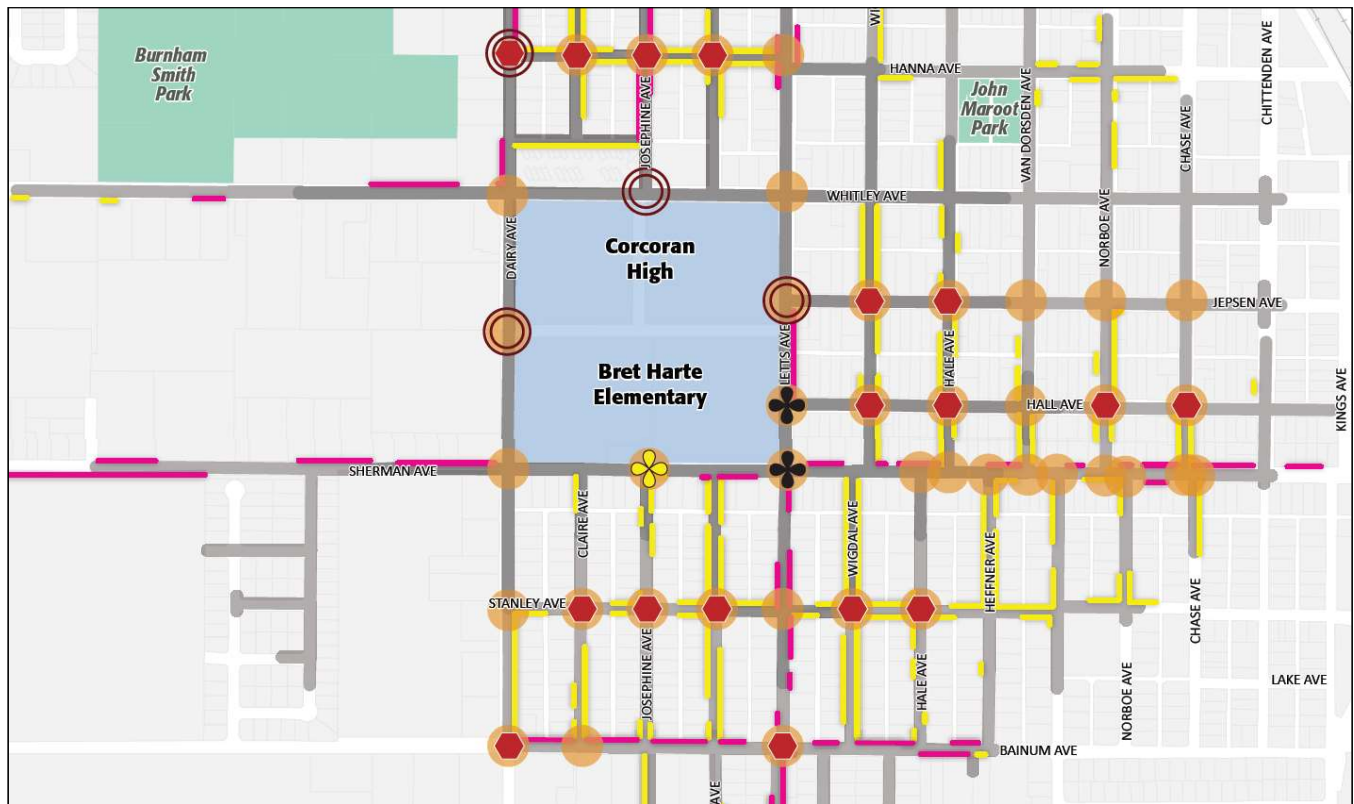
**Figure 6.3.2** | Recommended pedestrian improvements around John C. Fremont Elementary and John Muir Middle Schools (source: Corcoran Safe Routes to School Plan)



### Legend

<span style="color: pink;">—</span> Priority I Sidewalk Improvements	<span style="color: yellow;">—</span> Priority II Sidewalk Improvements
<span style="color: red;">◆</span> Proposed 2-way or 4-way Stop Signs	<span style="color: orange;">●</span> Curb Ramp and Crosswalk Improvements
<span style="color: red;">⊗</span> Proposed Pedestrian Activated Crossing	<span style="color: black;">✖</span> Existing Crossing Guard Locations
<span style="color: blue;">■</span> Schools	<span style="color: green;">■</span> Existing Parks
<span style="border: 1px dashed black; display: inline-block; width: 20px; height: 10px;"></span> City Limit	<span style="border: 2px solid pink; display: inline-block; width: 20px; height: 10px;"></span> Sphere of Influence
<span style="border: 2px solid black; display: inline-block; width: 20px; height: 10px;"></span> School Walk Zone	<span style="border: 2px solid black; display: inline-block; width: 20px; height: 10px;"></span> 0 to 1/4 mi Walking Distance
	<span style="border: 2px solid black; display: inline-block; width: 20px; height: 10px;"></span> 1/4 to 1/2 mi Walking Distance

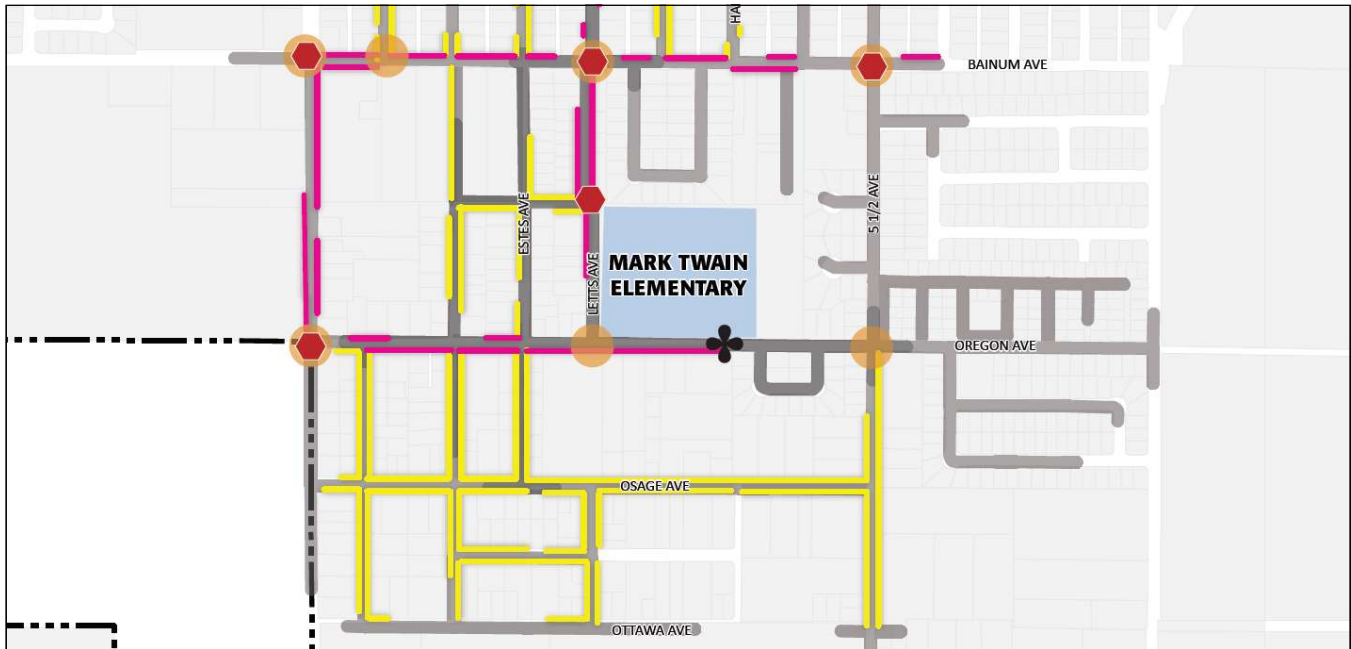
**Figure 6.3.3 | Recommended pedestrian improvements around Bret Harte Elementary and Corcoran High Schools** (source: Corcoran Safe Routes to School Plan)



### Legend

	Priority I Sidewalk Improvements		School Walk Zone
	Priority II Sidewalk Improvements		0 to 1/4 mi Walking Distance
	Proposed 2-way or 4-way Stop Signs		1/4 to 1/2 mi Walking Distance
	Curb Ramp and Crosswalk Improvements		Schools
	Proposed Pedestrian Activated Crossing		Existing Parks
	Existing Crossing Guard Locations		City Limit
			Sphere of Influence

**Figure 6.3.4 | Recommended pedestrian improvements around Mark Twain Elementary School**  
 (source: Corcoran Safe Routes to School Plan)



### Legend

	Priority I Sidewalk Improvements		Schools
	Priority II Sidewalk Improvements		Existing Parks
	Proposed 2-way or 4-way Stop Signs		City Limit
	Curb Ramp and Crosswalk Improvements		Sphere of Influence
	Proposed Pedestrian Activated Crossing		
	Existing Crossing Guard Locations		
			0 to 1/4 mi Walking Distance
			1/4 to 1/2 mi Walking Distance

### Crossing improvements

The main roads in Corcoran are difficult for pedestrians to cross. Most of these roads are wide, with fast, heavy traffic during peak hours; they do not provide proper crosswalks, and stop signs are generally found only on the minor cross streets. To address these challenges, the SRTS Plan proposes crosswalk improvements throughout the plan area. The main recommendations, which are shown on the map on the next page, are:

- Four-way stop signs and crosswalks at three unsignalized intersections along Dairy Avenue—at Patterson, Bainum and Oregon Avenues—if justified by an engineering study.
- Four-way stop signs and crosswalks at four unsignalized intersections along Letts Avenue—at Orange, North, Hall and Bainum Avenues—again, if justified by an engineering study.
- Crosswalk enhancements at ten intersections without traffic signals or stop signs along Dairy Avenue: from north to south, at Gable, North, Bell, Hanna and Whitley Avenues; midway between Whitley and Sherman Avenues; and at Sherman, Stanley, Bainum and Oregon Avenues.
- Crosswalk enhancements at 11 intersections without traffic signals or stop signs along Letts Avenue: from north to south, at Bell, Patterson, Brokaw, Hanna, Whitley, Jepsen, Hall, Sherman, Stanley, Bainum and Oregon Avenues.

The SRTS Plan lists the following types of potential crosswalk enhancements:

- Overhead signs and flashing beacons that hang from a mast arm extending over the street.
- Raised crosswalks, which extend the sidewalk across the road and bring cars up to the level of pedestrians. These crosswalks slow traffic, improving visibility of pedestrians and do away with the need for curb ramps.
- Pedestrian-activated in-pavement lighted crosswalks accompanied by flashing signs.
- Pedestrian-actuated signals, along with crosswalk signs, at uncontrolled intersection crossings or at crosswalks where pedestrians need greater visibility. (These signals are push buttons that cause a crosswalk light or traffic signal to turn.)

### Other improvements

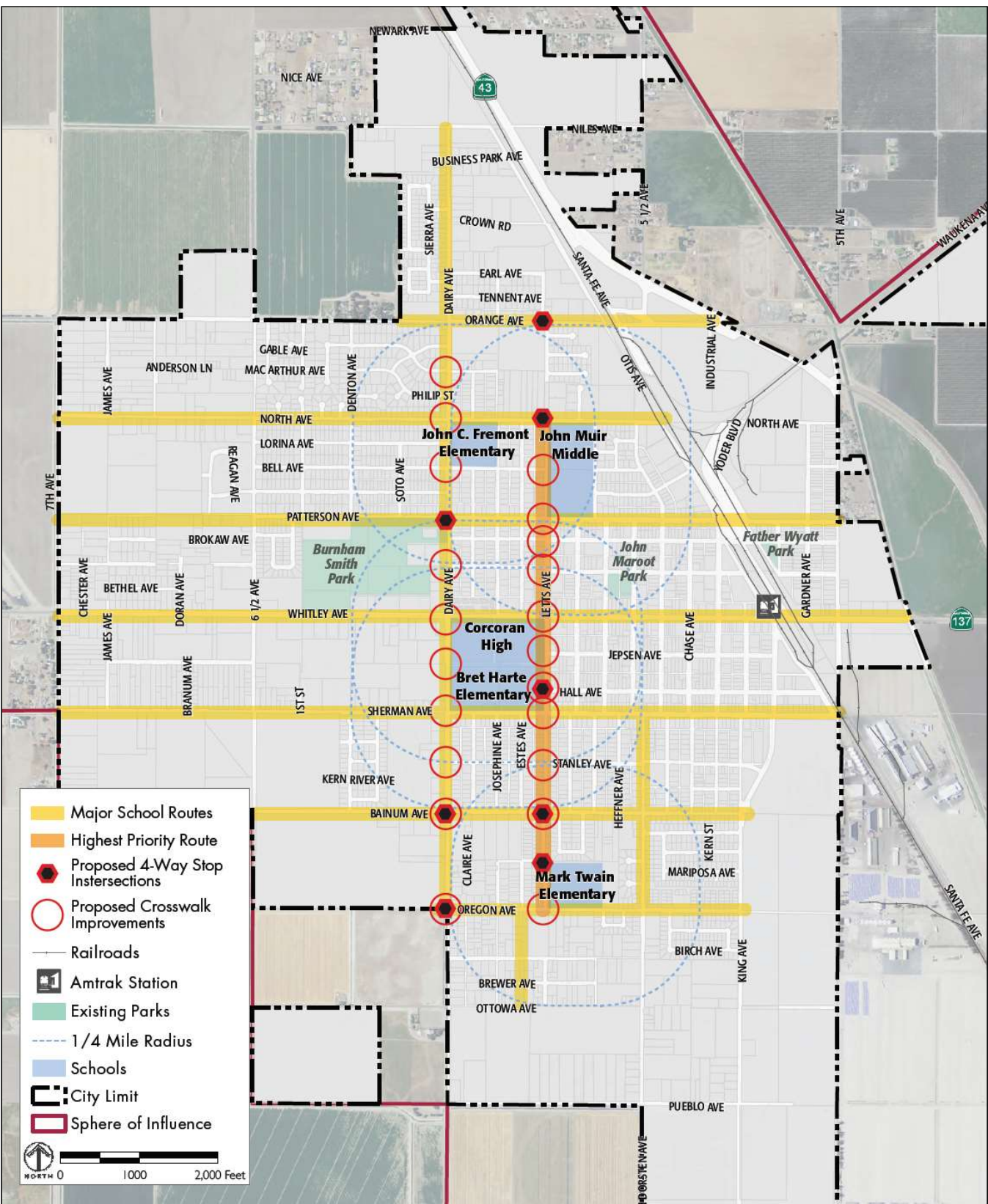
Other recommended engineering improvements in the SRTS Plan include:

- New crossing curb ramps and upgraded ones to meet ADA standards, particularly within school zones and along the major school routes.
- Pedestrian-scaled lighting along the major school routes.

The SRTS Plan also recommends that the update to the Corcoran General Plan incorporate traffic-calming measures for streets in school zones, not only along local streets and minor collectors but also along major collectors and arterials.



Figure 6.3.5 | Main recommended crosswalk improvements (source: Corcoran Safe Routes to School Plan)



# Proposed improvements

## 6.4 | Hanford

The Hanford Pedestrian and Bicycle Master Plan was adopted by the City in 2018. The plan designates a citywide network of bikeways and one of pedestrian routes, and recommends or suggests a number of bicycle and pedestrian programs and other improvements. Because the Hanford plan is recent, detailed at a local level and specific to the city, the recommendations here have been taken from that plan.



### Bicycle improvements

#### Recommended bikeway network

Section 3.5 of the Hanford plan proposes a two-stage citywide bikeway network: (i) 2016/initial network, which consists of actions that can be taken in the present, without the need to widen or build a street; and (ii) 2035, with recommendations for the future, once streets are built or widened.. The network—consisting of bike lanes (Class II facilities) and bike routes (Class III)—is based on the earlier networks for Hanford included in the 2011 Regional Bicycle Plan and the 2014 Regional Transportation Plan. However, the new network is more extensive, as it fills in gaps with new links and connections between previously discontinuous or disconnected facilities.

The table below summarizes the mileage of the recommended bicycle network at various stages. As shown in the table, the length of the existing

network is approximate 31 miles, while the 2035 network would extend approximately 140 miles.

**Table 6.4.1 | Mileage summary of bikeway network**

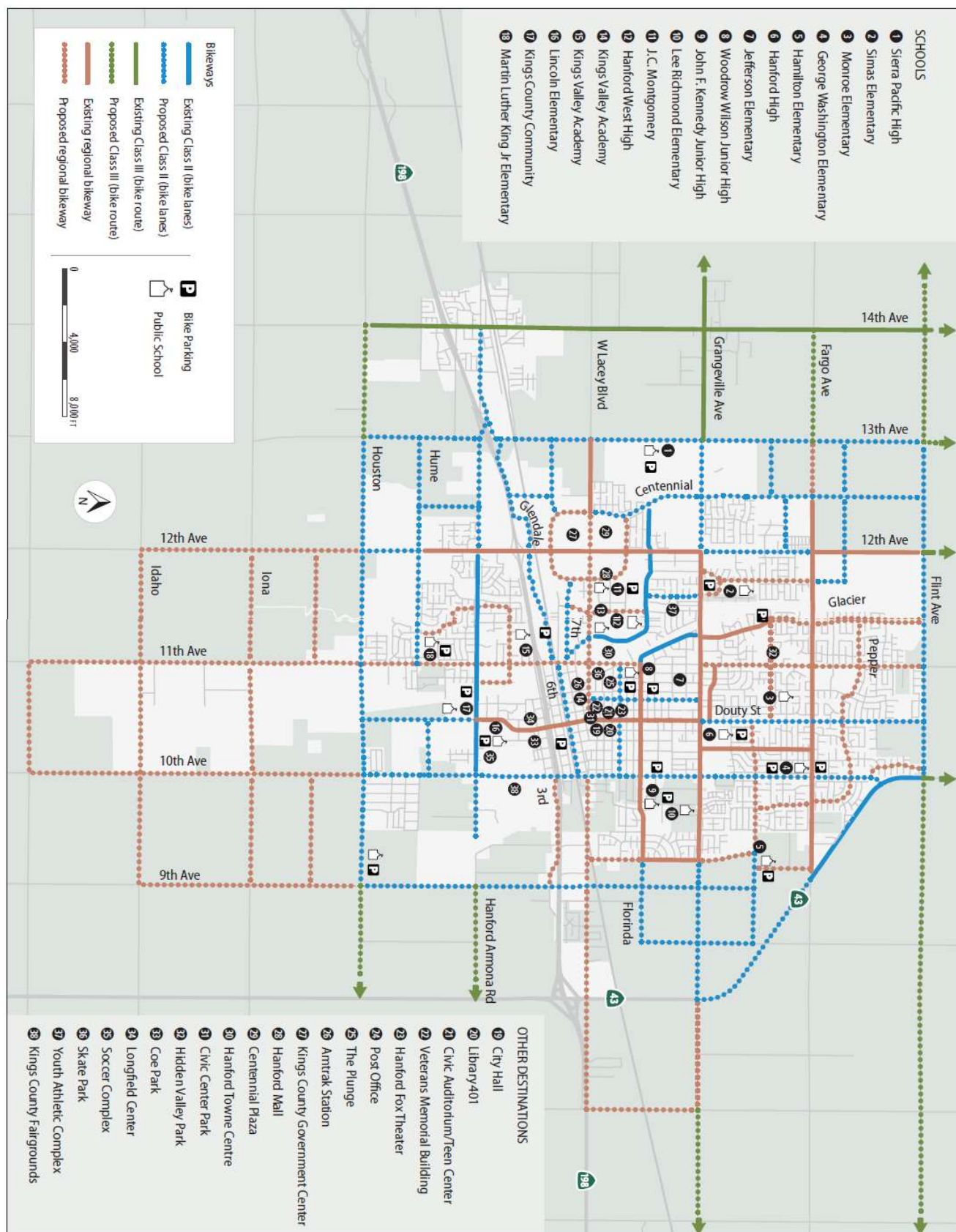
<i>Facility type</i>	<i>Existing</i>	<i>2016 / init'l (planned)</i>	<i>2035 (planned)</i>	<i>Total</i>
Class II bike lanes	5.69	4.65	40.23	50.57
Class III bike routes	24.87	59.39	5.55	89.81
<b>Totals</b>	<b>30.56</b>	<b>64.04</b>	<b>45.78</b>	<b>140.38</b>

On the following page is a map of the Hanford plan's 2035 network. In addition to bikeways within Hanford proper, the map shows existing and proposed bikeways in unincorporated areas immediately surrounding Hanford. The Hanford plan designates these as 'regional' bikeways. Because these bikeways are in areas under the jurisdiction of the County of Kings, they would need to be implemented by the County rather than by the City of Hanford.

Table 3-9 of the Hanford plan lists all the street segments that make up the network, along with key characteristics, including the street name, start and end points, length in miles, functional street classification (major arterial, arterial, collector or local), bikeway classification (Class II or III); and for existing streets: number of lanes, width of the outside travel lane, width of any bike lane and status of on-street parking. Following the map is a summary of the proposed 2035 network segments, listed according to bikeway classification (Class II or III).



**Figure 6.4.1** | Recommended Hanford bikeway network



**Table 6.4.2 | Proposed Hanford bikeways**

<i>Street / road</i>	<i>From</i>	<i>To</i>
<b><i>Planned bike lanes (Class II)</i></b>		
13th Ave.	Flint	Houston
Centennial Dr.	Flint	Lacey
12 ½ (Aquifer)	Future street	Hume
12 <sup>th</sup> Ave.	Hume	Houston
Fitzgerald Ave.	Pepper alignment	Fargo
University Ave.	Grangeville	Greenfield
Redington St.	Grangeville	Lacey
10 ½ Ave. (Douty St.)	Flint	Grangeville
10 ½ Ave. (Irwin St.)	Hanford Armona	Houston
10 <sup>th</sup> Ave.	Mission	Houston
9 <sup>th</sup> Ave.	Leland	Houston
8 ½ Ave.	Leland	Florida
Flint Ave.	13 <sup>th</sup>	Highway 43
Pepper Dr. alignment	13 <sup>th</sup>	Fitzgerald
Sangiovese St.	Centennial	12 <sup>th</sup>
Muscat Pl. alignment	13 <sup>th</sup>	Centennial
Leland Way	9 ¼	8 ½
Grangeville Blvd.	13 <sup>th</sup>	12 <sup>th</sup>
Grangeville Blvd.	9 <sup>th</sup>	8 <sup>th</sup> (Hwy. 43)
Greenfield Ave.	Centennial	Lacey
Florinda St.	9 ¼	8 ½
Seventh St.	Mall	11 <sup>th</sup>
Future street west of Target store	13 <sup>th</sup>	Centennial
Sixth St.	11 <sup>th</sup>	10 <sup>th</sup>
Glendale Ave.	13 <sup>th</sup>	11 <sup>th</sup>
Hanford Armona Rd.	13 <sup>th</sup>	Airport entrance
Hume Ave.	13 <sup>th</sup>	11 <sup>th</sup>
Orchard Dr. alignment	Douty	10 <sup>th</sup>
Houston Ave.	13 <sup>th</sup>	9 <sup>th</sup>
<b><i>Planned bike routes (Class III)</i></b>		
Centennial Dr.	Lacey	12 <sup>th</sup>
12 <sup>th</sup> Ave.	Houston	Idaho
Fitzgerald Ave.	Fargo	Grangeville
Campus Dr.	Greenfield	Glendale
11 ½ Ave. / Milpas St. / Echo Ln.	Davis	Hume
Glacier Way	Flint	Cortner
11th Ave.	Flint	Jackson <sup>a</sup>
Williams St. / Jones St.	Davis	Hume
Mission Dr.	Flint	10 <sup>th</sup>
10 <sup>th</sup> Ave. (Hwy. 43)	Houston	Jackson



Neill Way	Fargo	Leland
9 ¼ Ave.	Fargo	Lacey
9th Ave.	Houston	Idaho
7th Ave.	Grangeville	Lacey
Pepper Dr. / Aspen St.	Glacier	Encore
Encore Dr.	Aspen	Fargo
Fargo Ave.	13 <sup>th</sup>	9 ¼
Muscat Pl.	12 <sup>th</sup>	Fitzgerald
Cortner St.	Glacier	Kensington
Leland Way	Douty	9 ¼
Mustang Dr. / Berkshire Ln.	13 <sup>th</sup>	Centennial
Grangeville Blvd.	8 <sup>th</sup>	7 <sup>th</sup>
Elm St.	Greenfield	11 <sup>th</sup>
Ivy St.	11 <sup>th</sup>	10 <sup>th</sup>
Liberty St.	Centennial	12 <sup>th</sup>
Kings County Dr.	12 <sup>th</sup>	Lacey
Mall Dr.	12 <sup>th</sup>	Lacey
Lacey Blvd.	Centennial	7 <sup>th</sup>
Garner Ave.	Lacey	7 <sup>th</sup>
Third St.	10 <sup>th</sup>	9 <sup>th</sup>
Davis St.	11 ½	Williams
Hume Ave.	11 <sup>th</sup>	Jones
Industrial Ave. collector	12 <sup>th</sup>	9 <sup>th</sup>
Iona Ave.	12 <sup>th</sup>	9 <sup>th</sup>
Idaho Ave.	12 <sup>th</sup>	9 <sup>th</sup>
Jackson Ave.	11 <sup>th</sup>	10 <sup>th</sup>

<sup>a</sup> The Hanford plan proposes converting the existing Class II facility on 11<sup>th</sup> Ave. from Fargo to Grangeville to Class III by removing the striping and adding signs and sharrows.

### Low-volume traffic bikeway loops

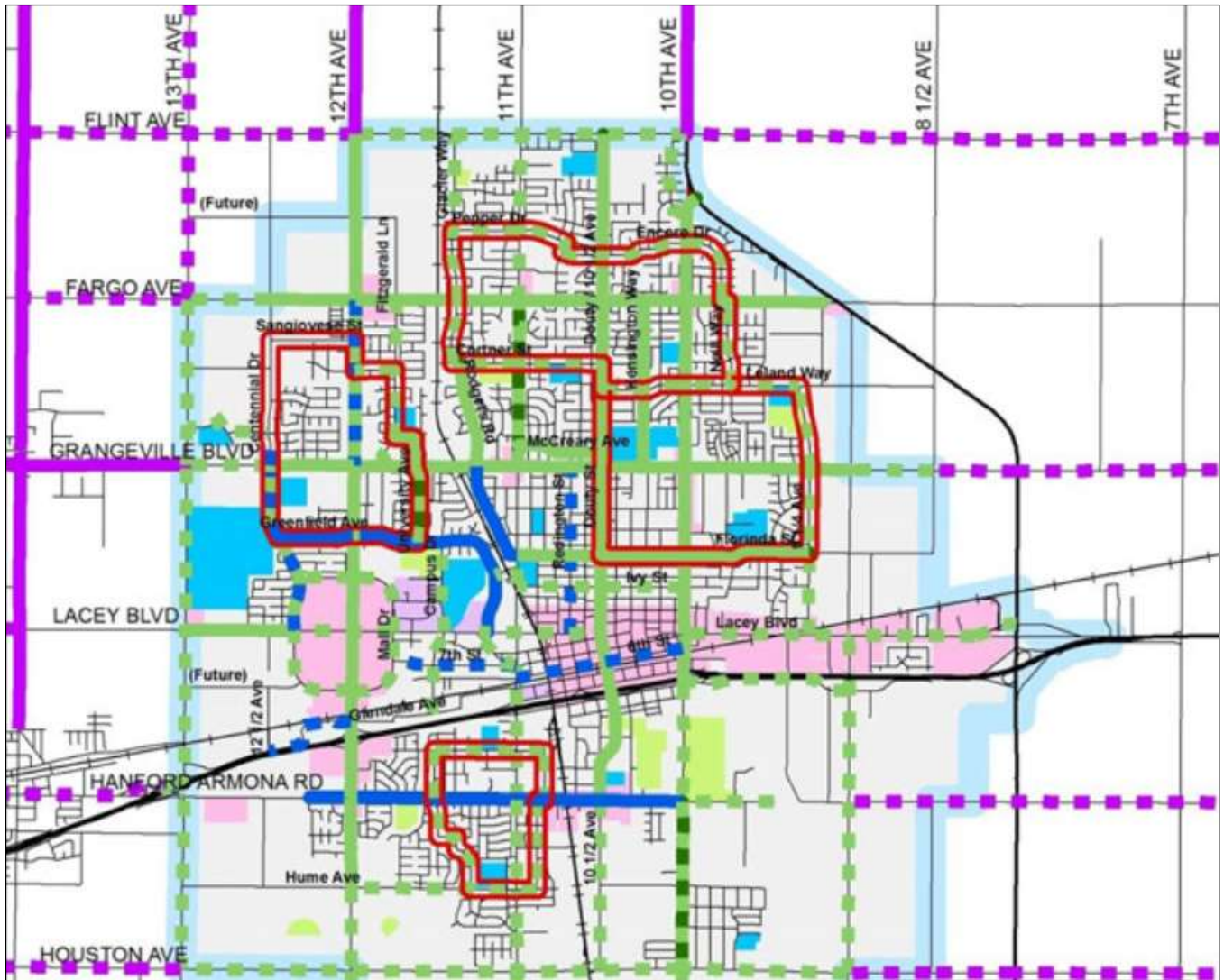
In addition to the bikeway network, the Hanford plan identifies four “low volume traffic bikeway loops”—one in each quadrant of the city—as safer alternatives to busy streets and public sidewalks. The map of these loops is shown on the next page. The loops utilize bikeways on streets with low traffic volumes and with speed limits of 35 mph or less. Most intersections along the bikeways are signalized.

The loops, ranging in length from 2.9 miles to 5.2 miles, provide access to schools and parks, and encompass largely residential neighborhoods centered around:

- Fargo Avenue from Glacier Way to Encore Drive/Neill Way (north quadrant).
- The intersection of Grangeville Boulevard and 12<sup>th</sup> Avenue (east quadrant).
- The intersection of Grangeville Boulevard and 10<sup>th</sup> Avenue (west quadrant).
- Hanford Armona Road from 11 ½ Ave. to Williams/Jones Sts. (south quadrant).

The loops in the north, west and south quadrants can be implemented on existing streets. The loop in the east quadrant can be developed as the future segments of Centennial Drive and Sangiovese Street are constructed.

Figure 6.4.2 | Low-volume-traffic bikeway loops (source: Hanford Pedestrian and Bicycle Master Plan)



### Programs and support facilities

Section 3.6 of the Hanford plan describes a number of programs and support facilities to facilitate bicycling, listed below. In addition, Section 4.7 includes safety education programs and Safe Routes to School programs that benefit both cyclists and pedestrians; these are summarized under the section on pedestrian improvements.

- Bicycle safety education programs. Section 3.6.1 describes existing City programs and also potential future programs targeting children, adult cyclists, drivers and law enforcement officials. Appendix D of the Hanford plan includes a selection of bicycle education programs from other communities throughout the country.
- Promotion programs to encourage bicycling, especially by increasing awareness of its benefits and providing incentives. Potential promotion programs and activities are outlined in Appendix E of the Hanford plan.
- Bicycle detection technology—whether detection loops or video detectors—at all new or modified traffic signals, along with pavement markings indicating where bicyclists should stop to be detected; also, minimum traffic-signal green times to accommodate bicyclists.
- City-sponsored program to provide parking at the request of businesses; ordinance requiring the installation of bicycle parking in new commercial buildings, existing buildings undergoing major renovations or change of use, parking lots, and City-owned and leased buildings; and suitable bicycle parking at locations where other objects are frequently used to secure bikes.
- Shower and locker facilities at workplaces.

## Pedestrian improvements

The Hanford Pedestrian and Bicycle Master Plan identifies a number of roadway stretches where pedestrian improvements such as new or upgraded sidewalks, ADA-compliant curb ramps, marked crosswalks, street trees and bus shelters should be prioritized. These locations are:

- Centennial Dr. from Fargo Ave. to Lacey Blvd.
- Irwin St. from Grangeville Blvd. to Downtown.
- Douty St. from Fargo Ave. to Downtown.
- 10<sup>th</sup> Ave. from Highway 43 to Hanford Armona Rd.
- 9 ¼ Ave. from Leland Way to Lacey Blvd.
- Fargo Ave. from Centennial Dr. to 10<sup>th</sup> Ave.
- Leland Way from 10<sup>th</sup> Ave. to 9<sup>th</sup> Ave.
- Grangeville Blvd. from 11<sup>th</sup> Ave. to 10<sup>th</sup> Ave.
- Greenfield Ave. from Centennial Dr. to Lacey Blvd. and from Elm St. to Wilson Junior H.S.
- West Lacey Blvd. from 13<sup>th</sup> Ave. to Civic Center Park.
- East Lacey Blvd. from Downtown to Highway 43.
- Hanford Armona Rd. from 13<sup>th</sup> Ave. to Hanford Municipal Airport.
- Second St. from Douty St. to Phillips St.
- Phillips St. from Second St. to Downtown.
- 12<sup>th</sup> Ave. from the San Joaquin Valley Railroad tracks to Hanford Armona Rd.

In addition to these location-specific improvements, the Hanford plan recommends several general pedestrian types of improvements citywide. These include:

- New or upgraded sidewalks.
- Crossing improvements such as marked crosswalks, midblock crossings, pedestrian islands or refuges, curb bulb-outs, traffic-calming measures, accessible pedestrian signals, countdown signals and enhanced overhead lighting.
- Parking restrictions at intersections and marked crosswalks where visibility of pedestrians is limited.
- Streetscape enhancements such as pedestrian-scaled lighting, street trees and landscaping, benches, trash receptacles, and decorative crosswalks.
- Sidewalks, curb ramps and safer crossings near bus stops; and bus stops equipped with signage, lighting, trash receptacles, wider sidewalks and shelters with seating.
- ADA-compliant driveway crossings.

### Recommended network

Section 4.5 of the Hanford Pedestrian and Bicycle Master Plan designates a recommended pedestrian network of routes providing connections to key destinations. The plan states that “although residents and visitors are encouraged to walk on all sidewalks in the City, the [routes] represent the key locations where improvements should be prioritized.” The network map (taken from the Hanford plan) is shown on the next page, while the table below lists the routes, or street segments, that make up the network.

The map also shows three “pedestrian districts.”

Although the districts are not mentioned in the text, it is presumed here that they, along with the pedestrian routes, represent the locations where pedestrian improvements should be prioritized. All three districts are along Lacey Boulevard:

- Existing retail center at 12<sup>th</sup> and Lacey.
- Downtown.
- Future retail center at Highway 43 and Lacey.



**Table 6.4.3 | Hanford pedestrian network routes**

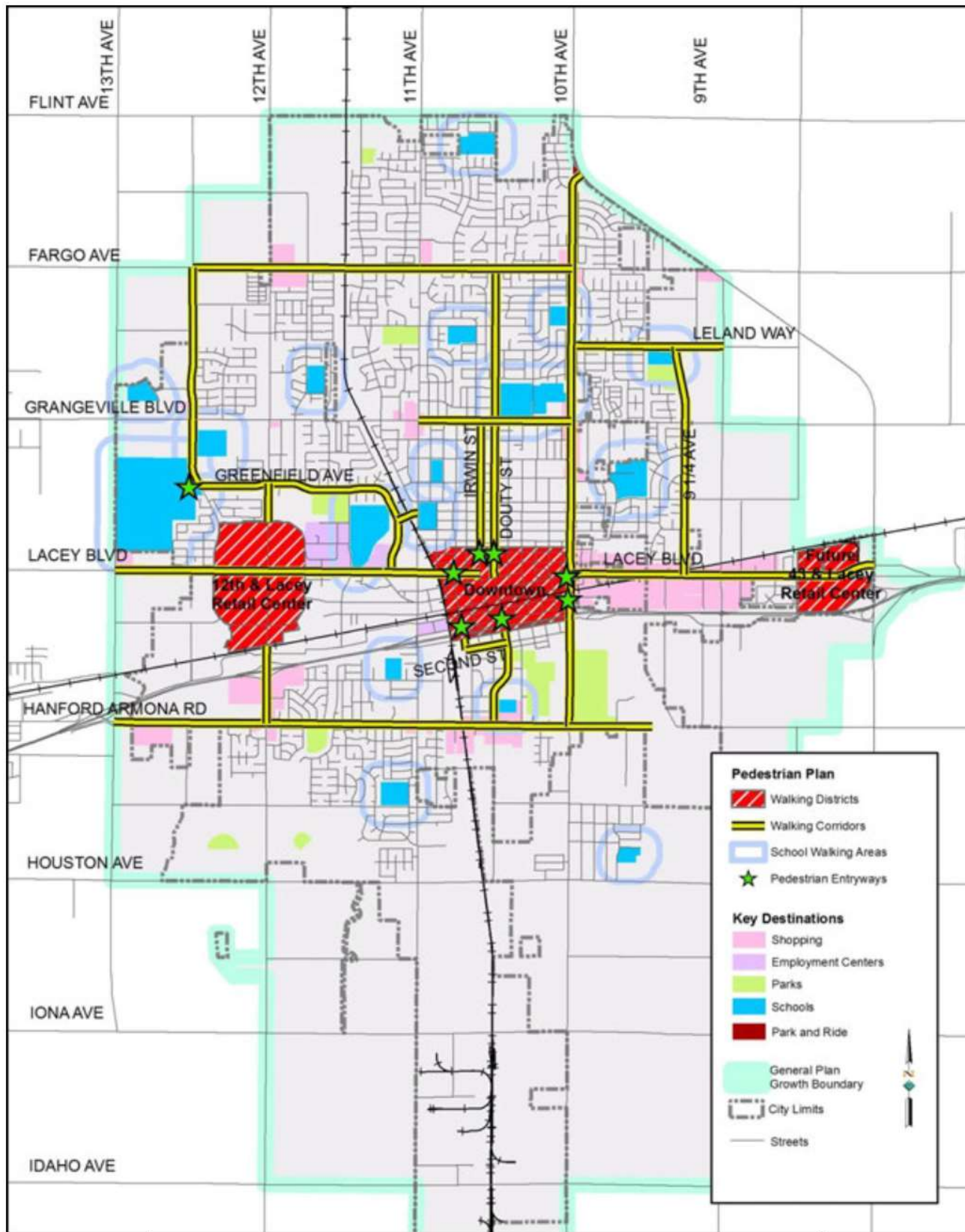
<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Suggested improvements</i>
Centennial Dr.	Fargo Ave.	Lacey Blvd. <sup>a</sup>	No specific improvements suggested.
Irwin St.	Grangeville Blvd.	Downtown	Opportunities for crosswalks; ADA-compliant curb ramps.
Douty St.	Fargo Ave.	Hanford Armona Rd. <sup>b</sup>	Opportunities for crosswalks; ADA-compliant curb ramps; pedestrian safety improvements at Douty / Irwin Sts.
10 <sup>th</sup> Ave.	Highway 43	Hanford Armona Rd.	ADA-compliant curb ramps.
9 ¼ Ave.	Leland Way	Lacey Blvd.	Crosswalks at controlled intersections; additional street trees; community-identified priority location for sidewalk improvements.
Fargo Ave.	Centennial Dr.	10 <sup>th</sup> Ave.	No specific improvements suggested.
Leland Way	10 <sup>th</sup> Ave.	9 <sup>th</sup> Ave.	Crosswalks at busy intersections; ADA-compliant curb ramps; sidewalk widening where poles obstruct the path.
Grangeville Blvd.	11 <sup>th</sup> Ave.	10 <sup>th</sup> Ave.	Upgraded curb ramps; street trees.
Greenfield Ave.	Centennial Dr.	Lacey Blvd.	Opportunities for crosswalks; community priority location for sidewalk, curb ramp and amenity improvements.
Elm St.	Greenfield Ave.	Wilson Jr. H.S.	No specific improvements suggested.
W. Lacey Blvd.	13 <sup>th</sup> Ave.	Civic Center Park (Downtown)	No specific improvements suggested.
E. Lacey Blvd.	Downtown	Highway 43	Sidewalks (possibly buffered by a landscaped strip with trees) and ADA ramps as the street is improved; community priority location for sidewalk improvements.
Hanford Armona Rd.	13 <sup>th</sup> Ave.	Hanford Mun. Airport	Shade trees; improved path around poles in the sidewalk; crosswalks at Harris St. and other high-traffic areas.
Second St.	Douty St.	Phillips St.	No specific improvements suggested.
Phillips St.	Second St.	Downtown	Mural and improved lighting at the Hwy. 198 underpass; ADA-compliant curb ramps; sidewalk between Fourth St. and the alley north of it; opportunities for crosswalks, including at Third St.
12 <sup>th</sup> Ave.	Greenfield Ave. <sup>c</sup>	Hanford Armona Rd.	No specific improvements suggested.

<sup>a</sup> Map shows the end point as Greenfield Ave.

<sup>b</sup> Text lists the end point as Downtown.

<sup>c</sup> Text lists the start point as the SJVRR tracks.

**Figure 6.4.3** | Recommended Hanford pedestrian network (source: Hanford Pedestrian and Bicycle Master Plan)



### Recommended improvements

Section 4.6 of the Hanford plan describes, in general terms, a number of recommended pedestrian improvements. They are:

- Improvement of facilities identified in the City's ADA Self Evaluation and Transition Plan, as well as of all sidewalks in street rights-of-way.
- Audit of the sidewalk system and repair of sidewalks so that they meet ADA requirements (generally a minimum of 4 feet of continuous unobstructed and fairly level sidewalk). Locations near major destinations should be prioritized for repair.
- Marked crosswalks along with "substantial" crossing improvements such as curb extensions, raised crosswalks, traffic and pedestrian signals, and enhanced overhead lighting. (Marked crosswalks alone might not improve pedestrian safety.)
- Parking restrictions at intersections and crosswalks, to help drivers and pedestrians see each other, along with red-painted curbs and consistent enforcement of the restrictions.
- Enhanced pedestrian signals, including accessible signals (with audible tones or messages) and countdown signals, and updated push buttons.
- Mid-block crossings on long blocks where crossings are far apart or where there is a concentration of pedestrians already crossing mid-block. Care must be taken to locate and design mid-block crossings properly.
- Reduced crossing widths through the use of curb extensions (bulb-outs) and pedestrian islands.
- Streetscape enhancements such as pedestrian-scaled lighting; street trees and landscaping; decorative paving and crosswalks; and benches and other street furniture. Streetscape enhancements should be prioritized for Downtown and near major destinations.
- More KART bus shelters, particularly along high-use bus routes, and equipped with signage, lighting, trash bins and seating; and paved sidewalks, curb ramps and safer crossings within a quarter mile of bus stops.
- Driveway crossings designed with a level pedestrian zone to meet ADA requirements.

### Support programs

Section 4.7 of the Hanford plan describes a number of safety education programs and initiatives targeted at all road user that should be considered:

- Community education programs relating to pedestrians and bicyclists.
- Neighborhood traffic calming program.
- Periodic walking audits at pedestrian collision hotspots to brainstorm ways to improve safety at these locations.
- Local walking promotions such as walk-your-child-to-school day, monthly community walking days, employer lunchtime walks and walk-to-transit campaigns.
- Public education campaigns to promote walking, including public service announcements, posters on transit vehicles and at bus stops; and safety and educational materials distributed through home mailings and utility bills.
- Citywide pedestrian network map and guide.

Lastly, Section 4.7 lists a number of Safe Routes to School programs designed to encourage walking and biking to school:

- Classes and training on pedestrian, bicycle and traffic safety skills, and educational campaigns aimed at drivers.
- Events and contests to encourage walking, bicycling and carpooling to school.
- Specialized law-enforcement tactics such as pedestrian safety stings and speed radar trailers.
- Signing, striping and engineering improvements around schools.
- Evaluation of activities and projects so that modifications can be made if needed.

# Proposed improvements

## 6.5 | Lemoore

### Bicycle improvements

Several versions of a citywide bikeway network have been drawn up for Lemoore over the years as part of earlier planning efforts. These efforts include the City's 2030 General Plan (adopted in 2008), the 2011 Kings County Regional Bicycle Plan, the 2014 Kings County Regional Transportation Plan and, before them, the Lemoore Bikeway Plan (undated but based on the document's graphic design appears to be from the 1980s).



The recommended bikeway network presented here combines the networks from the 2008, 2011 and 2014 plans, primarily by reconciling the differences between them. The network consists of existing and

planned bike paths (Class I facilities), bike lanes (Class II) and bike routes (Class III), and has a combined length of approximately 33 miles. The network is shown in Figure 6.5.1, with existing bikeways shown as solid blue lines and planned ones shown as dashed orange lines. Below is a table listing the proposed bikeway segments.

In addition to these segment, the network includes several planned off-street paths:

- Crisscrossing the planned development area surrounding West Hills College Lemoore (west of Highway 41 and south of the Union Pacific Railroad).
- Along the east and south sides of Lemoore High School (from Bush Street to Highway 198 and west to Lemoore Avenue).
- Along the north and west sides of the Cinnamon Elementary School site, from the eastern end of Devon Drive to Heritage Park and from the southern end of Murphy Drive to Cinnamon Drive.
- Connecting Bush Street to the Lemoore Canal at two places: from the northern end of Bush Street and along Bush Place / Barcelona Drive / Tuscany Court.

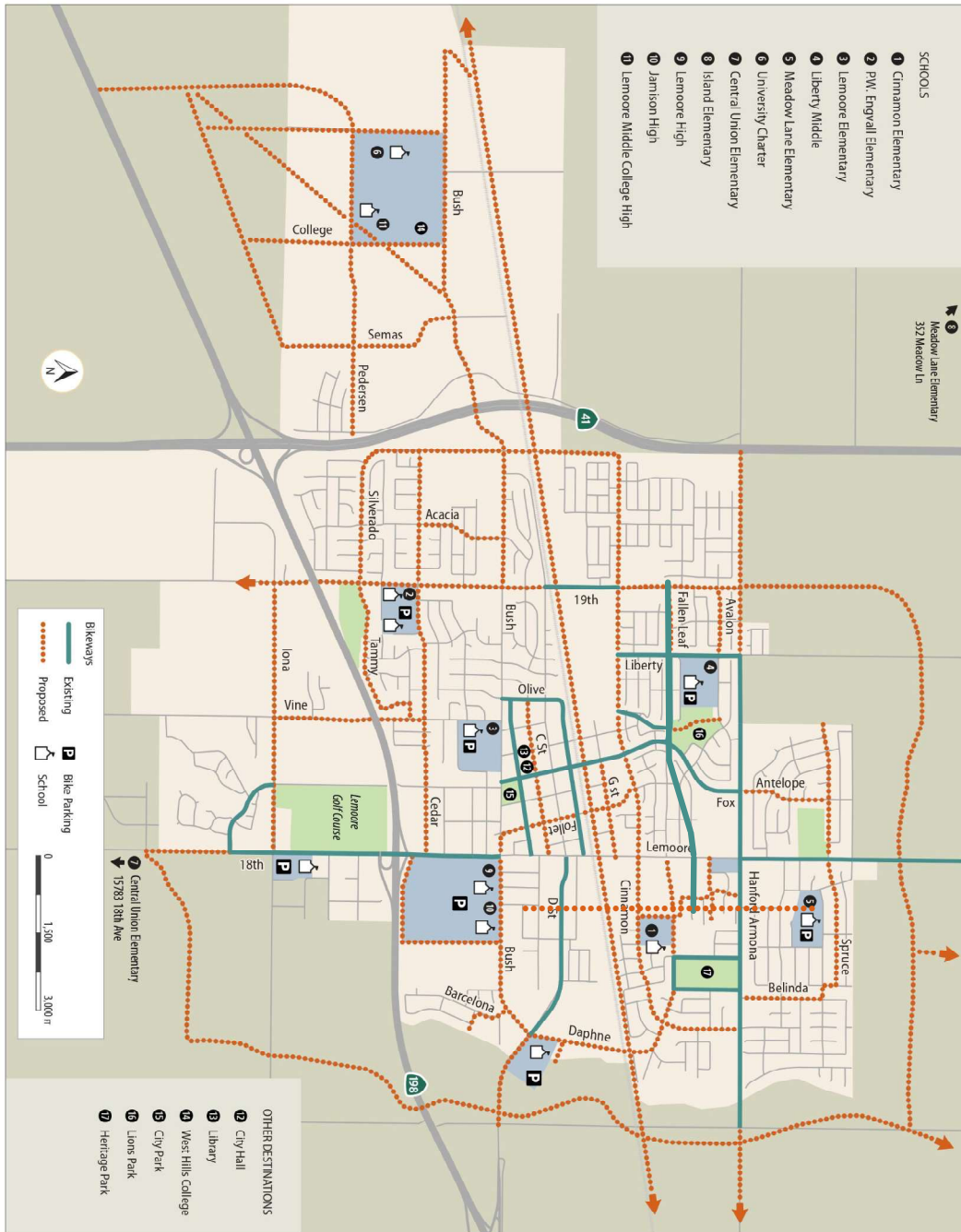


**Table 6.5.1 | Proposed Lemoore bikeways**

Street / road	From	To
Planned north–south bikeways		
19 ½ Avenue	Cinnamon Drive	Silverado Avenue
Acacia Drive	Bush Street	Cedar Lane
19 <sup>th</sup> Avenue	Northern city limit	Cinnamon Drive
19 <sup>th</sup> Avenue	D Street	Bush Street
19 <sup>th</sup> Avenue	Atlantic Avenue	Southern city limit
Path through Lions Park	Avalon Drive	Fallenleaf Drive
Vine Street	Cedar Lane	Iona Avenue
Antelope Drive	Spruce Avenue	Hanford Armona Road
Follett Street	Cinnamon Drive	Bush Street
Lemoore Avenue	Entire length within the city	
Murphy Drive	Hanford Armona Frontage	End of street
Ashland Drive / Meadow Lane / Belinda Drive	Spruce Avenue	Hanford Armona Road
Daphne Lane (existing portion and planned extension) <sup>a</sup>	Heritage Park	Bush Street
Lemoore Canal	Entire length within the city	
Planned bike routes (Class III)		
Spruce Avenue	Western city limit	Ashland Drive
Hanford Armona Road	Western city limit	Liberty Drive
Avalon Drive	19 <sup>th</sup> Avenue	Liberty Drive
Fallenleaf Drive	19 <sup>th</sup> Avenue	Liberty Drive
Club Drive (entire length)	Lemoore Avenue	Cul-de-sac
D Street	Bush Street	Eastern city limit
Cinnamon Drive	Lemoore Avenue	Hanford Armona Road
G Street	Fox Street	Lemoore Avenue
Path along UPRR ROW	Within the city limits	
C Street (entire length)	Olive Street	Lemoore Avenue
D Street	Eastern end of Bush Street	Eastern city limit
Bush Street	Western city limit	19 <sup>th</sup> Avenue
Bush Street	Follett Street	End of street
Cedar Lane (existing portion and planned extension)	19 ½ Avenue	Lemoore Avenue
Silverado Drive / Tammy Lane / Blakeley Drive / Mike Lane	19 ½ Avenue	Vine Street
Iona Avenue	19 <sup>th</sup> Avenue	Lemoore Avenue

<sup>a</sup> Bikeway will likely not be continuous because of the train tracks parallel to and just south of Monaco Drive/Geneva Drive.

Figure 6.5.1 | Recommended Lemoore bikeway network



## Pedestrian improvements

The City of Lemoore has not conducted a comprehensive pedestrian planning effort (such as a pedestrian master plan, active transportation program or safe routes to school plan) to identify pedestrian needs and formulate recommendations to address those needs. The Circulation Element of the City's 2030 General Plan, adopted in 2008, does mention a few specific pedestrian-oriented or streetscaping improvements:

- Contiguous 6- to 10-foot sidewalks on Lemoore Avenue, with trees in landscape strips or tree wells.
- Pedestrian bridge over Highway 198 at Vine Street (see screenshot below of the Vine Street dead-end at the highway).



- Urban/rural edge tree plantings along stretches of 19<sup>th</sup> Avenue, Bellehaven Drive, Idaho Avenue, Iona Avenue, Industry Way, Jackson Avenue, Marsh Drive, 18<sup>th</sup> Avenue, East D Street and the Lemoore Canal.
- Landscaped medians along Cedar Lane (see screenshot below) and Semas Drive and portions of Hanford Armona Road, Fox Street and Bush Street.



In general, the most useful improvements for pedestrians are: (i) continuous sidewalks on arterials and collectors that provide walking access to schools and other key destinations and (ii) safer crossings along these streets and roads. In terms of sidewalks, the City should consider prioritizing the filling in of any gaps in the downtown and along the following thoroughfares:

### North-south

- 19<sup>th</sup> Avenue north of Highway 198.
- Liberty Drive.
- Vine Street north of Highway 198.
- Fox Street.
- Follett Street.
- Lemoore Avenue between Meadow Lane Elementary School and Lemoore High School.
- Daphne Lane.

### East-west

- Hanford Armona Road.
- Cinnamon Drive.
- D Street.
- Bush Street east of 19 ½ Avenue.
- Cedar Lane.
- Silverado Avenue.

In terms of street crossings, the City should consider installing high-visibility crosswalks, curb bulb-outs, pedestrian islands, flashing beacons and other pedestrian-safety-oriented improvements at the intersections of arterials and collectors, particularly those near schools. Potential locations include:

- 19<sup>th</sup> Avenue at Cinnamon Drive, D Street, Bush Street, Cedar Lane and Silverado Avenue.
- Lemoore Avenue at Hanford Armona Road, Cinnamon Drive, D Street, Bush Street and the planned extension of Cedar Lane.
- Cinnamon Drive also at Liberty Drive, Fox Street, Follett Street, Daphne Lane and Hanford Armona Road.
- D Street also at Fox Street, Follett Street and Bush Street.
- Bush Street also at Vine Street, Fox Street and Follett Street.
- Cedar Lane at Vine Street.







# Proposed improvements

## 6.6 | Unincorporated Kings County

### Countywide bikeway network

While the County of Kings has not developed its own bicycle master plan, a bikeway network for the unincorporated areas was previously developed as part of the Kings County Regional Bicycle Plan (2011). That network was later reflected, with a few differences, in the Regional Transportation Plan (2014). The bikeway network shown here for the unincorporated county refines the 2011 and 2014 networks slightly, primarily by reconciling the differences between them.



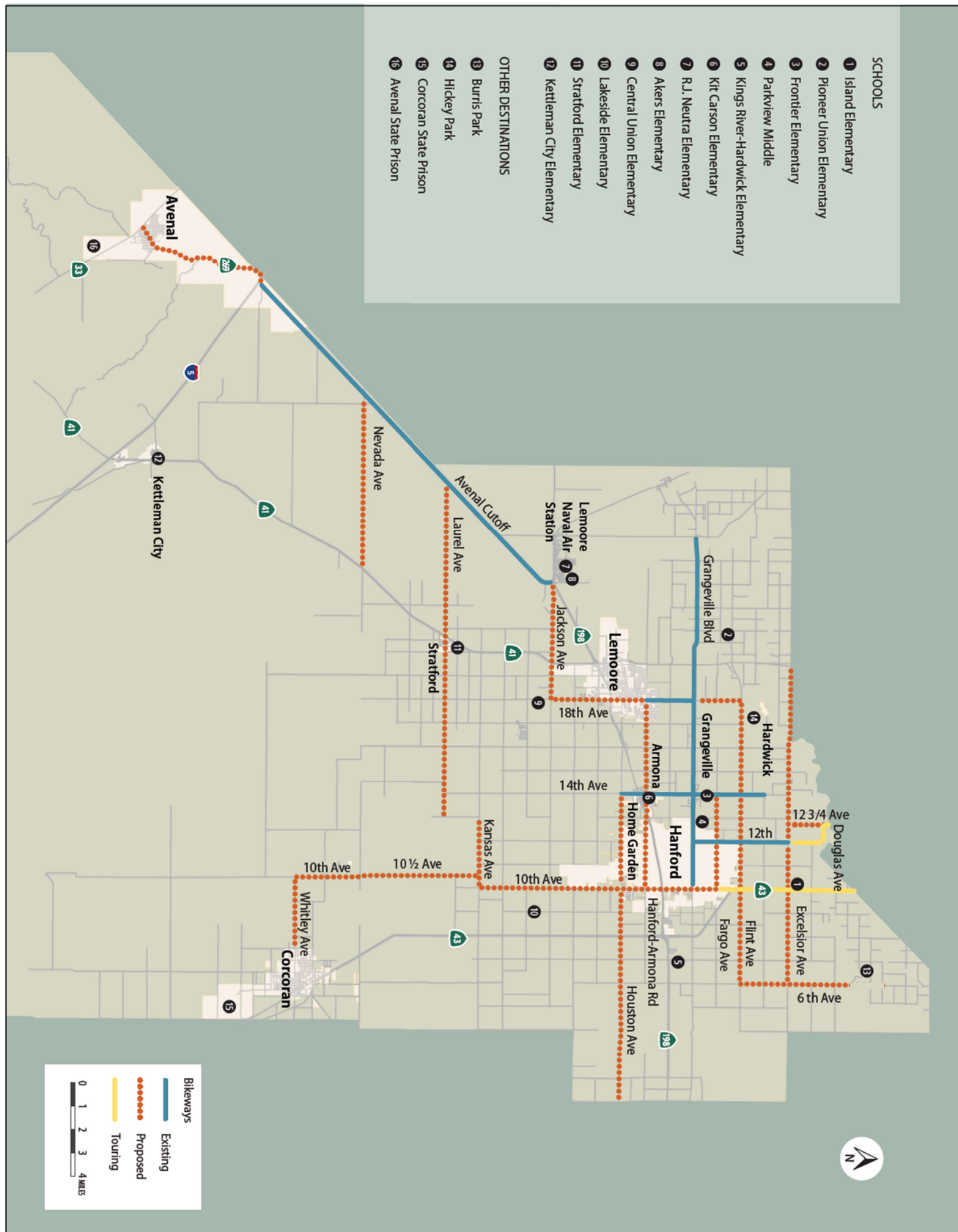
The network is shown on the map on the next page and following the map is a table that lists the proposed bikeway segments, organized by north-south and east-west roadways. The street length of the network is approximately 173 miles (including on state routes, which are owned, administered and operated by Caltrans).

The 2011 and 2014 plans classify all the bikeways in the unincorporated county as Class III (bike routes), with a few exceptions: 18th Avenue, which is classified as Class II (bike lanes); several roads in the northern part of the county, between Hanford and the Fresno county line, which are classified as “touring” bikeways (see the box on this page for the definition of touring bikeways); and a conceptual

cross-county multi-use path along the Union Pacific Railroad (see the footnote for Table 6.6.1).

KCAG’s Cross County Path Plan (2006) envisions a pedestrian and bicycle path extending from West Hills Community College, on the western edge of Lemoore, to State Highway 43, east of Hanford, a distance of approximately 13 miles. Within the urbanized portions of Lemoore, Armona and Hanford, the path would generally follow surface streets in the form of bike lanes and marked bike routes; within the more rural areas, the path would follow the Union Pacific Railroad right-of-way in the form of a paved multi-use path. Similarly, the County has identified the Union Pacific Railroad right-of-way as a viable option for bicycle and pedestrian use.

Figure 6.6.1 | Recommended bikeway network for Unincorporated Kings County



**Table 6.6.1 | Proposed bikeways in unincorporated Kings County**

<i>Street / road</i>	<i>From</i>	<i>To</i>
<b><i>Proposed, north-south</i></b>		
6 <sup>th</sup> Avenue	Burris Park Dr.	Flint Ave.
10 <sup>th</sup> Avenue	Houston Ave.	Kansas Ave.
10 <sup>th</sup> Avenue	Nevada Ave.	Whitley Ave.
10 1/2 Avenue	Kansas Ave.	Nevada Ave.
12 3/4 Avenue	Fresno County line	Excelsior Ave.
18 <sup>th</sup> Avenue	Flint Ave.	Grangeville Blvd.
18 <sup>th</sup> Avenue	Lemoore city limit	Jackson Ave.
Highway 198	Fresno County line	Hanford city limit
Union Pacific Railroad <sup>a</sup>	Fresno County line	Tulare county line
<b><i>Proposed, east-west</i></b>		
Excelsior Avenue	Hwy. 41	6 <sup>th</sup> Ave.
Fargo Avenue	14 <sup>th</sup> Ave.	Hanford city limit
Flint Avenue	18 <sup>th</sup> Ave.	6 <sup>th</sup> Ave.
Houston Avenue	14 <sup>th</sup> Ave.	Tulare county line
Jackson Avenue	Avenal Cutoff Rd.	18 <sup>th</sup> Ave.
Kansas Avenue	13 <sup>th</sup> Ave.	10 <sup>th</sup> Ave.
Laurel Avenue	Avenal Cutoff Rd.	13 <sup>th</sup> Ave.
Nevada Avenue	Avenal Cutoff Rd.	Hwy. 41
Whitley Avenue	10 <sup>th</sup> Ave.	Corcoran city limit

<sup>a</sup> This is a proposed cross-county multi-use path. The distance provided includes segments running through the cities of Lemoore and Hanford. According to KCAG's Cross County Path Plan (2006), the facility would generally follow surface streets in the form of bike lanes and marked bike routes within the urbanized portions of Lemoore, Armona and Hanford; in the more rural areas, the facility would follow the Union Pacific Railroad right-of-way in the form of a paved multi-use path.

## Pedestrian improvements

While the County has not developed a pedestrian master plan, it has conducted a number of planning efforts that identified pedestrian needs and developed recommendations to address those needs. The recommendations here reflect the most recent of those efforts, namely the 2035 Kings County General Plan; community-specific plans developed for the main unincorporated communities; the County's Americans with Disabilities Act Transition Plan; and State Route 41 Corridor Smart Growth Improvement Plan.

Below are the main pedestrian improvements to be considered in each of the largest unincorporated communities:

### Armona

- Continuous sidewalks along the major corridors, particularly 14<sup>th</sup> Avenue and Front Street.
- New crosswalks and pedestrian crossing signs along busy roads, particularly along 14<sup>th</sup> Avenue north of Highway 198 and at intersections near schools; also, re-striping of existing crosswalks.
- Pedestrian crossings at the railroad right-of-way to link Ambrose and C Streets or Railroad Avenue and D Street. Currently, dirt paths are used by children living north of the railroad tracks to reach the elementary and middle

schools and the park (see screenshot below of D Street at the railroad right-of-way).



- Pedestrian pathways in new residential developments east of 14<sup>th</sup> Avenue and north of Front Street to connect to the downtown commercial core and mixed-use developments in the North Expansion Area.
- Multi-use pathway extending from Front Street to job centers and higher education/vocational training facilities in west Hanford (to be developed in coordination with the City of Hanford).

### Home Garden

- Sidewalks along the major roads.
- Pedestrian crosswalks along the major roads to reduce driver and pedestrian uncertainty at intersections.
- Pedestrian and bicycle pathways in new commercial and residential development areas.
- Pedestrian-friendly, traffic-calming street design for the intersection of 10<sup>th</sup> and Home Avenues (see screenshot below).



### Kettleman City

- Sidewalks along the major roads in the residential area.
- Multi-use path extending south from 9<sup>th</sup> Street to link the residential community and the highway commercial area, including pedestrian/bicycle access across the aqueduct (see screenshot below of the southern end of 9<sup>th</sup> Street).



### Stratford

- Sidewalks along the major roads.
- Pedestrian and bicycle access along 20 ½ Avenue south of 6<sup>th</sup> Street, including a pathway in the open space buffer along 20 ½ Avenue.

More specifically, Section B of the County's Americans with Disabilities Act Transition Plan recommends sidewalk improvements at almost 200 midblock segments, curb ramps at 200 locations and pedestrian signals at seven intersections. Improvements were assigned priority ratings of 1 through 4, with greater priority given to pedestrian routes that serve government buildings and facilities (including schools, parks and transit stops) and downtowns, and with consideration given to population density and concentrations of seniors. The plan lists 23 priority 1 sidewalk improvement projects. The majority are in the City of Hanford, in the Kings County Government Center area, while eight of the projects are in central Stratford. The plan also lists 33 priority 1 or 2 locations for curb ramp improvements. Almost all these locations are, again, in the Kings County Government Center area and in central Stratford. Lastly, of the seven recommended pedestrian signal improvement projects, six are in Armona.



# 7 | Strategic implementation

## 7.1 | Priority projects

Chapters 6.2 through 6.6 list a large number of proposed bicycling and pedestrian improvements for each of the four cities in the county and for the county's unincorporated areas. However, those chapters do not give an idea of which improvements are most important for each municipality. While it is important to document a community's needs comprehensively, each of those chapters represents more of a wish list than an actionable plan, given the limited resources available to implement bicycle and pedestrian projects.

From among the large number and broad range of bicycling and pedestrian improvements outlined previously, this chapter aims to identify the more important ones for each jurisdiction. There are two related purposes for identifying these higher-priority projects: (i) to guide the use of KCAG's and the member agencies' limited funds and staff resources for bicycling and pedestrian projects; and (ii) to provide the lists of projects by jurisdiction that were included in the Active Transportation chapter of the 2018 RTP update.

The higher-priority bikeways and pedestrian projects for each jurisdiction were identified as follows:

- **Avenal:** These are the "Phase 1" projects identified in Chapter 5 of the Avenal Active Transportation and Safe Routes to School Plan (see Tables 5.3 and 5.8 of that plan). They are listed in tables 7.3.1 and 7.3.2 of this chapter.
- **Corcoran:** These are the "planned" bikeways in Chapter 3 of the Corcoran Safe Routes to School Plan (see Figure 3-5 of that plan); the "Priority 1" sidewalks in the same chapter (see Figures 3-2, 3-3 and 3-4); and street-crossing enhancements at the intersections of Dairy Avenue and of Letts Avenue with other "major school routes" (see Figure 3-1). They are listed in tables 7.4.1, 7.4.2 and 7.4.3 of this chapter.

- **Hanford:** These are the proposed bikeways under the "2016 Initial Stage Bikeway Plan" in section 3.5.4 of the Hanford Pedestrian and Bicycle Master Plan (see Figure 3-5 of that plan); and improvements along the key pedestrian routes identified in section 4.5.2 of the same plan (see Figure 4-2). They are listed in tables 7.5.1 and 7.5.2 of this chapter.
- **Lemoore:** These are the planned bikeways along arterials and collectors from the City's General Plan and the 2014 Kings County Regional Transportation Plan; and pedestrian improvements such as continuous sidewalks and safer crossings along arterials and collectors that provide access to schools and other key destinations. They are listed in tables 7.6.1 and 7.6.2 of this chapter.
- **Unincorporated Kings County:** These are the bikeways on the Kings County project list in the 2014 Kings County Regional Transportation Plan (see Figure 8-1 of that plan); and pedestrian improvements identified in Community Plans developed for the main unincorporated communities. They are listed in tables 7.7.1 and 7.7.2 of this chapter.

## 7.2 | ATP-competitive projects

As mentioned previously in this plan, in California the largest source of grant funds for walking and bicycling projects is the California Transportation Commission's (CTC) Active Transportation Program (ATP). Most recently, the state has allocated \$440 million to the program for the four fiscal years from 2019-20 through 2022-23, or approximately \$100 million annually. The ATP is a highly competitive funding source, with cities, counties and other eligible agencies around the state submitting many dozens of unsuccessful project applications each funding cycle.

ATP applications are lengthy, complex and involved, requiring a significant amount of effort

and resources on the part of applicants. At the start of each funding cycle, the CTC issues guidance for public agencies considering whether or not to apply for ATP funding. Most critically, this guidance includes detailed “scoring rubrics,” which serve as the scoring guide for evaluators of ATP applications. The rubrics are not a definitive scoring formula, since evaluators may take other factors into consideration, such as the overall quality of the application, the project context, and issues concerning project deliverability. Nevertheless, the rubrics provide clear direction as to the types of pedestrian and bicycling projects that are likely to compete well for ATP funding—and, conversely, those that are likely to be unsuccessful.

Based on the scoring rubrics for project applications submitted in 2018 as part of the most recent ATP funding cycles, below is an overview of the attributes and characteristics that are likely to make for competitive projects under the next ATP cycle.

### Main characteristics of ATP-competitive projects

The projects that are most competitive for ATP funding tend to share the following four characteristics:

- Improve walking and biking **connections** between key destinations, **especially schools** (see item 1 below for more information).
- Address **traffic safety** issues at a location with a history of pedestrian and bicycle collisions (item 2).
- Were developed through a comprehensive **planning process** and represent one of the community’s highest priorities (item 3).
- Are located in or directly benefit a severely **disadvantaged community** (item 4).

#### 1. Project need

The most important evaluation criterion for ATP applications is whether the project is likely to increase walking and bicycling, and have certain other positive benefits, relative to existing conditions. Projects likely to compete well under this criterion possess the following potential attributes:

- Connect key destinations such as schools, transit facilities, stores, community centers and employment centers.
- Close a gap, remove a barrier, improve existing routes or create new routes.
- Serve students traveling to and from school.
- Target populations with limited transportation options.
- Help meaningfully address local public health concerns (such as physical inactivity or obesity, for example).

#### 2. Traffic safety

The second-most important evaluation criterion is whether the project is likely to increase the traffic safety of pedestrians or cyclists. Projects likely to compete well under this criterion would:

- Target a priority location, or locations, with a history of collisions resulting in pedestrian and bicyclist fatalities and injuries.
- Incorporate safety improvements and countermeasures that address the safety issues and collision details specific to the project location.

#### 3. Public participation

Another important consideration is the extent to which the public participated in formulating the project. Competitive projects under this criterion:

- Were defined, formulated and developed through a comprehensive technical planning process (appropriate for the complexity and magnitude of the project).
- Were developed through a planning process that effectively engaged a range of stakeholders and a cross-section of the broader public.
- Reflect one of the community’s highest active transportation priorities.

#### 4. Benefit to disadvantaged communities

The ATP places a great deal of emphasis in benefitting disadvantaged or vulnerable populations. Successful ATP applications feature projects that:

- Are located in areas that qualify as severely disadvantaged communities. Generally speaking, qualifying areas meet certain criteria related to

median household income, exposure to environmental pollution or public school students eligible for free or reduced-price school meals. More information about these criteria is provided in Chapter 3 of this plan, “Equity and Public Health.”

- Provide direct active transportation benefits to residents of disadvantaged communities in terms of closing gaps, creating connections or addressing network deficiencies.
- Were requested, defined or supported by the residents of a disadvantaged community.

#### Miscellaneous considerations

- Does the project satisfy the purpose and needs of a full range of users and stakeholders?
- Is the project appropriate to the local context and in harmony with the community?
- Does the project incorporate best practices or innovative elements, or were they considered in the development of the project?
- Will the project have added lasting value to the community?

Based on the above considerations, below are the types of projects that are likely to be competitive for ATP funding in each of the KCAG member agencies.

#### Avenal

- Bikeways in Avenal’s urbanized area.
- Safer crossings and traffic calming around schools.
- Comprehensive, “transformational” projects to make San Joaquin Street or Skyline Boulevard more pedestrian- and bicycle-friendly.

#### Corcoran

- Previously proposed bikeways in the central area.
- Comprehensive, “transformational” projects to make Dairy Avenue or Letts Avenue more pedestrian-friendly.
- Sidewalks or street-crossing enhancements around any of the five public schools.

#### Hanford

- Bikeways in parts of Hanford that qualify as disadvantaged communities; these are areas

generally east of 12<sup>th</sup> Avenue and south of Grangeville Boulevard.

- Sidewalks and safer crossings that are near schools and along arterials in parts of Hanford that qualify as disadvantaged communities. These arterials include Douty, Irwin, 10<sup>th</sup> and 9 ¾ Avenues south of Grangeville Boulevard; Grangeville Boulevard between 11<sup>th</sup> and 10<sup>th</sup> Avenues; Lacey Boulevard east of 12<sup>th</sup> Avenue; and Hanford Armona Road.

#### Lemoore

- Bikeways in parts of Lemoore that qualify as disadvantaged communities; these are areas generally between 19<sup>th</sup> and 17<sup>th</sup> Avenues, and south of Cinnamon Drive/18<sup>th</sup> Avenue/Hanford Armona Road and north of Highway 198.
- Sidewalks and safer crossings that are near schools and along arterials in parts of Lemoore that qualify as disadvantaged communities. These arterials include 18<sup>th</sup> and 19<sup>th</sup> Avenues north of Highway 198; Bust Street east of 19<sup>th</sup> Avenue; D Street; Cinnamon Drive; and Hanford Armona Road east of 18<sup>th</sup> Avenue.

#### Unincorporated Kings County

- Bikeways within Armona, Grangeville, Kettleman City and Stratford. (The one sizable unincorporated community that does not qualify as a disadvantaged community is Hardwick.)
- Sidewalks, paths and crossing enhancements called out in previous County plans. These include projects along 14<sup>th</sup> Avenue and Front Street in Armona; along General Petroleum Avenue, 9<sup>th</sup> Street and Highway 41 in Kettleman City; and along Main, Railroad, Cross and Empire Streets in Stratford.

## 7.3 | Avenal

*C = Connection to key destinations, especially schools; S = Traffic safety issue (history of collisions); P = Developed through a planning process; D = Located in or benefitting a disadvantaged community*

**Table 7.3.1 | Priority bikeways**

<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Description</i>	<i>Length (mi.)</i>	<i>Est. cost</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
First Avenue	Reef-Sunset Middle School	Laneva Blvd. (SR 33)	Continuous bike lanes (Class II)	0.8	\$165,000	●		●	●
Seventh Avenue	Mariposa St.	Laneva Blvd. (SR 33)	Continuous bike lanes (Class II)	1.0	\$225,000	●	●	●	●
Hanford Avenue	Fresno St.	Tamarack Elem. School	New bike route (Class III)	0.4	\$8,000	●		●	●
Monterey Street	Seventh Ave.	Park Ave.	New bike route (Class III)	0.2	\$5,000	●	●	●	●
Big Tar Canyon Road	Seventh Ave.	Sports Complex	Paved multi-use path	1.0	\$2,300,000			●	●
San Joaquin Street	Skyline Blvd.	Laneva Blvd. (SR 33)	Separated bikeway (Class IV)	1.3	\$450,000	●		●	●
Hydril Road	Skyline Blvd.	Just west of Ave. 36	Paved multi-use path	0.6	\$1,450,000			●	●

**Table 7.3.2 | Priority pedestrian projects: High-visibility crosswalks and other street-crossing enhancements**

<i>Location</i>	<i>Est. cost</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
Along First Avenue at ten locations: Sonoma, Santa Clara, San Mateo, Mariposa, Stanislaus, Merced, Madera, Fresno, Kings and Tulare Streets	\$204,000	●		●	●
Along Hanford Avenue at four locations: Shasta, Fremont and Kern Streets, and Tamarack Elem. School	\$82,000	●		●	●
Along Seventh Avenue at five locations: Mariposa, Monterey, San Joaquin, Stanislaus and Merced Streets	\$54,000	●	●	●	●
At San Joaquin Street and Park Avenue / Merced Street	\$173,000	●		●	●
At Mariposa Street and Fifth Avenue	\$12,000	●		●	●



## 7.4 | Corcoran

*C = Connection to key destinations, especially schools; S = Traffic safety issue (history of collisions); P = Developed through a planning process; D = Located in or benefitting a disadvantaged community*

**Table 7.4.1 | Priority bikeways**

<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Description</i>	<i>Length (mi.)</i>	<i>Est. cost</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
Orange Avenue	Seventh Ave.	Otis Ave.	Bike lanes (Class II) or bike route (Class III)	1.4	\$21,000			●	●
North Avenue	Seventh Ave.	Otis Ave.	Bike lanes (Class II) or bike route (Class III)	1.5	\$22,500	●	●	●	●
Patterson Avenue	6 1/2 Ave.	Otis Ave.	Bike lanes (Class II) or bike route (Class III)	1.2	\$18,000	●	●	●	●
Whitley Avenue	West of Doran Ave.	East of Pickerell Ave.	Bike lanes (Class II) or bike route (Class III)	1.9	\$28,500	●	●	●	●
Sherman Avenue	Seventh Ave.	Otis Ave.	Bike lanes (Class II) or bike route (Class III)	2.0	\$30,000	●	●	●	●
Oregon Avenue	6 1/2 Ave.	King Ave.	Bike lanes (Class II) or bike route (Class III)	1.3	\$19,500	●		●	●
6 1/2 Avenue	Orange Ave.	Oregon Ave.	Bike lanes (Class II) or bike route (Class III)	1.5	\$22,500		●	●	●
Dairy Avenue	Niles Ave.	Pueblo Ave.	Bike lanes (Class II) or bike route (Class III)	2.5	\$37,500	●	●	●	●
Letts Avenue	North Ave.	Oregon Ave.	Bike lanes (Class II) or bike route (Class III)	1.3	\$19,500	●	●	●	●
Otis Avenue	Orange Ave.	Patterson Ave.	Bike lanes (Class II) or bike route (Class III)	0.6	\$9,000			●	●
Chittenden Avenue	Patterson Ave.	Sherman Ave.	Bike lanes (Class II) or bike route (Class III)	0.5	\$7,500			●	●
Flory Avenue	Whitley Ave.	Bainum Ave.	Bike lanes (Class II) or bike route (Class III)	0.5	\$7,500			●	●
King Avenue	Bainum Ave.	Corcoran State Prison	Bike lanes (Class II) or bike route (Class III)	1.8	\$27,000			●	●

**Table 7.4.2 | Priority pedestrian projects: Continuous sidewalks**

<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Description</i>	<i>Length of gaps (ft.)</i>	<i>Est. cost</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
Dairy Avenue	Orange Ave.	Oregon Ave.	Multiple gaps, mostly north of Whitley and south of Bainum	4,500	\$450,000	●	●	●	●
Josephine Avenue	North Ave.	Preston Way	Multiple gaps, mostly south of Patterson	1,100	\$110,000	●	●	●	●
Letts Avenue	Orange Ave.	Oregon Ave.	Multiple gaps, on both sides	4,100	\$410,000	●	●	●	●
Otis Avenue	Cardoza Ave.	North of Patterson Ave.	Gap on the west side	500	\$50,000			●	●
Orange Avenue	Dairy Ave.	Letts Ave.	Gap on the south side	1,300	\$130,000		●	●	●
North Avenue	6 1/2 Ave.	Otis Ave.	Multiple gaps, on both sides	4,500	\$450,000	●		●	●
Patterson Avenue	Soto Ave.	Otis Ave.	Multiple gaps, on both sides	2,600	\$260,000	●		●	●
Whitley Avenue	Burnham Smith Park	Dairy Ave.	Two gaps	500	\$50,000	●	●	●	●
Sherman Avenue	6 1/2 Ave.	Kings Ave.	Multiple gaps, on both sides	4,500	\$450,000	●	●	●	●
Bainum Avenue	Dairy Ave.	Norboe Ave.	Multiple gaps, mostly on the north side	2,000	\$200,000	●	●	●	●
Oregon Avenue	Dairy Ave.	Mark Twain Elem. Sch.	Multiple gaps, mostly on the south side	2,000	\$200,000	●	●	●	●

**Table 7.4.3 | Priority pedestrian projects: Street-crossing enhancements**

<i>Location</i>	<i>Est. cost</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
Along Dairy Avenue at 10 – 12 locations between Gable and Oregon Avenues	\$330,000	●	●	●	●
Along Letts Avenue at 12 – 14 locations between Orange and Oregon Avenues	\$390,000	●	●	●	●

## 7.5 | Hanford

*C = Connection to key destinations, especially schools; S = Traffic safety issue (history of collisions); P = Developed through a planning process; D = Located in or benefitting a disadvantaged community*

**Table 7.5.1 | Priority bikeways**

Street / road	From	To	Description	Length (mi.)	Est. cost	C	S	P	D
<b>North – south routes</b>									
13 <sup>th</sup> Avenue	Fargo Ave.	Houston Ave.	Bike route (Class III)	4.0	\$40,000			●	●
Centennial Drive	Berkshire Ln.	12 <sup>th</sup> Ave. / Mall Dr.	Bike lanes (Class II) or bike route (Class III)	1.9	\$28,500	●		●	
12 <sup>th</sup> Avenue	Fargo Ave.	Grangeville Blvd.	Bike lanes (Class II)	1.0	\$20,000			●	
12 <sup>th</sup> Avenue	Hume Ave.	Idaho Ave.	Bike route (Class III)	2.5	\$25,000			●	
Fitzgerald Lane	Fargo Ave.	Grangeville Blvd.	Bike route (Class III)	1.0	\$10,000	●		●	
Kings County Drive / Mall Drive	12 <sup>th</sup> Ave. / Liberty St.	12 <sup>th</sup> Ave. / Centennial Dr.	Bike route (Class III)	1.0	\$10,000	●		●	●
University Avenue	Grangeville Blvd.	Greenfield Ave.	Bike route (Class III)	0.5	\$5,000			●	
Campus Drive	Greenfield Ave.	Glendale Ave.	Bike route (Class III)	1.1	\$11,000	●		●	●
11 1/2 Avenue / Echo Lane	Davis St.	Hume Ave.	Bike route (Class III)	1.0	\$10,000	●		●	●
Glacier Way	Flint Ave.	Cortner St.	Bike route (Class III)	1.4	\$14,000			●	
11 <sup>th</sup> Avenue	Flint Ave.	Grangeville Blvd.	Bike lanes (Class II) or bike route (Class III)	1.0	\$15,000	●		●	
11 <sup>th</sup> Avenue	Seventh St.	Jackson Ave.	Bike route (Class III)	4.9	\$49,000	●	●	●	●
Williams Street / Jones Street	Davis St.	Hume Ave.	Bike route (Class III)	0.9	\$9,000			●	●
Redington Street	Grangeville Blvd.	Lacey Blvd.	Bike lanes (Class II)	1.0	\$20,000	●	●	●	●
10 1/2 Avenue	Hanford Armona Rd.	Houston Ave.	Bike route (Class III)	1.0	\$10,000		●	●	●
Mission Dr.	Flint Ave.	10th Ave.	Bike route (Class III)	0.6	\$6,000			●	
10 <sup>th</sup> Avenue	Third St.	Jackson Ave.	Bike route (Class III)	4.8	\$48,000			●	●
Neill Way	Fargo Ave.	Leland Way	Bike route (Class III)	0.5	\$5,000			●	
9 1/4 Avenue	Leland Way	Lacey Blvd.	Bike route (Class III)	1.5	\$15,000	●		●	●
9 <sup>th</sup> Avenue	Lacey Blvd.	Idaho Ave.	Bike route (Class III)	4.0	\$40,000			●	●

<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Description</i>	<i>Length (mi.)</i>	<i>Est. cost</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
<b>East – west routes</b>									
Flint Avenue	12 <sup>th</sup> Avenue	10 <sup>th</sup> Avenue	Bike route (Class III)	2.0	\$20,000			●	
Pepper Drive / Encore Drive	Glacier Way	Fargo Ave.	Bike route (Class III)	2.0	\$20,000			●	
Fargo Avenue	13 <sup>th</sup> Ave.	Centennial Dr.	Bike route (Class III)	0.5	\$5,000			●	
Cortner Street	Glacier Way	Douty St.	Bike route (Class III)	0.9	\$9,000	●	●	●	
Leland Way	Douty St.	9 1/4 Ave.	Bike route (Class III)	1.2	\$12,000	●		●	●
Mustang Drive / Berkshire Lane	13 <sup>th</sup> Ave.	Centennial Dr.	Bike route (Class III)	0.6	\$6,000			●	
Grangeville Boulevard	13 <sup>th</sup> Ave.	Centennial Dr.	Bike route (Class III)	0.5	\$5,000			●	
Grangeville Boulevard	9 <sup>th</sup> Ave.	8 1/2 Ave.	Bike route (Class III)	0.5	\$5,000			●	●
Liberty Street	Centennial Dr.	12 <sup>th</sup> Ave.	Bike route (Class III)	0.3	\$3,000	●		●	
Ivy Street	11 <sup>th</sup> Ave.	10 <sup>th</sup> Ave.	Bike route (Class III)	1.0	\$10,000		●	●	●
Lacey Boulevard	Centennial Dr.	Irwin St.	Bike route (Class III)	1.8	\$18,000	●	●	●	●
Lacey Boulevard	10 <sup>th</sup> Ave.	Hwy. 43	Bike route (Class III)	2.0	\$20,000	●	●	●	●
7 <sup>th</sup> Street	Mall Dr.	11 <sup>th</sup> Ave.	Bike lanes (Class II)	0.8	\$16,000	●		●	●
6 <sup>th</sup> Street	11 <sup>th</sup> Ave.	10 <sup>th</sup> Ave.	Bike lanes (Class II)	1.0	\$20,000	●	●	●	●
3 <sup>rd</sup> Street	10 <sup>th</sup> Ave.	9 <sup>th</sup> Ave.	Bike route (Class III)	1.0	\$10,000			●	●
Glendale Avenue	12 1/2 Ave.	Campus Dr.	Bike lanes (Class II)	1.1	\$22,000		●	●	
Davis Street	11 1/2 Ave.	11 <sup>th</sup> Ave.	Bike route (Class III)	0.5	\$5,000	●	●	●	●
Hanford Armona Road	10 <sup>th</sup> Ave.	Hanford Municipal Airport	Bike route (Class III)	0.3	\$3,000			●	●
Hume Avenue	12 <sup>th</sup> Ave.	Jones St.	Bike route (Class III)	1.1	\$11,000			●	●
Houston Avenue	13 <sup>th</sup> Ave.	9 <sup>th</sup> Ave.	Bike route (Class III)	4.0	\$40,000			●	●
Iona Avenue	12 <sup>th</sup> Ave.	9 <sup>th</sup> Ave.	Bike route (Class III)	3.0	\$30,000			●	●
Idaho Avenue	12 <sup>th</sup> Ave.	9 <sup>th</sup> Ave.	Bike route (Class III)	3.0	\$30,000			●	●
Jackson Avenue.	11 <sup>th</sup> Ave.	10 <sup>th</sup> Ave.	Bike route (Class III)	1.0	\$10,000			●	●



Table 7.5.2 | Priority pedestrian routes

Street / road	From	To	Improvement opportunities	Length (mi.)	C	S	P	D
<b>North – south routes</b>								
Centennial Drive	Fargo Ave.	Lacey Blvd.	No specific improvements suggested	2.1	●		●	
12 <sup>th</sup> Avenue	Greenfield Ave.	Hanford Armona Rd.	No specific improvements suggested	1.6	●	●	●	
Phillips Street	Second St.	Downtown	Mural and improved lighting at the Hwy. 198 underpass; ADA-compliant curb ramps; sidewalk between Fourth St. and the alley north of it; crosswalks, including at Third St.	0.5	●		●	●
Irwin Street	Grangeville Blvd.	Downtown	Crosswalks; ADA-compliant curb ramps.	1.3	●	●	●	●
Douty Street	Fargo Ave.	Hanford Armona Rd.	Crosswalks; ADA-compliant curb ramps; crossing improvements at Douty / Irwin Streets	3.1	●	●	●	●
10 <sup>th</sup> Avenue	Highway 43	Hanford Armona Rd.	ADA-compliant curb ramps.	3.7	●	●	●	●
9 ¼ Avenue	Leland Way	Lacey Blvd.	Crosswalks at controlled intersections; sidewalk improvements; additional street trees.	1.5	●		●	●
<b>East – west routes</b>								
Fargo Avenue	Centennial Dr.	10 <sup>th</sup> Ave.	No specific improvements suggested	2.5			●	
Leland Way	10 <sup>th</sup> Ave.	9 <sup>th</sup> Ave.	Crosswalks at busy intersections; ADA-compliant curb ramps; sidewalk widening where poles obstruct the path.	0.7	●	●	●	
Grangeville Boulevard	11 <sup>th</sup> Ave.	10 <sup>th</sup> Ave.	Upgraded curb ramps; street trees.	1.0	●	●	●	●
Greenfield Avenue	Centennial Dr.	Lacey Blvd.	Crosswalks; sidewalk improvements; curb ramps; pedestrian amenities.	1.8	●	●	●	
Elm Street	Greenfield Ave.	Wilson Jr. H.S.	No specific improvements suggested	0.1	●	●	●	●
West Lacey Boulevard	13 <sup>th</sup> Ave.	Downtown	No specific improvements suggested	2.4	●	●	●	●
East Lacey Boulevard	Downtown	Highway 43	Sidewalks (possibly buffered by a landscaped strip with trees) and ADA ramps as the street is improved.	2.0	●	●	●	●
Second Street	Phillips St.	Douty St.		0.3			●	●
Hanford Armona Road	13 <sup>th</sup> Ave.	Hanford Municipal Airport	Shade trees; improved path around poles in the sidewalk; crosswalks at Harris St. and other high-traffic areas.	3.7		●	●	●

## 7.6 | Lemoore

*C = Connection to key destinations, especially schools; S = Traffic safety issue (history of collisions); P = Developed through a planning process; D = Located in or benefitting a disadvantaged community*

**Table 7.6.1 | Priority bikeways**

<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Description</i>	<i>Length (mi.)</i>	<i>Est. cost</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
<b>North – south routes</b>									
19 <sup>th</sup> Avenue	D St.	Silverado Dr.	Bike lanes (Class II)	0.8	\$16,000	●	●	●	●
Hill Street (east side)	E St.	Bush St.	Bike lanes (Class II)	0.3	\$6,000	●		●	●
Follett Street	Cinnamon Dr.	Bush St.	Bike lanes (Class II) or bike route (Class III)	0.6	\$9,000	●	●	●	●
<b>East – west routes</b>									
Cinnamon Dr. (south side)	Hill St.	Hanford Armona Rd.	Bike lanes (Class II)	1.5	\$30,000	●	●	●	●
Bush Street (south side)	College Ave.	Hwy. 41	Bike path (Class I)	0.6	\$200,000		●	●	
Bush Street	Lemoore Ave.	Bush Pl. / Barcelona Dr.	Bike route (Class III)	0.6	\$6,000	●		●	●
Bush Street (east side)	Bush Pl. / Barcelona Dr.	East D St.	Bike lanes (Class II)	0.1	\$2,000			●	●
Cedar Lane (north side)	19 ½ Ave.	Lum Dr.	Bike lanes (Class II)	0.7	\$14,000	●		●	●
Silverado Dr. (south side)	19 ½ Ave.	19 <sup>th</sup> Ave.	Bike lanes (Class II)	0.5	\$10,000			●	

Table 7.6.2 | Priority pedestrian routes

<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Length (mi.)</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
<b>North – south routes</b>							
19 <sup>th</sup> Avenue	Hanford Armona Rd.	Silverado Dr. / City Park	0.7	●	●	●	●
Liberty Drive	Hanford Armona Rd.	Cinnamon Dr.	1.0	●			
Vine Street	Bush St.	Cedar Ln.	1.8			●	●
Fox Street	Hanford Armona Rd.	Bush St.	0.1	●	●		●
Eton Avenue / Follett Street	Brentwood Dr.	Bush St.	2.4	●	●		●
Lemoore Avenue	Glendale Ave.	Bush St. / Lemoore H.S.	2.0	●	●	●	●
Daphne Lane (incl. extension)	Heritage Park	San Joaquin Valley R.R.	0.3		●		●
Other north – south streets in the downtown from Olive Street to Lemoore Avenue			N/A	●	●	●	●
<b>East – west routes</b>							
Hanford Armona Road	Apricot Ave.	Cinnamon Dr.	1.9	●	●		●
Cinnamon Drive	19 ½ Ave.	Hanford Armona Rd.	2.5	●	●		●
D Street	W. Bush St.	E. Bush St.	2.2	●	●		●
Bush Street (incl. extension)	19 ½ Ave.	San Joaquin Valley R.R.	2.7	●	●		●
Cedar Lane (incl. extensions)	19 ½ Ave.	Lemoore Ave.	1.5	●			●
Silverado Avenue	19 ½ Ave.	19 <sup>th</sup> Ave. / City Park	0.5				
Other east – west streets in the downtown from E Street to Bush Street			N/A	●	●	●	●

## 7.7 | Unincorporated Kings County

*C = Connection to key destinations, especially schools; S = Traffic safety issue (history of collisions); P = Developed through a planning process; D = Located in or benefitting a disadvantaged community*

**Table 7.7.1 | Priority bikeways**

<i>Street / road</i>	<i>From</i>	<i>To</i>	<i>Description</i>	<i>Length (mi.)</i>	<i>Est. cost</i>	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
<b>North – south routes</b>									
6 <sup>th</sup> Avenue	Burris Park Dr.	Flint Ave.	Class III with stripe	4.7	\$23,500			●	●
10 <sup>th</sup> Avenue	Houston Ave.	Kansas Ave.	Class III with stripe	6.0	\$30,000			●	●
10 <sup>th</sup> Avenue	Nevada Ave.	Whitley Ave.	Class III with stripe	2.8	\$14,000			●	●
10 ½ Avenue	Kansas Ave.	Nevada Ave.	Class III with stripe	5.0	\$25,000			●	●
12 ¾ Avenue	Fresno County line	Excelsior Ave.	Class III with stripe	1.5	\$7,500			●	●
18 <sup>th</sup> Avenue	Lemoore city limit	Jackson Ave.	Class II	1.6	\$16,000			●	●
<b>East – west routes</b>									
Fargo Avenue	14 <sup>th</sup> Ave.	BN Santa Fe RR / Hanford city limit	Class III with stripe	2.5	\$12,500			●	●
Flint Avenue	18 <sup>th</sup> Ave.	6 <sup>th</sup> Ave.	Class III with stripe	12.0	\$60,000			●	●
Jackson Avenue	Avenal Cutoff Rd.	18 <sup>th</sup> Ave.	Class III with stripe	5.0	\$25,000			●	●
Nevada Avenue	Avenal Cutoff Rd.	Hwy. 41	Class III with stripe	7.4	\$37,000			●	●
Whitley Avenue	10 <sup>th</sup> Ave.	7 <sup>th</sup> Ave. / Corcoran city limit	Class III with stripe	3.0	\$15,000			●	●



Table 7.7.2 | Priority pedestrian projects

	<i>C</i>	<i>S</i>	<i>P</i>	<i>D</i>
<b>Armona</b>				
• Sidewalks along 14 <sup>th</sup> Avenue and Front Street	•	•	•	•
• New or restriped crosswalks and crossing signs along 14 <sup>th</sup> Avenue north of Highway 198 and near schools	•		•	•
• Pedestrian crossings across the railroad ROW at Ambrose/C Streets or at Railroad Avenue/D Street	•	•	•	•
• Footpaths in new developments east of 14 <sup>th</sup> Avenue and north of Front Street			•	•
• Cut-throughs from cul-de-sacs in the Armona North subdivision onto Front Street			•	•
• Multi-use path from Front Street to west Hanford			•	•
<b>Home Garden</b>				
• Sidewalks and crosswalks along the major roads	•		•	•
• Multi-use paths in new developments			•	•
• Traffic-calming design for the intersection of 10 <sup>th</sup> /Home Avenues			•	•
<b>Kettleman City</b>				
• Sidewalks along the major roads in the residential area	•		•	•
• Multi-use path south of 9 <sup>th</sup> Street between the residential and highway commercial areas			•	•
<b>Stratford</b>				
• Sidewalks along the major roads	•	•	•	•
• Multi-use path along 20 ½ Avenue south of 6 <sup>th</sup> Street			•	•

# 8 | Potential funding sources

## Overview

In almost every community, the most frequent and formidable challenge to implementing pedestrian and bicycle projects is lack of funding. Striping bike lanes on wide-enough streets and putting up signage is inexpensive, but more impactful active transportation projects often carry big price tags. Reconstructing streets to provide sidewalks with curb and gutter, for example, or acquiring easements to construct trails are complex, time-consuming and costly efforts.

On the next few pages is a list of the most likely federal, state and local sources of funding for pedestrian and bicycle improvements. The Walk and Bike Plan has been prepared in large part to position the KCAG member agencies to compete better for funds under these various sources to implement their priority projects (outlined in the previous chapter). It should be noted that the funding landscape changes frequently, with new funding programs being created and old ones ceasing to exist. While the list provides current information as of fall 2018, KCAG and local-agency staff will need to make an effort to stay up to date on news and announcements related to funding programs.

Lastly, this chapter describes a relevant mechanism for providing pedestrian and bicycle projects in Kings County: the “complete streets” approach to transportation. Complete streets are those that work better for different forms of transportation—including walking and biking—and for people of all ages and abilities. This is in essence not a funding source but rather a funding strategy.

## Federal sources

### Regional Surface Transportation Program (RSTP)

RSTP funds can be used for construction, rehabilitation, and operational improvements for

highways and bridges. This may include projects that are necessary to accommodate other transportation modes and for bicycle transportation and pedestrian walkways principally for transportation, rather than recreation purposes, and for carrying out non-construction projects related to safe bicycle use. Funds are payable up to 80% of the total project cost. Project selection is made by local jurisdictions from their annual apportionments and programmed through the Federal Transportation Improvement Program (FTIP). RSTP funds that are exchanged can also be used for non-motorized projects. KCAG annually exchanges its RSTP funds apportionment for non-federal dollars and distributes it to the local jurisdictions based on the standard distribution formula used by KCAG with the agreement of our member agencies.

### Congestion Mitigation and Air Quality (CMAQ)

CMAQ program intends to support transportation projects to help meet the requirement of Clear Air Act. Funds are available to regions designated as nonattainment or maintenance areas with regard to the National Ambient Air Quality Standards (NAAQS) Act. Eligible activities include bicycle and pedestrian related projects, such as bicycle and pedestrian facilities construction (paths and supporting facilities) and non-construction projects related to walking and biking safety education. KCAG administers CMAQ funds on a competitive basis and programs CMAQ projects in the Federal Transportation Improvement Program (FTIP).

### Highway Safety Improvement Program (HSIP)

HSIP focuses on roadway safety improvement by funding projects that help reduce traffic fatalities and serious injuries on all public roads. The examples of eligible activities relevant to bicycle and pedestrian include pedestrian hybrid beacons and crossing treatments for active transportation users in school zones. HSIP funds must be used for safety projects consistent with the State’s Strategic

Highway Safety Plan (SHSP). In California, HSIP is administered by Caltrans.

### **Federal Transit Act**

This act provides funds to non-urbanized areas for various transit operating and capital assistance projects. Eligible projects include those that provide access to mass transit facilities or to install racks or other equipment for transporting bicycles on mass transit.

### **Surface Transportation Block Grant (STBGP)**

Under the FAST Act, the long-standing Surface Transportation Program is converted into the Surface Transportation Block Grant Program that promotes flexibility in State and Local transportation decisions to best address their transportation needs. The funding for Transportation Alternative Program (TAP) is set aside from a State's STBGP apportionment. Eligible projects include projects on any public road, bicycle or pedestrian pathway or trail. In California, funds for TAP program are allocated through the Active Transportation Program (ATP).

### **Community Development Block Grants (CDBG)**

The CDBG program provides communities with resources to address a wide range of unique community development needs. This flexible program supports varying types of eligible activity that contribute to the development of viable urban communities, which includes building a suitable living environment and facilitating neighborhood revitalization. Pedestrian related projects that are beneficial to enhance accessibility and improve living environment for the community, such as trails and greenway projects, may be qualified to apply for the CDBG funding. The Department of Housing and Community Development administers the State's CDBG program. Currently, the State's CDBG program is undergoing a redesign process to reflect budgetary shortages, address low expenditure rates and high levels of unspent program income. The draft of the revised Program Guidelines is anticipated by June 30, 2018.

### **Better Utilizing Investments to Leverage Development (BUILD)**

Transportation Discretionary Grants The BUILD transportation grants replace the pre-existing Transportation Investment Generating Economic Recovery (TIGER) grant program. BUILD Transportation grants are for investments in surface transportation infrastructure and are to be awarded on a competitive basis for projects that will have a significant local or regional impact. BUILD funding can support roads, bridges, transit, rail, ports or intermodal transportation. Projects for BUILD will be evaluated based on merit criteria that include safety, economic competitiveness, quality of life, environmental protection, state of good repair, innovation, partnership, and additional non-Federal revenue for future transportation infrastructure investments. The Department of Transportation intends to award a greater share of BUILD Transportation grant funding to projects located in rural areas that align well with the selection criteria than to such projects in urban areas. Bicycle and pedestrian related projects that improve public health and safety and promote regional connectivity may present a suitable fit for the program.

### **Environmental Protection Agency (EPA) Smart Growth Program**

This program aims to help communities improve their development practices and get the type of development they want. Smart Growth converts a range of development and conservation strategies that include the strategy of providing a variety of transportation choices to the communities. Projects that encourage the use of active transportation can help achieve the goal of the Smart Growth Program and may be eligible for this funding opportunity. The Smart Growth Program is housed in the Office of Sustainable Communities.

## **State sources**

### **Active Transportation Program (ATP)**

In 2013, the California Transportation Commission (CTC) consolidated a number of grant programs for pedestrian and bicycle projects into a single funding

source, the Active Transportation Program (ATP). The ATP consolidates existing federal and state transportation programs, including the Transportation Alternative Program, the Bicycle Transportation Account, and the State Safe Routes to School Program. The ATP's authorizing legislation also allows the ATP to receive auction proceeds from the Greenhouse Gas Reduction Fund (GGRF). In addition, with the recent passage of the Road Repair & Accountability Act (SB 1, 2017), an additional \$100 million will be allocated to ATP annually for the next ten years. Fifty percent of ATP funds are distributed on a competitive statewide basis. The most recent Call-for-Projects cycle (Cycle 3, FY 2019-20 and 2020-21) has distributed \$240 million to active transportation projects. Forty percent is allocated to Metropolitan Planning Organizations (MPO) in urban areas with population greater than 200,000, and the remaining ten percent goes to small urban and rural areas with populations of less than 200,000. The program guidelines and budgets are approved by California Transportation Commission (CTC) while the Caltrans Division of Local Assistance administers the ATP funds.

### **Gas Tax**

Funds from the State gas tax are based on the historical apportionments provided to Kings County jurisdictions. The passage of Senate Bill 1, which aims to generate an estimated \$52 billion more money by increasing gasoline tax and imposing new transportation improvement fee to help repair and maintain the state's transportation system for the next decade, allows a significant increase in funding for bicycle and pedestrian improvement programs.

### **State Transportation Improvement Program (STIP)**

STIP funds new construction projects that add capacity to the transportation network. STIP funding is a mix of state, federal and local taxes and fees. STIP is comprised of two components: Caltrans's Interregional Transportation Improvement Program (ITIP) and regional transportation planning agencies' Regional Transportation Improvement Program (RTIP). STIP revenues are based on actual regional share dollars available to Kings County in

the 2018 STIP Funds Estimate. Under the 2018 adopted STIP Guideline, bicycle and pedestrian projects may be programmed in the STIP as long as they are eligible for the State Highway Account of Federal funds.

### **Office of Traffic Safety**

Comprehensive pedestrian and bicycle safety programs that involve enforcement, education, public health, driver education, transportation engineering, and public communication are eligible project types under this program. Communities from throughout the state are invited to submit annual applications for program grants.

### **Land and Water Conservation Fund Program**

This program provides grants to plan, acquire, and develop recreation parks and facilities including bikeway and pedestrian trails. The California Parks and Recreation provides reimbursement grant funds of 50% of the total projects costs. Grants for local agencies are divided, with 40% of the total funding going to Northern California and 60% to Southern California.

### **Mello-Roos Community Facilities District Act of 1982**

This program allows a sponsoring agency to issue a special tax bond for a community facilities district to finance public facilities and services such as parks, recreation areas, parkways, and open spaces. Bicycle and pedestrian projects could be included in any proposed public facility.

## **Local sources**

### **Local Transportation Fund (LTF)**

Up to two percent of each county's LTF can be claimed annually by local jurisdictions to be used for installing or maintaining bicycle and pedestrian facilities (Public Utilities Code, Section 99233.3). This amount would provide around \$90,000 each year for bicycle and pedestrian projects. The RTPA may also reserve an amount so designated, up to 2% of the LTF, each year for later allocation to claimants for pedestrian and bicycle facilities or bicycle safety



programs. If the RTPA finds that all or any portion of the amount reserved could be used more appropriately for other purposes, that amount can be added to the total apportionment available the following year. Generally, local jurisdictions prefer to use LTF allocations claimed for street and road purposes for bicycle and pedestrian projects in order to minimize administrative costs. KCAG could apportion an amount of LTF to provide a bicycle facilities maintenance fund. If the funds are not needed for bicycle facility maintenance, the funds can be returned to the following fiscal year's estimated LTF for reapportionment.

### General Fund of local agencies

As with any public improvement, local general fund revenues can be used to build and maintain bicycle facilities, or to provide a match for State and Federal grants.

### Private funds

Funds from private sources can be used to provide secure bicycle parking at high-use destinations. Such facilities can be required as part of the zoning review processes used by each of the local agencies.

### Developer fees

Development fees could be levied and administered by local jurisdictions to provide improvements to accommodate new development.

### Development agreements

Agreements can stipulate that developers provide portions of bikeway facilities where the construction becomes a part of the development.

### Other local programs

Local agencies may implement other local programs to provide bikeways and bicycle facilities including "adopt-a-trail," symbolic shares in trail right-of-way, and memorial benches. These programs require that private individuals or groups donate money, property, or time for the design, acquisition, and construction of pedestrian and bicycle facilities.

## Complete Streets

Many of the needs in Kings County related to biking and, especially, to walking stem from the fact that streets have often been constructed without full consideration of pedestrians and cyclists. This is reflected in the many projects in the Walk and Bike plan that aim simply to install sidewalks along existing roads.

One way for local agencies to address this deficiency is by adopting a "complete streets" approach to transportation projects. Complete streets are those that are planned and designed for safe and convenient access by all users as appropriate—depending on the context of the streets—including pedestrians and cyclists. To simplify greatly, this means building roads with sidewalks and bike lanes or shoulders where pedestrians and cyclists can be expected to use them.

A number of complete streets policies have come into effect in recent years at the local, state and federal levels. Caltrans and the U.S. Department of Transportation, among other agencies, have adopted policies committing themselves to integrate "multi-modal" considerations—that is, addressing various forms of transportation—into their planning activities. Assembly Bill 1358, the California Complete Streets Act of 2008, requires "that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users ...." While it is not yet clear what effect these policies have had on the planning, design and construction of transportation facilities, they do reflect the growing attention of public agencies to the needs of pedestrians and bicyclists.

# Appendix A | Equity and public health data

## A-1 | Youth, seniors, household income and environmental pollution

Percentage of school-age youth, percentage of seniors and median household income in each census tract and census block group in Kings County, and CalEnviroScreen (CES) percentile for each census tract (CalEnviroScreen results are not available at the block group level). In cases where a census tract contains only one block group—indicated in the table below by an asterisk (\*)—the data is the same for the block group as for the census tract.

<i>Census tract and block group</i>	<i>% of school-age youth</i>	<i>% of seniors</i>	<i>Median household income</i>	<i>CES percentile</i>
<b>Census tract 1</b>	<b>17.5%</b>	<b>13.8%</b>	<b>\$63,125</b>	<b>74.37</b>
Block group 1	11.6%	20.5%	\$48,393	
Block group 2	18.4%	2.7%	\$63,594	
Block group 3	20.9%	20.1%	\$66,484	
<b>Census tract 2</b>	<b>17.0%</b>	<b>14.5%</b>	<b>\$52,750</b>	<b>79.63</b>
Block group 1	17.0%	17.1%	\$54,500	
Block group 2	17.0%	9.9%	\$48,750	
<b>Census tract 3</b>	<b>16.5%</b>	<b>0.0%</b>	<b>\$41,552</b>	<b>81.78</b>
Block group 1	17.1%	0.0%	\$51,293	
Block group 2	15.8%	0.0%	\$35,644	
<b>Census tract 4.02</b>	<b>19.1%</b>	<b>10.9%</b>	<b>\$67,308</b>	<b>67.40</b>
Block group 1	22.2%	14.0%	n/a	
Block group 2	21.1%	12.0%	60,597	
Block group 3	15.3%	7.9%	77,500	
<b>Census tract 4.03</b>	<b>23.0%</b>	<b>9.6%</b>	<b>\$48,615</b>	<b>69.73</b>
Block group 1	21.0%	12.8%	\$42,279	
Block group 2	28.2%	8.7%	\$55,083	
Block group 3	10.1%	4.7%	\$47,235	
<b>Census tract 4.04</b>	<b>20.2%</b>	<b>6.6%</b>	<b>\$54,492</b>	<b>63.44</b>
Block group 1	17.1%	6.3%	\$80,855	
Block group 2	43.3%	7.9%	\$72,115	
Block group 3	32.3%	3.5%	\$31,836	
Block group 4	18.4%	6.3%	\$61,544	
Block group 5	12.0%	8.6%	\$45,127	

<i>Census tract and block group</i>	<i>% of school-age youth</i>	<i>% of seniors</i>	<i>Median household income</i>	<i>CES percentile</i>
<b>Census tract 4.05</b>	<b>21.2%</b>	<b>5.7%</b>	<b>\$38,586</b>	<b>63.22</b>
Block group 1	15.0%	2.1%	\$38,317	
Block group 2	11.1%	9.4%	\$54,712	
Block group 3	35.7%	7.0%	\$33,092	
Block group 4	23.1%	5.0%	\$28,611	
<b>Census tract 5</b>	<b>24.5%</b>	<b>12.7%</b>	<b>\$43,510</b>	<b>77.21</b>
Block group 1	17.5%	4.5%	\$70,313	
Block group 2	25.9%	10.6%	\$44,375	
Block group 3	32.9%	8.1%	\$36,450	
Block group 4	17.9%	21.7%	\$38,210	
<b>Census tract 6.01</b>	<b>25.4%</b>	<b>7.1%</b>	<b>\$86,538</b>	<b>55.90</b>
Block group 1	26.9%	6.3%	\$93,333	
Block group 2	18.7%	10.9%	n/a	
<b>Census tract 6.02</b>	<b>15.6%</b>	<b>15.5%</b>	<b>\$74,270</b>	<b>31.15</b>
Block group 1	18.0%	16.7%	\$55,944	
Block group 2	15.4%	11.8%	\$72,673	
Block group 3	17.2%	23.3%	\$91,418	
Block group 4	7.4%	8.3%	\$135,750	
<b>Census tract 7.01</b>	<b>20.3%</b>	<b>13.8%</b>	<b>\$75,077</b>	<b>47.57</b>
Block group 1	25.0%	12.0%	\$59,792	
Block group 2	15.4%	20.2%	\$58,990	
Block group 3	13.6%	17.9%	\$74,426	
Block group 4	23.6%	7.4%	\$95,625	
<b>Census tract 7.02</b>	<b>18.3%</b>	<b>14.6%</b>	<b>\$56,596</b>	<b>58.15</b>
Block group 1	22.6%	14.8%	\$70,446	
Block group 2	15.3%	14.4%	\$53,542	
<b>Census tract 8</b>	<b>22.8%</b>	<b>13.3%</b>	<b>\$36,765</b>	<b>86.15</b>
Block group 1	24.6%	12.0%	\$35,417	
Block group 2	21.0%	12.0%	\$30,365	
Block group 3	15.8%	23.4%	\$43,750	
Block group 4	33.8%	10.9%	\$58,500	
<b>Census tract 9</b>	<b>25.4%</b>	<b>10.1%</b>	<b>\$34,552</b>	<b>74.61</b>
Block group 1	22.4%	12.3%	\$40,388	
Block group 2	24.0%	14.8%	\$45,975	
Block group 3	27.8%	0.0%	\$49,297	
Block group 4	25.1%	15.6%	\$31,698	
Block group 5	25.2%	6.2%	\$22,106	
Block group 6	34.5%	15.1%	\$35,804	
Block group 7	19.9%	3.1%	n/a	

<i>Census tract and block group</i>	<i>% of school-age youth</i>	<i>% of seniors</i>	<i>Median household income</i>	<i>CES percentile</i>
<b>Census tract 10.01</b>	<b>12.1%</b>	<b>19.3%</b>	<b>\$63,711</b>	<b>66.94</b>
Block group 1	3.2%	19.4%	\$54,632	
Block group 2	13.8%	19.2%	\$63,906	
<b>Census tract 10.02</b>	<b>24.0%</b>	<b>12.1%</b>	<b>\$34,676</b>	<b>82.85</b>
Block group 1	13.5%	12.2%	\$34,712	
Block group 2	22.1%	13.1%	\$27,740	
Block group 3	36.0%	11.0%	\$36,452	
<b>Census tract 10.03</b>	<b>23.4%</b>	<b>7.6%</b>	<b>\$59,132</b>	<b>85.98</b>
Block group 1	24.9%	6.0%	\$60,176	
Block group 2	20.5%	10.6%	\$54,598	
<b>Census tract 11</b>	<b>26.6%</b>	<b>9.9%</b>	<b>\$30,841</b>	<b>97.12</b>
Block group 1	18.6%	11.6%	\$35,577	
Block group 2	26.6%	11.3%	\$27,448	
Block group 3	32.8%	4.5%	\$22,390	
Block group 4	27.0%	12.3%	\$48,750	
<b>Census tract 12</b>	<b>23.8%</b>	<b>10.5%</b>	<b>\$52,500</b>	<b>64.71</b>
Block group 1	20.3%	13.5%	\$49,938	
Block group 2	26.4%	8.2%	\$56,979	
<b>Census tract 13</b>	<b>27.0%</b>	<b>5.9%</b>	<b>\$30,191</b>	<b>87.60</b>
Block group 1	27.7%	4.8%	\$25,882	
Block group 2	26.2%	7.3%	\$31,228	
<b>Census tract 14.01*</b>	<b>19.6%</b>	<b>8.0%</b>	<b>\$38,689</b>	<b>67.27</b>
<b>Census tract 14.02</b>	<b>22.9%</b>	<b>9.9%</b>	<b>\$25,089</b>	<b>77.20</b>
Block group 1	20.3%	12.2%	\$24,432	
Block group 2	24.5%	8.6%	\$25,201	
<b>Census tract 15</b>	<b>21.6%</b>	<b>10.7%</b>	<b>\$33,654</b>	<b>69.01</b>
Block group 1	17.9%	12.0%	\$44,293	
Block group 2	29.8%	8.3%	\$23,333	
Block group 3	28.3%	11.7%	\$33,229	
Block group 4	10.4%	10.1%	\$36,563	
<b>Census tract 16.01</b>	<b>24.3%</b>	<b>5.7%</b>	<b>\$35,399</b>	<b>89.03</b>
Block group 1	21.9%	2.3%	\$36,402	
Block group 2	29.3%	7.7%	\$41,929	
Block group 3	22.1%	9.5%	\$22,401	
<b>Census tract 16.02*^</b>	<b>0.0%</b>	<b>3.0%</b>	<b>n/a</b>	<b>NA</b>



<i>Census tract and block group</i>	<i>% of school-age youth</i>	<i>% of seniors</i>	<i>Median household income</i>	<i>CES percentile</i>
<b>Census tract 17.01</b>	<b>22.9%</b>	<b>5.9%</b>	<b>\$32,432</b>	<b>75.48</b>
Block group 1	20.6%	5.8%	\$34,311	
Block group 2	17.8%	5.5%	\$30,842	
Block group 3	16.1%	13.0%	\$36,250	
Block group 4	31.0%	3.4%	\$25,938	
Block group 5	0.0%	0.0%	n/a	
<b>Census tract 9818*^</b>	<b>0.0%</b>	<b>2.7%</b>	<b>n/a</b>	<b>NA</b>

\* Census tracts 14.01, 16.02 and 9818 contain only one block group; the data for the block group is the same as for the census tract.

^ Census tract 16.02 represents Corcoran State Prison. Census tract 9818 represents Avenal State Prison.

## A-2 | School meals

Percentage of K–12 students at public schools in Kings County who were eligible for free or reduced-price school meals in the 2016–2017 academic year. Schools are listed by school district.

<i>School (by school district)</i>	<i>City/Uninc'd community</i>	<i>% of students</i>
<b>Armona Union Elementary</b>		
Crossroads Charter Academy	Hanford	73.8%
Armona Elementary	Armona	94.3%
Parkview Middle	Armona	95.2%
<b>California Virtual Academy @ Kings</b>	<b>n/a</b>	<b>56.6%</b>
<b>Central Union Elementary</b>		
Akers Elementary	NAS Lemoore	39.1%
Central Union Elementary	Lemoore	63.4%
Neutra Elementary	NAS Lemoore	50.9%
Stratford Elementary	Stratford	79.5%
<b>Corcoran Joint Unified</b>		
Corcoran Academy	Corcoran	83.3%
Mission Community Day	Corcoran	100.0%
Kings Lake Education Center	Corcoran	81.8%
Corcoran High	Corcoran	77.7%
Bret Harte Elementary	Corcoran	82.5%
John C. Fremont Elementary	Corcoran	88.2%
John Muir Middle	Corcoran	84.8%
Mark Twain Elementary	Corcoran	80.8%
<b>Hanford Elementary</b>		
Hamilton Elementary	Hanford	84.0%
Jefferson Charter Academy	Hanford	47.5%
Lee Richmond Elementary	Hanford	92.3%
Lincoln Elementary	Hanford	97.4%
Monroe Elementary	Hanford	78.1%
Roosevelt Elementary	Hanford	92.6%
Woodrow Wilson Junior High	Hanford	76.9%
George Washington Elementary	Hanford	82.3%
John F. Kennedy Junior High	Hanford	85.9%
Martin Luther King Jr. Elementary	Hanford	88.8%
Hanford Elementary Community Day	Hanford	95.5%
Simas Elementary	Hanford	56.0%

<i>School (by school district)</i>	<i>City/Uninc'd community</i>	<i>% of students</i>
<b>Hanford Joint Union High</b>		
Sierra Pacific High	Hanford	53.9%
Hanford Night	Hanford	87.8%
Hanford Community Day	Hanford	100.0%
Hanford West High	Hanford	60.4%
Earl F. Johnson High	Hanford	71.3%
Hanford High	Hanford	62.2%
<b>Island Union Elementary</b>		
Island Elementary	Lemoore	38.8%
<b>Kings County Office of Education</b>		
Kings County SELPA Preschool	Hanford	0.0%
JC Montgomery	Hanford	100.0%
Kings Community	Hanford	100.0%
Kings County Special Education	Hanford	62.5%
<b>Kings River-Hardwick Union Elementary</b>		
Kings River-Hardwick Elementary	Hanford	31.2%
<b>Kit Carson Union Elementary</b>		
Kings Valley Academy	Hanford	87.3%
Kit Carson Elementary	Hanford	72.4%
Mid Valley Alternative Charter	Hanford	38.9%
<b>Lakeside Union Elementary</b>		
Lakeside Elementary	Hanford	91.0%
<b>Lemoore Union Elementary</b>		
University Charter	Lemoore	35.8%
Bridges Academy	Lemoore	75.0%
Meadow Lane Elementary	Lemoore	63.5%
Engvall Elementary	Lemoore	59.4%
Lemoore Elementary	Lemoore	71.6%
Liberty Middle	Lemoore	65.1%
Cinnamon Elementary	Lemoore	67.4%
<b>Lemoore Union High</b>		
Lemoore Middle College High	Lemoore	20.0%
Jamison High	Lemoore	62.8%
Lemoore High	Lemoore	47.3%
<b>Pioneer Union Elementary</b>		

<i>School (by school district)</i>	<i>City/Uninc'd community</i>	<i>% of students</i>
Frontier Elementary	Hanford	44.1%
Pioneer Elementary	Hanford	47.1%
Pioneer Middle	Hanford	37.5%
<b>Reef-Sunset Unified</b>		
Sunrise High	Avenal	87.9%
Adelante High	Kettleman City	100.0%
Primary/Secondary Community Day	Avenal	83.3%
Avenal High	Avenal	85.9%
Avenal Elementary	Avenal	88.4%
Kettleman City Elementary	Kettleman City	91.9%
Reef-Sunset Middle	Avenal	89.1%
Tamarack Elementary	Avenal	97.0%



# Appendix B | Needs assessment comments

## Contents

B-1. Survey question #6 (other general challenges to walking) .....	158
B-2. Survey question #7 (additional information about walking) .....	159
B-3. Survey question #8 (pedestrian improvements) .....	167
B-4. Survey question #9 (other general challenges to biking) .....	174
B-5. Survey question #10 (additional information about biking) .....	174
B-6. Survey question #11 (biking improvements) .....	179

## B-1 | Survey Question #6

*Have we forgotten any general challenges to walking?*

1. It is tiring.
2. There need to be more stop signs.
3. No area to hydrate like a water fountain.
4. Fences, aggressive dogs, overgrown trees or weeds blocking path.
5. Availability of paths in scenic settings.
6. Random people walking that are weird.
7. There is a dog that has no fence and is not hooked up to something.
8. Walking is hard.
9. Kidnappers.
10. I'm just lazy about long walks.
11. Road work.
12. Drunk or crazy people.
13. There are no designated walking paths. You just have to walk in your neighborhood where there are cars, missing sidewalks, broken sidewalks or dogs NOT on leashes.
14. Homeless people.
15. There are not a lot of crosswalks where I walk.
16. Water fountains.
17. There are many people in Hanford that run regularly as well and there are also no real places or paths to run safely. You are forced to run on the road or sidewalk. It is often not safe. There are communities such as Visalia and Tulare that have invested in pathways designed for runners and cyclists that provide a safe alternative.
18. Pet dogs that are off leash.
19. Cold weather.
20. Yes, because it is sometimes cold in the morning.
21. Burglars.
22. Yes, some of the homeless people are crazy sometimes.
23. You think someone is following you.
24. People that you don't know and they walk with you.
25. Cars don't let me cross the street.
26. When people are not watching when kids are crossing/walking to school.
27. Through traffic does not stop.
28. Walking home with a stranger following along.
29. The walks are sooooo long.
30. Gangs and graffiti.
31. The only thing I could think of is hoboes and drug-addicted people.
32. I feel like a lot of kids in Hanford walk outside, to destination, school, etc. The problem is that there are predators, kidnappers, and creeps. A solution for this could be that any child who walks outside a lot, alone, should be given a free necklace that I've heard about online. The necklaces can make a screaming voice if you just press the button on it. This can scare anyone away from any children or pre-teens.
33. Gang areas.
34. Railroad crossing.
35. Strangers.
36. Fallen trees.
37. Also, bike riders riding too fast and can run you over.
38. Walking in the fog is very dangerous, especially with people who drive while on their phones.
39. Some people often get the wrong impression of people walking late at night. For instance, police sometimes find it suspicious.
40. When people race in town.
41. Not really, but water fountains would help.
42. Time can be a really big problem and also the energy. Some people are too exhausted to walk.
43. Safety of community.
44. Greater separation from roadways for personal and family safety.
45. Walking on the sidewalks you have to deal with driveways, up and down no flat paths. In Lemoore,

the only path to the college is not maintained. Trees, grass are dead and dying.

46. Safety.
47. Air quality is bad.
48. Speed bumps should be placed by busy school streets.
49. General safety of the neighborhood, nearby motels have criminals, drugs, prostitution in them.
50. Safety. Would like boxes with buttons that alert police if need them, like on college campuses. Not sure if that is realistic.
51. Construction reroutes.
52. Large farm equipment overlapping the road.
53. People riding their bikes on the sidewalk.
54. No curb at the corner of certain intersections.

## B-2 | Survey Question #7

*Where (if at all) do you walk for recreation or transportation? What do you most enjoy about walking there? What do you like least?*

1. I walk or rather run around my neighborhood. I like it because there are a couple of parks close to my house to take my children to. Plenty of sidewalks to use.
2. I enjoy the scenery when I walk/skateboard to the park.
3. Around my block. I enjoy walking wound my block because its near my home. What I like least is that my block isn't very big.
4. Fresh air.
5. Park, store.
6. I like how my destinations when walking or riding aren't bad but I don't like how certain destinations have a risky path to get to.
7. Our neighborhood.
8. Silver Oaks.
9. The tress and cool plants I see on the way.
10. I walk to my grandparents' house and sometimes to the store.
11. I walk home from school a few times every week. The thing that I like about it is that I get home faster because I don't have to wait for my mom to come and pick me up, but I don't like walking by myself.
12. I sometimes walk to the store by my house. I enjoy just being able to go there and get things I might want or need. I also walk to the church by my house.
13. What I like the most is that I get to be outside in the sun and I get to see my neighborhood. What I least like is that there are some broken sidewalks and big cracks in them as well.
14. To the store. The only thing I don't like it I have to cross a busy street.
15. To the bus stop and home from school. I like walking with my friends.
16. There is not so much shade.
17. Sometimes I walk to school and to friend's houses. I like how peaceful it is. I don't like walking in the cold or heat.
18. I usually walk to the park, but on the way there, it's somewhat difficult because the ground is uneven. I enjoy walking there because I like running through the grass.
19. I don't walk that much to get to school, seeing how there's a long road that I have to follow down. It could be dangerous to cross the road. Walking is great exercise, but it is dangerous as a child to walk alone to school.
20. I do not like walking because it takes a very long time to get somewhere.
21. I walk from school; it's boring.
22. I like walking to the park with my dog.
23. It gets you out to see new things.
24. I walk from school to home and I like walking with my friends, but sometimes it's really hot.
25. I like exploring the outdoors.
26. Go with friends.
27. My son walks from Flint and Glacier to Pioneer Middle School. There is no sidewalk for approximately ½ a mile on Flint West of 11<sup>th</sup> Avenue and he along with many other children must walk on a 6" piece of asphalt roadway while cars drive past at 40+ mph.
28. I enjoy walking to the park. Once you get to the park, it's so beautiful and it was worth it.
29. I like to walk at Hidden Valley Park because they have a track you can walk, a nice duck pond, water park, and jungle gym for older and younger kids.
30. Me and my family walk even sometimes ride our bikes to Hidden Valley Park and play on the playground play with our dogs in the dog park area.
31. I walk to school sometimes, but usually I ride my bike but sometimes I walk. I most enjoy walking with my friends and feeling like I accomplished something for some reason.
32. I mainly walk my dog around Lemoore. Nothing much to enjoy but lots to dislike.
33. What I like the most is that I get to walk around my neighborhood.
34. I walk in my neighborhood. It's convenient.
35. I enjoy walking to school because I can talk with my friends and it's fun to be with your friends while walking. What I don't like about walking is when my friends leave.
36. My least like is no sidewalk.
37. I walk my dog to our neighborhood park and I like walking because it takes my eyes off my phone.

38. I never walk because my parents don't trust me.
39. I like walking to my bus stop because I am not inside and trapped. The thing I don't like about walking is I don't want to be kidnapped.
40. I walk to the park. I like walking to the park because if I see my friends then I would walk around with them. I do not like to walk to the park because of mosquitoes.
41. I like to walk to the park that is near my house. It is commonly very fast and simple and there is a lot of shade along the way. I don't like the construction and the sometimes slightly drunk drivers.
42. Walking home from school or to and from the store.
43. I like walking to my friend's house because the trail to her house is nice. I do not like walking there because the walk is long.
44. I don't like that it's cold outside.
45. To a neighborhood park, or drug store. It's a nice change from driving, and allows me to get in extra steps.
46. To walk by myself.
47. I used to walk around my neighborhood. They cut down all the trees that gave shade to us. So now it is not so nice.
48. I run in the Short Acres neighborhood and beyond. It has well established trees and wide street.
49. I tend to walk to the stores and parks with my cousins. What I enjoy the most is the beautiful nature. What I strongly like the least are stray dogs.
50. Walking toward 11<sup>th</sup> Avenue from Quail Run & Stonecrest neighborhoods on Flint. Our family and neighbors particularly students like the proximity to Pioneer Middle School and the high school bus stops. We don't like missing sidewalks—feels less safe for walkers.
51. Around the neighborhood.
52. Around my neighborhood. My middle school-age son walks to and from school. Streets feel safe and generally clean. It is rather dark at night.
53. I walk around my house. 14<sup>th</sup> & Grangeville, on the back roads.
54. No rest benches.
55. Park in neighborhood. Most: seeing the neighborhood. Least: weather.
56. My neighborhood, walking my dogs. Neighborhood is generally friendly except occasional kids in cars harassing me.
57. To Pioneer Middle School for son's games. There needs to be a sidewalk from Glacier to 11<sup>th</sup> on Flint Ave.
58. I walk along the last ditch canal and near the orchards there because there are trees and nature. It would be nice if we had more natural areas in Kings County.
59. Recreation: Walk in the area of 11<sup>th</sup> Ave, and Douty between Flint and Fargo. Transportation: 11<sup>th</sup> and Tarragon to Pioneer Middle School.
60. My street. It is beautiful with nice trees for shade in the heat. However, there are lots of cars and intersections to be aware of.
61. My wife and I walk around town for the exercise. We take various routes and distances depending on our mood. We are learning which areas do not have safe sidewalks and simply avoid them.
62. I walk around my block and I like the freedom but I don't like random people talking/staring at me suspiciously.
63. I walk to the mini store or to Centennial Park. I like walking there because I could get more exercise or get something from the store. I do not like to walk at Freedom Park because of the ducks, hills, and holes in the ground.
64. Freedom Park. Around Woodrow Wilson.
65. I walk on my sidewalk and I like the fact that it is wide so I can ride my bike.
66. The mall—we get to pass the big houses and hospital.
67. Least: Cars not paying attention to walkers who are not in a designated walking area because there isn't a designated walking area. I would walk more and for different reasons, like work, if I felt it was safer.
68. I like to walk around my subdivision.
69. I generally walk around our neighborhood. I prefer to walk that area because it is a safe area and my children are familiar with the area. The main problem is the drivers. It is a road where cars drive fast.
70. I walk for exercise in the neighborhood I live in. I enjoy the clean neighborhood and the walkways are up to date and safe. I do understand that there are areas in town where safety would be an issue though.
71. I walk to the park. I enjoy hearing the birds sing and to get some fresh air or maybe read a book. There is nothing that I don't really like.
72. Enjoying the beautiful weather.
73. I sometimes walk from school to home. What I like is that there's a path but what I don't like is when it gets cold and dark.
74. I walk from school to home and sometimes I got to little stores. I like when my friends are with me, and I dislike that I don't have shade, crosswalks where there needs to be one, safe drivers, and drivers who listen to loud music that I don't want to hear.
75. The bus stop to go to school.
76. Something I like is being in the fresh air.
77. To school, home.
78. I walk to the corner store, to my grandma's house, and to the bus stop.
79. I like to walk instead of getting a ride from my mom.

80. I walk to and from school, and there's not enough shade or water fountains.
81. The breeze.
82. To school.
83. I walk down 11<sup>th</sup> Ave. between Fargo and Flint. It is a straight shot. Very seldom are dogs roaming freely, I only have to worry about cars when I cross over the street to get to the other side and the sidewalks are fairly new.
84. Store, that I could have some time alone.
85. Martin Luther King Elementary School. Seeing the school. Getting too tired.
86. I like to walk because you get to have fresh air. I like most about walking is seeing the outside and get to know people. I don't like dogs that are loose because I don't feel safe, because every time I walk, dogs try to scare people and get off the road.
87. When me and my cousin get off school we walk.
88. I walk home from school for transportation. I enjoy the silent walk.
89. Walking to the park to go have fun with my friends. What I enjoy the most is that we kind of just do what we want. The thing that I don't like the most is I have to walk kind of far.
90. I love being outdoors and having picnics at local parks with my family and friends. Sometimes it is too hot.
91. I enjoy walking with my sisters.
92. To the park.
93. We only walk when me and my cousin are off of school and we walk a lot and we would walk on the good side not the bad side.
94. Walking to my friend's house it takes a while to get there.
95. The fun when I get there. Waiting for heavy traffic.
96. I get to hang out with my friend. The weather.
97. I run regularly, at least 5 times a week, and end up on the street or sidewalk as we have no dedicated pathways through the city and it forces cyclists and runners onto the road in harm's way at times as there are no alternatives.
98. I enjoy going to the stores but one thing I like the least is that there are a lot of people smoking there.
99. Most of the time I walk to get to my grandma's house. What I like: Meeting new people, talk to people. What I least like: the hot weather.
100. From M Street and Cross down to Cartmill or Merit. I enjoy the scenery and safety of the neighborhoods where I walk. I do not enjoy loose dogs, cars parked on sidewalks, or drivers not looking for pedestrians crossing at night.
101. It would be fun if you added misters along the path.
102. I walk to my house once I get off the bus and the thing that I like about it is I can walk with my friends. The least part I don't like is the traffic.
103. I like walking because it is exercise.
104. That there is a lot of space. What I don't like is that there are uneven sidewalks.
105. Why I like walking around the park it is good exercise. What I don't like walking around the park is we always have to step to the side for others to walk.
106. I like to walk to my cousin's but there are too many stray dogs.
107. I like walking to school because I like it in the morning. I don't like sweating.
108. Walking to school my I enjoy the colorful trees my least part is when I have to cross the road and cars keep on driving.
109. I enjoy the people I see. I hate the cold weather.
110. That I am with someone.
111. People smoking.
112. I don't walk and I least like about it is takes too long.
113. Something I like the most is going outside and riding my bike. Something I like the least is homeless people.
114. Least: my legs hurt. Best if better shoes.
115. I like walking alone but sometimes I bring older siblings. I take the street by the Hanford library and I get happy walking down that path.
116. I walk to the park. I like the path I take because there are no stray animals. I don't like the broken sidewalk.
117. I like when I walk because I could find new shortcuts when I'm walking.
118. Cars, dogs.
119. For it to not be cold when walking. I do not like to walk that much.
120. I like walking because it's cooling. I don't like walking because of stray dogs!
121. I like walking alone mostly because it's more peaceful.
122. I walk home. That dogs get out of their gate.
123. Getting strong from your legs.
124. I walk to school in summer. Two reasons that I like walking to school is because sometimes you could walk with your friends and sometimes it's the perfect weather. Two reasons I dislike walking to school is that sometimes you have to walk alone and sometimes it's too hot, cold, foggy, etc.
125. The most thing I like about my house is that I live close do the downtown and in the afternoons we go to walk once or twice a week. The most thing I don't like is that some time cars go and make lots of noise.
126. I would walk to my high school or to the RAC. The thing I enjoy most about walking here is the crosswalks where I can safely cross. I don't like



- crossing over near my high school because usually cars don't stop there.
127. I sometimes walk to school and sometimes not. All the times there are dogs barking. The thing I like is the nature.
  128. What I like about walking is that it is quiet. What I least like is that it is too windy.
  129. I like that I can get fresh air and I can visit my family members. What I like least is that people are walking and the cars.
  130. To the store and I walk back safe.
  131. The thing that I like best is getting to get exercise by walking. The worst thing is when there is fog and I can't see the street or cars.
  132. What I do not like about it is the cars. They drive too fast and they do not let us cross. Only some people let us cross.
  133. The park is a cool place I enjoy. I go there every day when I'm free. But it's hard sometimes to get there when the road has lots of wood chips or splinters that pop my tires or get into my feet and shoes. So now I don't really trust taking my bike or myself out to the parks that much.
  134. I walk around town with my dad. I like walking because I get to see new things.
  135. I like walking around the neighborhood or go to the park and walk around for a long time and walking from school. I most enjoy about walking is you get free time to just be fresh and good and I like being healthy and strong and you get a lot of energy. I really don't have anything I like least.
  136. I walk to school for transportation and sometimes to the store. What I enjoy most about walking to school is that there is enough safe sidewalks in my path but I do not enjoy how far school is from home. While walking to the store I enjoy all the amenities in my path but I do not enjoy that there's not enough crosswalks or there's signs that say "thru traffic does not stop."
  137. I walk to school and I don't enjoy it. I only walk there because I have to.
  138. I walk around Freedom Park and to the store. I mostly enjoy talking and hanging out with my friends. How many dangers there are with walking.
  139. I usually walk to school and it's pretty cool.
  140. I walk to school every day and from school back home and I don't like it sometimes because it gets hot and it takes a long time.
  141. I like walking to the store because I live next to my cousins and they live right next to the store.
  142. What I enjoy about walking is the exercise you get from walking. What I like least is there's a lot of speeding cars.
  143. I like meeting up with my friend to walk to school.
  144. I never really walk to school but I always walk back home.
  145. I enjoy going to the park.
  146. What I like most is to go to my friend's house. What I like least is there are a lot of stray dogs.
  147. I walk to school from my house but I don't if I am almost late. I do not like the cold air outside.
  148. I walk to my friend's house. What I like about it is that I get to go and spend time with her. I don't have a reason that I don't like.
  149. I like to walk to my friend and what I don't like is there is a lot of speeding drivers.
  150. I like to walk to the park to play basketball.
  151. I like to walk to my neighbor's house and to my friends. I don't like to ride a bike.
  152. I like to walk home from school but I don't like to wait for all the cars.
  153. The thing I like the least is that there are dogs.
  154. I like to walk around my neighborhood because it is beautiful.
  155. I like to go to the park, but a lot of gangs hang out there and somebody was once killed right across the street. There are so many vicious and angry dogs that always are barking at people and escape from their house.
  156. I like to go to my friends. I don't like that sometimes cars are going too fast. I like that my friend is three blocks down the street.
  157. I like to go to my friend's house. I like it because when I get there I can play with him. I don't like it because the walk is too short so I don't get that much exercise.
  158. I walk around the neighborhood and it's fun but it's kind of dark.
  159. I like to walk to my cousin's house.
  160. I like to go to the park. There is too much speeding.
  161. I like that you can feel the nice air but what I do not like is that it gets hot and it gets cold.
  162. I enjoy Freedom Park because I enjoy walking with my family.
  163. I walk to Freedom Park for recreation or transportation. The thing I enjoy most about Freedom Park is the swings because that is pretty much the only thing you can do and I like to bring my electric go-cart. The thing I don't like about Freedom Park is when I have to go slow on my go-cart because the people walk too slow.
  164. I enjoy walking to the store. But sometimes there are crazy drivers. Also aggressive dogs. there are also lots of dangers areas and broken sidewalks. The store I walk to is Save Mart.
  165. Usually I'm walking to Freedom Park. I love walking their because it just gives me great exercise and just to enjoy the breeze!

166. I walk to the bus to get the school in the morning.
167. I go walking in my neighborhood, Country Crossings, usually just to go home or to go to my nana's house because she lives in the same neighborhood as I do, really close by. I also go walking with my papa on the track at the high school Sierra Pacific. I enjoy walking in my neighborhood because I feel safe and the neighbors are friendly. One thing that I do not like about walking at Sierra Pacific is that the dirt trail that you have to walk to get to the school is usually uneven, but they sometimes even it out.
168. Where I like to walk is the park because what I like is that the people in my area are really nice so that's good.
169. I usually walk to Hidden Valley Park with my mom and my sister.
170. I like going to my cousin's house that's in the Vineyards, and we play at the park, and play soccer, and more, but I usually can't because my mom doesn't let me cross Grangeville.
171. Walk to my grandma's house in the Vineyards and what I enjoy the most is the scenery outside the community. What I like the least is distracted drivers.
172. On all the parks in Hanford, Lemoore, etc.
173. I walk to Save Mart because it's only a 10-15 minute walk, and sometimes we don't have gas to be able to drive over there. Everything is great except for the crazy drivers (drunk, speeding, tired, etc.) Also the delayed railroad crossings when a train is not too far away from coming through. The dangerous intersections around Subway and Walgreens.
174. I mostly enjoy walking to Freedom Park.
175. I like going to the Vineyard Park. It's fun! I like going there because it has a lot of grass to play on and it has a water fountain for tall people, short people, and even dogs!
176. I walk home from school, but the way to my house is really long and sometimes there are people who drive who don't pay attention to the kids walking home.
177. Least: the park at night. Safe: to my friend's house. Strangers hide in the bushes at the park and will snatch you up like that.
178. I walk with my friends to the 99 cent store and comer stores. The thing that I enjoy the most is that I get to have some exercise in my day. The things that I dislike the most are when it's somewhat cold weather and it's dark sometimes due to the season we are experiencing at this time.
179. I like stopping by the store and buying gum.
180. I walk home from school almost every day and I really like it because it gives me a chance to hang out with my friends outside of school. It is also cool that I stop by the store and get a drink to enjoy. The only thing I'm really concerned about is my little brother's safety walking out there with me. I can only do so much.
181. I enjoy walking and spending time at Freedom Park. It's really nice to hang out outside and enjoy our wonderful weather, but it's difficult because people stand in the bike lane and don't understand that bikers are moving fast and it makes it difficult to move around them.
182. I like walking with my friends to the store.
183. I walk to school, the park, and around town when I'm bored.
184. I walk to school as transportation. I most enjoy the trees on my way to school. I least like that teachers get mad when you're late. Some people just live far and walk to school.
185. I walk because sometimes my mom can't take me to school. What I like about it is that it's good exercise. What I don't like about it is that it's cold in the morning.
186. I like walking to the CHS track to exercise.
187. School. I don't like how there is a busy street I have to walk by (Dairy).
188. I don't walk for fun because it's not fun to walk around our town.
189. I walk to the gym with my friends sometimes, listening to my music on the way there. The thing I like least is crossing at an intersection where it is too dark or unsafe.
190. Parks. I like that there are no cars, and it is usually quiet. My kids can run free and I don't have to worry about them getting hit.
191. I always go to Hidden Valley Park in Hanford.
192. I love the trees at Centennial Park. I dislike the intersection at 198 and 11th.
193. The music to keep me going and to just look around town see what's new or still there.
194. I don't like how strangers come up and ask me questions.
195. Sometimes I walk for fun around my neighborhood or going to the park. I enjoy going to the park because of the even sidewalk that makes walking enjoyable, the shade from trees and the benches. I don't enjoy when there is a lack of sidewalk which forces one to either trespass and step on people's lawns or walk close to oncoming traffic.
196. I tend to walk around my neighborhood or I utilize the walkway near St. John's River. It is peaceful and relaxing to hear the sound of the water.
197. To the book store. They have manga.
198. I like walking to the park with my family. I like going there because at the park they have swings, a playground and a water structure.

199. My wife and I walk/bike around central Hanford. We enjoy large old trees. Diverse architecture. Enjoy least stray dogs and homelessness problem.
200. I walk to the store. See people. How much things cost.
201. I go walking in the park and what I like about it is that I get exercise and that is very healthy. What I dislike about walking to the park is that it is the nearest park to where I live and still takes me around 30 minutes to get there.
202. The park, my friend's house, or school.
203. I walk to the store with my friends.
204. I walk to the park.
205. I like walking a lot and to get to exercise. When I was little I used to walk a couple houses over to go to the school bus every day.
206. I walk to my friend's house that is around the corner. I also walk to my other friend's house and her house is a couple blocks away. I also like going around my block just to walk or ride my bike. I like walking to my friends and I like going around the block.
207. I like to walk for fun. I like it because it is awesome. I don't like the heat.
208. I like seeing nature, and sometimes I take pictures of it.
209. To walk with my friends.
210. The gas station. I like going there because it's close to where I live.
211. I walk for transportation and I like how it is quiet. What I don't like is how I get bothered on the street.
212. I hate the honks of horns.
213. My family walked around the block a few times hunting for Pokemon. I like the view of the places we walk around. I hate when it's too dark but mom and dad calm me down.
214. I like walking with my friends. The least thing I like is when it gets too cold or too hot.
215. I walk to school in the summertime. Two things I enjoy about it is that sometimes you can walk with friends. Another reason is that sometimes it's the perfect weather. Two reasons that I dislike is that sometimes you have to walk alone. Another reason is because sometimes it's too cold or too hot or foggy.
216. I don't like that when you walk you can get foot cramps or leg cramps. I would walk to places like the park, around the block, and to a friend's house.
217. Coe Park, Centennial Park. There is no crosswalk between 10<sup>th</sup> Avenue and 11<sup>th</sup> Avenue on Hanford Armona Rd. There should be crosswalks marked for safe crossing.
218. What I like about parks is that you get to enjoy time with my family.
219. I would like it for good health. But it would get boring.
220. I walk in my neighborhood and in areas around it. I don't like speeding drivers and I like the parks along the way.
221. I walk home from school the thing that I most enjoy is that I get pomegranates when I walk down the road and the thing I like the least is crossing the street because the cars go fast down the street.
222. Honking of horns.
223. I love riding my bike around town. I go to the park often and walk around downtown. The least I like about it, is it's freezing. There are too many people who don't pay attention and can run you over.
224. I enjoy walking at Freedom Park because it's safe, quiet and lovely there.
225. I walk to Rite Aid and Chevron with my parents and my dog. I like to walk there because it keeps me entertained.
226. I like walking around my neighborhood. The least thing I like is when I have to share the sidewalk.
227. Hidden Valley Park. Downtown Hanford, I like the destination and riding down Irwin St.—very wide and room to ride.
228. Well sometimes I just walk with my mom for fun and I like it because I can see pretty cool stuff neighbors have. But what I don't like about it is that sometimes when we walk I forget to bring myself a drink and when we're walking I'm thirsty.
229. I walk to the park and I love that it is so calm and you could do a lot of stuff.
230. I like to walk to Elm Street because it is fun and safe.
231. I never walk anywhere in Hanford.
232. My family and I walk around Armona Elementary School on a regular basis. I enjoy the sidewalks and the absence of heavy traffic in the after-school hours. When walking our dog on a leash, I am always concerned about stray dogs.
233. I usually walk to school and home from school and it is not tiring if you have friends with you.
234. I like walking home from school.
235. I like how you feel accomplished from walking to point B from point A.
236. To downtown. At night there aren't too many lights so it's dark on the main streets.
237. School.
238. To home or school. Sometimes when I'm walking and feel people's eyes on me or someone behind me, I feel unsafe so I walk faster. I ride my bike to the donut shop sometime and I get scared because of there being no crosswalks over there.
239. The center of Hanford because Superior Dairy is over there.
240. I like walking to Elm Street because it's safe.
241. The park, grandma's, around the block and on my street, etc.

242. I like walking to go somewhere because you get to see beautiful things outside like trees and flowers.
243. Having my own time alone.
244. The park, school, soccer.
245. I like to walk to Ivy street to get to the Ivy store because it is closer to where I live because I live on 11<sup>th</sup> and Brown Street so I don't have to walk that far.
246. I walk every day to school unless a friend gives me a ride and that never really happens. I don't like walking. It's too cold or too hot.
247. I like walking by the main street since there are stores and it is a place where you can see people from our community.
248. I don't really walk to a particular place, but I do tend to wander off to relax. I take afternoon walks and sometimes run down to the park. This makes me feel relaxed and less stressed. I enjoy the trees and greenery most of all, especially the flowers.
249. For eco reasons.
250. Walking around with my friends knowing I'm safe.
251. I like walking around this time of year because of all the Christmas lights. It lights up the whole neighborhood. It looks so good, especially at night.
252. I sometimes walk to the stores instead of a vehicle for healthy and environmental reasons.
253. I enjoy walking in the park or going with a friend to go get a bite to eat.
254. I walk to school. I enjoy the exercise that I get but I dislike the weather.
255. Sometimes after school I walk to the gym because it's so close. What I like about it is that the distance is so short so I get more time to work out.
256. I walk from the high school down to Rite Aid to John Muir. I enjoy it because for the most part there are sidewalks. I don't like how narrow the sidewalks are because many kids from John Muir walk the opposite direction as me and it gets really clustered. Also, there are bushes that stick out that make it worse. I and other people have been hit by them.
257. I drive and do not walk in town unless it is with friends because I live on the outskirts of town and am not in town that much.
258. Well, I walk to school mostly but I live across the train tracks where it is hard to get to school on time. But I think the time I did enjoy walking was to a friend's house or to the library in the summer. I just wish the weather was better in Corcoran when I walk but I just got to deal with it.
259. The park or the library. I enjoy walking there if it's cold outside or warm. I don't like how there isn't a crosswalk to get to the library. You just run across the street.
260. I walk to school or home sometimes. I don't like the distance because I get tired but I like being able to relax.
261. Walking to the park is fun because you get to see your friends passing by but it's unsafe because there are stray dogs.
262. At the RAC because it's open and surrounded by trees; however, there are some homeless people around now.
263. YMCA. The area is huge where people can exercise or hang out with friends. The issue here is that there are areas where the light doesn't reach which leaves it risky to walk there at night.
264. I walk to school every once in a while. Some people are crazy drivers on the main roads. I try not to walk on busy roads so I'm safe.
265. I like walking to take 10 but I dislike crossing the four-way stop because I feel like I don't know when to cross.
266. Walking by the fire station park because it gives a different feeling from other parks. More peaceful and cleaner than most.
267. I walk home. I enjoy it because I get to be at a comfortable place. The thing I don't like about walking home is that the cars can get too close to me whenever I cross the street.
268. For recreation I walk around parks because I enjoy taking pictures of nature. For transportation, I often walk to school or practice which I really dislike because my backpack is around 45-50 lbs. and it really hurts my back to walk that distance.
269. I like to walk at the RAC because the sidewalks are not broken and there is enough light at the park and around the streets.
270. Walking to the library, to the park, and to school help me gain energy throughout the day. It helps me focus more when I am at school.
271. I walk to school every school day. I enjoy looking at the trees as I walk by people's homes, but the least thing I like is broken sidewalks.
272. I walk the most to school. I enjoy walking very much because it gives me time to think and it distracts me from social media and my cellular device. I dislike the cars that do not stop for crosswalks or are too distracted to notice.
273. I walk from school to my house frequently. I enjoy the walking in the fresh air. I think the least of what I enjoy when walking is how there isn't crosswalks on my path home so cars can give me the right to cross the street.
274. I walk for transportation to school and from school. I enjoy most coming from school on Fridays. The least is walking to school in the mornings when it's very



- cold and sometimes even foggy, I cannot see the cars when crossing the road.
275. I walk to work and school. Just walking passes time. And what I don't like is sometimes it's dark or people drive dumb.
  276. I walk to the local grocery store to get food, or to the local drug store for an Arizona when it is hot out.
  277. Around town mostly, it's always nice but not the safest.
  278. I just walk to school and back then sometimes I would go to a friend's house.
  279. Well I mostly either walk to school then walk home and at school there are my friends and I mostly walk to friend's house because I prefer to walk.
  280. I mostly enjoy the people I see when I pass by, and my least favorite thing is how long it takes to get from point A to point B.
  281. Around the schools. There are wider sidewalks and more light.
  282. I like to walk, not ride bikes.
  283. I really don't walk anywhere for transportation.
  284. I walk at the park because it is a nice place.
  285. I like to walk and run around the Corcoran High School track. I just like running here knowing that I am safe in a fence so not just anyone can come in and try to hurt me. I also like that I don't have to worry about stray dogs coming in because they scare me a lot. For transportation I walk to my grandma's through Whitley, Dairy and Garvey. I hate having to walk to my grandma's house because there are a good number of stray dogs on that side of town and they scare me. Mainly Garvey and the surrounding streets is where the stray dogs are.
  286. I like the fact that it feels good in the morning with fresh air. I don't like the distance that much.
  287. I like walking so I can listen to music and it's good for my body.
  288. I walk to soccer practice to get a warm-up. I just don't like that it takes me a few minutes.
  289. To the post office for mail and around the neighborhood. Lemoore High School and West Hills College for recreational use.
  290. Park strips with dirt trails and trees in publicly visible area adds greater safety and enjoyment. Especially when there is at least a 1 mile circular radius route.
  291. Hanford has some well-designed pedestrian facilities, most constructed between 1930-1950. Wide sidewalks, setback from roads, etc. Since then the city has allowed the construction of poor facilities or even areas totally without facilities (Short Acres).
  292. We walk in the fields behind our home, flat path, do not like the dusty path. In winter it is too muddy and we are forced to walk in Lemoore where we deal with the uneven sidewalks.
  293. Every morning before work I go to Freedom Park. I like the openness, cleanliness and safety the park provides during the day.
  294. Hanford, brings happiness. Heat in the summer, people who don't obey traffic laws
  295. Through the main streets. It just feels good to walk and to get that exercise in.
  296. Hidden Valley Park Area, YMCA to County complex.
  297. Walk around my neighborhood.
  298. I walk in my neighborhood in Lemoore or around one of our local parks. I like the shade trees and sidewalks.
  299. For exercise.
  300. In the hills behind City Hall and the High School, on San Joaquin St. to the post office. Usually peaceful walks.
  301. Walk around my neighborhood—good sidewalks, safe.
  302. Around my neighborhood, The Vineyards housing off Fargo and Fitzgerald. I enjoy walking around the grassy park. However, the street lights are horrible and they barely light the streets and sidewalks.
  303. When I'm able to walk, I still walk here in Short Acres. It's beautiful, very little traffic, very few dogs if any. I wish we had sidewalks.
  304. Kids and I walk to the local park that was just built and to the shopping centers. We love to play visual games and just talk about life.
  305. I do enjoy walking in Hanford.
  306. Around my block.
  307. To the local park about a half mile from the house. It's great this time of year. It can be dangerous after dark as we live in a poor neighborhood and some of the gang people cruise around after dark.
  308. I have used Freedom Park for regular exercise and I do enjoy that park. I have only felt unsafe on once instance. I now live near Hidden Valley and find the lack of paths and sidewalks to be a huge issue especially for the safety of those attending events at the park with no parking alternatives than the street.
  309. Around my neighborhood. It's mostly quiet and is well maintained.
  310. Sometimes we walk when we are in downtown instead of moving the car repeatedly, like from the Fox Theatre to the Library. Also we sometimes ride the KART bus into town and walk from Target shopping center to Walmart and back.
  311. I live in Lemoore. I walk at the soccer/softball complex on 19<sup>th</sup> Avenue (right next to Hwy. 198). The back side of the walking trail (along the top of the complex) is rough terrain and not well lit. I do not feel safe walking there.

312. In the country. I like the space and the scenery. I don't like the dust and the pesticides. Also, hunting season makes it less safe.
313. I walk daily on our family farm. We have a long drive way and a dirt road that leads to the Kings River. I enjoy being out in the fresh air and walking our dogs. It is very peaceful. I live 5 miles north of Hanford, and is too far for me to walk for transportation. I did join some friends for walking at a park in South Hanford. I enjoyed the park, the people walking and children playing were smiling and enjoying the park.
314. I usually walk for recreation around Cinnamon Street and E Hanford Armona Road. The sidewalks are fairly well kept, but there are some areas where it has lifted due to trees on Cinnamon and I have tripped. I would like to see more street lights on East Hanford Armona Road (the areas between Liberty Street and Lemoore Avenue). The trees make the street very dark at night.
315. We walk twice a day when the weather permits on our breaks. My family and I walk most evenings for exercise on the walking trails in Visalia.
316. The large park across the street from my house. It has a very nice playground, and a large grassy area. Most residents from our subdivision are there nightly either walking along the path, or riding bikes around.
317. Walk to the mall.
318. Walk around the farmers' fields by my house.
319. In my neighborhood for exercise. I live in a safe neighborhood so walking during the daytime is never a problem. However during the week, I walk early in the morning and don't like to walk by myself because I am not certain it would be safe.
320. Walking from home to Centennial Park or south on 11<sup>th</sup> to Houston. It's familiar territory and close to home. People riding their bikes on the sidewalk is the greatest concern. Especially, when a bike lane is available.
321. Various locations throughout the NW part of town.
322. Downtown, Lemoore Ave, Fox Ave.
323. Neighborhood and main streets.
324. Fox, Cinnamon, Liberty, Hanford-Aarmona.
325. I just walk my dog in my neighborhood and sometimes to the Starbucks or mini mart on the corner. I most enjoy being outside near trees, bushes, flowers and birds. I least enjoy the traffic noise and emissions from vehicles.
326. I use the walking track at Lemoore Recreation. I enjoy the fact that it is safe, the cushioned track, out of the weather, and the friendly atmosphere.

## B-3 | Survey Question #8

*What is the one thing (or things) that you would do to improve walking in your area?*

1. The thing I like least is the one crosswalk for my children to get from our neighborhood to the middle school on Douty and Fareway Ave. My son almost got hit one day when both lanes of traffic had stopped but some jerk decided to go around the stopped traffic and proceed through the intersection almost hitting my son and his friend. It would be nice if the crosswalk had the flashing lights like the one down at the high school. Maybe that would be one more added measure of safety at that crosswalk to alert motorists that there are pedestrians in the crosswalk.
2. I would fix the sidewalks.
3. No, my neighborhood is somewhat new so there is no need to change it.
4. Get sidewalks, more street lights.
5. Have another path for cyclists that isn't too big or small so both the people walking and the people driving don't get hit in the process of moving from one place to another.
6. More yield or stop signs needed in the development near Frontier Elementary School.
7. More trees and fix the sidewalks.
8. I would want to add a park and trees so people can walk to the park and relax when they're tired under a tree.
9. I think that everything is fine and that the drivers are good, there is a lot of shade trees along the way, there aren't many stray animals, and the roads aren't broken.
10. More sidewalks.
11. Some more crosswalks or ticketing unsafe drivers to keep everyone safer.
12. I really don't have any suggestions about walking.
13. More stop signs.
14. A bench.
15. I would make more sidewalks and make some more crosswalks closer to schools.
16. I would like there to be a crossing guard at intersections.
17. I wish drivers were more careful.
18. I think that the sidewalks should be leveled out because when you're riding your bike or walking you could trip over the unlevelled sidewalk and get hurt.
19. Putting up lights along the sidewalk.
20. School crossing guards.
21. I would put crossing guards by the school to keep it safer when going to school.
22. More crosswalks.
23. Fixing the sidewalks.

24. My son walks from Flint and Glacier to Pioneer Middle School. There is no sidewalk for approximately ½ a mile on Flint West of 11<sup>th</sup> Ave. and he along with many other school children must walk on a 6" piece of asphalt roadway while cars drive past at 40+ mph. Pioneer refuses to bus the children from the Quail Run subdivision to the school. It is a matter of time until there is an accident.
25. Some sidewalks are uneven and it's a safety hazard.
26. Fix the sidewalks there are many holes. You should also ticket many people that are speeding near schools.
27. More crosswalks near my school.
28. Year-round standing water near Me n' Ed's Pizza in Lemoore. Fences where aggressive dogs peek out and will one day break out. The distance to anything remotely good is too far. I have to drive to the only dog park. That whole mess of a school zone on Flint and 12<sup>th</sup> needs attention, like the addition of turning lanes and sidewalks, it always floods there making it hard to walk. Plenty of school crosswalks are on busy streets with no flashing lights embedded in them. Most entrances are blocked making them hard to see, then there is the fog also since they're on busy roads with above 25 mph speed limit there is little to no warning when a kid steps out. Embedded flashing lights would help. 11<sup>th</sup> and Flint needs something to stop all traffic to allow bikers to cross. School kids on bikes use that intersection and a lot of drivers won't give them the right-of-way for minutes on end, until I get the intersection and block it to let them pass. If you don't believe me ask the City or County Public Works Department that was doing work there about a month ago and didn't do anything to help the kids, or ask either the CHP, KSCO or Hanford PD when they gave me a dirty look while blocking them. Stop the trains from parking inside city limits or do what they did in Reno and send them underground or build bike/pedestrian and vehicle overpasses.
29. Fix the sidewalks and make more sidewalks.
30. Get bags so you can pick up your dog's poop.
31. I think there should be a lane next to the car lanes just for walking.
32. If I did walk I would put a lot of benches and bus stops.
33. It would help if there was more sidewalk room in terms of width to walk on.
34. I would like for people to ticket drivers who are speeding by people that are walking.
35. Crosswalks, lights, and cross guards on 11<sup>th</sup> and Fargo for kids walking or riding bikes to school. Walking paths with plenty of space and light would be great.
36. Yes, there are a lot of unsafe drivers.
37. The city of Hanford could do a lot to improve safety for walkers and bikers, especially our children who walk or bike to school. We need crossing guards for areas with large numbers of students, safe sidewalks that aren't cracked or broken, making it mandatory for all new developments to have parks, paths, and walking trails. The city also needs dedicated walking/biking paths as they do in Visalia and Clovis.
38. We live in Stonecrest. I have an 8<sup>th</sup> grader (and 4<sup>th</sup> grader at the elementary school) who I WON'T ALLOW to walk to Pioneer Middle because there is no crosswalk at Pepper and 11<sup>th</sup> and people FLY down 11<sup>th</sup> Ave. Pioneer is our district, yet getting him safely to school other than by car is not an option. We need a lighted crosswalk with a crossing guard mornings and afternoons. LONG LONG OVERDUE! Thank you.
39. What I would do to improve walking is make safer sidewalks.
40. School crossing guards and more trees and no way to walk to Sierra Pacific from my neighborhood.
41. We need something like Woodward Park.
42. Sidewalk needed on the east side of 11<sup>th</sup> just south of Flint in Hanford. Also, a crosswalk is needed between Fargo & Flint on 11<sup>th</sup> for kids to cross the street.
43. Something that I think would improve my walking area is more crosswalk signs and for there to be as few as possible stray dogs because they are a threat to safety.
44. Sidewalk down Flint Ave. between Glacier and 11<sup>th</sup> Avenue for children walking to/from Pioneer Middle School AND high school students walking to/from bus stops into the adjoining neighborhoods.
45. There are no safe locations to cross streets in the neighborhood as speed limits are NEVER enforced and drivers speed in excess of 50-60 mph through the neighborhood (Silver Oaks), making it exceptionally dangerous for children. Frontier Elementary has NO delineated crosswalk from the neighborhood to the school.
46. Crosswalks in more areas, and enforcement on unsafe driving in neighborhoods.
47. There needs to be at the very least a crosswalk with flashing lights (a stop sign or light would be better) at the intersection of Pepper and 11<sup>th</sup> Avenue. There are so many kids that walk or bike from the Stonecrest subdivision and cross 11<sup>th</sup> Avenue to get to the middle school. SO VERY DANGEROUS!!! The cars are going way too fast on 11<sup>th</sup> and those poor kids are playing Frogger with the cars.
48. I would love to see wide sidewalks that were wide enough for 2-3 people to be able to walk side by side.
49. Crossing guards, rest benches.

50. Fix sidewalks, more bike paths, and label bike paths with signs.
51. There needs to be a sidewalk from Glacier Way to 11<sup>th</sup> Ave. on Flint Ave. for kids that walk and bike to Pioneer Middle School from Quail run housing development.
52. More lighting. More patrol in the area especially mornings when kids are walking to school.
53. There isn't much to do to the street I live on as it is a major road. Having other options of places to walk or ride a bike would be great. The zones on the side of the railroad tracks that run through town from main St. to Fargo would be beautiful with a path, trees, and solar lights.
54. A crosswalk in front of JFK/Richmond with lights and signs posted, similar to the crosswalk near Hanford High School.
55. There are many streets in residential areas that we would like to walk in where there are no sidewalks.
56. There is currently no safe crossing for kids to cross 11<sup>th</sup> Avenue walking to Pioneer Middle School. There needs to be a lighted crosswalk or stop light at Pepper and 11<sup>th</sup> Ave. Also walking from the new Quail Run subdivision to Pioneer Middle down Flint is unsafe. There are no sidewalks for a portion of the route.
57. I would like to cover all the holes in the ground and make sure there will not be any animals such as stray dogs, ducks, and ground hogs so anyone can't be hurt.
58. I think it would be great if biking/walking was encouraged by having a family biking/walking day downtown. Perhaps one Sunday or Saturday per week (you could begin with once a year). A downtown street could be closed off a couple of hours. I have seen this type of activity that involved many businesses as well as non-profits that lined that street with fun outdoor activities outside (in Fresno). I have also seen this done in another country, they did this once a week, it was fun and safe for families because it was a safe sectioned-off area.
59. More sidewalks.
60. Crossing guards at school.
61. Definitely ticket unsafe drivers. I moved my child from Pioneer to Frontier due to the unsafe crossing and reckless driving in front of the school. Place flashing lights in the road in the crosswalk to show drivers people are waiting to cross the street.
62. It would be wonderful to have a walk/bike trail. I would feel safer letting my students ride their bikes knowing they didn't have to worry about distracted drivers. It would be safer than riding on the streets.
63. Ticket unsafe drivers. Better lit school crosswalks like near our Hanford High campus.
64. I would make sure the light poles were working properly because sometimes by my house the light goes out.
65. They should slow down the cars that go by because there are people who walk there.
66. I feel when on days I walk home from school unsafe streets, sidewalks, drivers, and crosswalks make me not want to walk home. I would enjoy walking and riding my bike more if I know the route is safe but as it is right now I know it is not safe to walk home from my middle school to my house.
67. Too much traffic.
68. More bus stops.
69. School crossing guards.
70. Tell people to keep their dogs on a leash. Also, to fix the sidewalks so that way when we ride our bikes we won't fall off. Lastly, they should have crossing guards around our school at Woodrow Wilson junior high because there are way too many crazy drivers in our community and I wouldn't want one of my friends to get hurt.
71. What I would want to have is more shade.
72. Fix the sidewalks.
73. Fix the street.
74. A ticket to unsafe drivers and a lot more crosswalks and short cuts so we don't have to use the roads.
75. To make a place for bikers.
76. Make all stops near Woodrow a four-way stop so kids can cross safer.
77. Shade, benches.
78. Add a crosswalk and stop sign at 11<sup>th</sup> and Pepper so that school children and walkers can SAFELY cross that busy street!
79. Make it safer by fixing the sidewalk.
80. You can make a road only for walking. That can make walking safer.
81. More smooth roads so people don't trip.
82. Maybe a bench to sit on and a water fountain.
83. Trees and a clean path, and for bikes there can be big shade trees and a track, and then a playground for kids and dogs.
84. Make the streets more smooth so people don't fall.
85. Nothing.
86. Not having a lot of leaves on the sidewalk.
87. More benches, water fountains and more crosswalks.
88. I think making an investment, especially with the growth we are beginning to see in new housing, to develop areas designed specifically for cyclists and runners would help to keep them safe and encourage more people to participate in a healthier lifestyle, but it will take a commitment from our city and county. It would be a way for them to demonstrate to our community that they value a healthy lifestyle.
89. One thing is to give a ticket to unsafe drivers.



90. Enforce laws for keeping dogs on leashes and keeping sidewalks clear more effectively.
91. 1) Have people take care of the cats. 2) Take care of trash. 3) More crosswalks. 4) Last, stop people from racing around neighborhood.
92. To add crosswalks signs because people have to wait until all the cars go before the person can go. Some people live near traffic lights and I think it's fair that they can walk and the cars can wait. Put cameras everywhere.
93. Crosswalks.
94. They should have crossing guards.
95. Making the divers stop when kids are walking.
96. No stray dogs.
97. Fix sidewalks.
98. Add heaters on the sidewalk.
99. Having a crossing sign or have one of those people that hold the crossing sign.
100. Ticket unsafe drivers.
101. Water fountains.
102. More sidewalks and crosswalks would make it easy.
103. Put crossing guards because of the unsafe drivers.
104. Adding more trees and just fixing any broken sidewalks.
105. Fix the broken sidewalks and do not let dogs out. They could chase you.
106. To ticket the bad drivers.
107. Fix the road of China Alley at the store.
108. More crosswalks.
109. I would like to add sidewalks so we don't have to walk on the road.
110. One thing I would want to change is the crooked roads and fix the fences.
111. Give more tickets to unsafe drivers.
112. More areas to walk and ride a bike in.
113. Definitely make sure needed crosswalks exist.
114. Post school crossing guards.
115. I would just fix the sidewalks.
116. More crosswalks.
117. Having shortcuts or trails for walkers, where there aren't a lot of cars.
118. Ticket unsafe drivers and clear the streets of all the branches that fall and all the trash.
119. Put a new sidewalk for bikes so they are not in the street.
120. Better sidewalks that are not broken.
121. I suggest that they should add a street on for biking and walking.
122. Give a ticket to unsafe drivers.
123. A lot of crosswalks.
124. Add signs as to where it's safe to bike and where it's not.
125. Post school-crossing guards.
126. Put more cops out.
127. Put a camera and catch that person that is speeding.
128. Fix the sidewalks and fix the roads for preventing car crashes.
129. They can make the roads more safer. You can also put more stop signs.
130. The thing I would like to fix is that cars not go fast.
131. One think I suggest to make Hanford better is to make speed limits lower.
132. Have crossing guards at every elementary school.
133. Give a ticket to the unsafe drivers because somebody can get hurt.
134. Put more stop signs.
135. Fix the fences behind the ditch where all the graffiti is behind Centennial Park in Hanford. We can give tickets to speeding drivers because my friend almost got hit in my neighborhood.
136. Give a ticket if the driver is speeding or also drinking and driving.
137. Stop the graffiti.
138. More crosswalks for people.
139. Fix the sidewalks.
140. My suggestion is to make it safer in neighborhoods and more lights.
141. A school crossing guard.
142. Stop people who look like they are unsafe, just in case anything is wrong.
143. Have these signs saying that you can only go a specific speed.
144. Post crossing guards or ticket unsafe drivers.
145. There needs to be a cop or other person to give tickets for speeding in a school crossing.
146. Put more benches and shade. And also put more sidewalks.
147. I think we should have a police or sheriff to make sure that no one gets hurt or kidnapped.
148. In my area I have a pretty popular park, Freedom, so it's always a pretty busy street when trying to walk over there. Kids at age 4 or 5 can run across the street and get run over by speeders so I think we should start to ticket more of these unsafe drivers.
149. Nothing that I could think of.
150. Near my nana's mailbox, the sidewalk is very cracked and one side is higher than the other. I've almost tripped due to that, even while riding my bike.
151. I'm not so sure what I would do.
152. Can't walk that much in Lacey Park because there are some weird people always watching me.
153. I would like to improve the number of crosswalks in the areas that many families walk. Also, to have more bike lanes on each side of the road.
154. Add some sort of a gate that only bikers, scooters, or walkers can go in, so they can be nice and safe.

155. Improve the air quality for people with asthma. This will improve the popularity of walking, biking or skateboarding.
156. Maybe have their own lane for walking instead of a sidewalk.
157. If I can improve things around my area it would be aggressive drivers, some broken sidewalks.
158. I would put up more stop signs.
159. Have more crosswalks. I would feel much safer with crosswalks, especially in the bigger roads, like near many neighborhoods.
160. We need more school-crossing guards.
161. I think a helpful thing would be to keep track of unsafe drivers, as my little brother and I use crosswalks at the intersection and I can see some drivers aren't paying attention.
162. Post school-crossing guards.
163. Maybe ticket unsafe drivers. When I walk I always see drivers on their phone.
164. Less cracks on the sidewalk and less bumps.
165. I would like more sidewalks and bike lanes. Also fix stop signs and road signs. My biggest issue is that roads have holes in them and aren't smooth in a lot of places.
166. I think more trees because it brings shade, which we need during the hot days.
167. More street lights.
168. Maybe some more sidewalks along the southern side of Dairy.
169. Make the streets prettier, make the town better with more stores and attractions. That would encourage people to walk more often.
170. I would put up traffic lights and street lamps and add crosswalks in areas where they are needed.
171. Crossing guards near Monroe Elementary would be amazing! There is a lot of traffic (biggest school in Hanford). Parents speed, don't adhere to rules and kids are constantly moving around traffic, instead of the other way around.
172. That all sidewalks should be fixed or most of them.
173. Add sidewalk down roads without sidewalks to make it safer for both the pedestrian and the driver.
174. As a teacher I would LOVE to see school crossing guards!
175. They can add more nice places to see or somewhere you can relax.
176. Fixing sidewalks.
177. More sidewalks.
178. I would like to improve the sidewalks.
179. One of the things I would do to improve walking in my area is by clearing it so it's just a nice clean area.
180. There are not that many unsafe things here. But there are some broken sidewalks that should be fixed.
181. In my neighborhood I want more crosswalks. I also want some stop signs because we only have yield signs.
182. I would want more crosswalks around the town.
183. To fix to sidewalks.
184. More sidewalks and also more crossing signs.
185. Slow down the speed limit.
186. Nice lighting projects with better walking places. I think we should look harder for people violating speed limits.
187. Fix the sidewalks and make them wider.
188. I think that schools should give students maps that could easily lead them to their school.
189. I would pick up trash, move rocks out of the way, give people a heads-up so they don't trip, ask the construction workers if they could fix the cement, and walk with the elderly so they don't trip.
190. Add more sidewalks on residential streets.
191. It's OK how it is.
192. A sensor to track cars if they drive through the stop light so they can be arrested and not be able to drive and not able to hurt anyone.
193. You could give unsafe drivers a ticket and fix sidewalks.
194. Put a speed limit and some street lights.
195. More crosswalks.
196. I would like more doggy bags and trash cans.
197. I would fix this place. I would build more things to do and fix the roads, sidewalks, streetlights, and the recreational things. I would also like to grow the population and expand Hanford.
198. I wouldn't have so many dogs in the streets or have bad people out there.
199. The only thing I would improve is if there were more crosswalks.
200. I would change the fact of stray dogs, the construction that is around when walking, all the trash that is on the streets. More community events.
201. Fix sidewalks so no one can trip and fall down.
202. Fix the sidewalks, post school crossing guards or ticket unsafe drivers.
203. I would change all the accidents that happened in the world and help the poor people who struggled through it.
204. Sidewalks.
205. I would add better filters to water fountains and more benches under trees.
206. Nothing much.
207. More lighting.
208. More crosswalks and ticketing unsafe drivers.
209. A lot of crossing guards because some drivers are not safe.
210. I would like that sidewalks not have bumps because sometime people can fall.

211. We could use crossing guards and tickets for unsafe drivers and have some fixed sidewalks.
212. School crossing guards.
213. I don't know.
214. I would like to see more sidewalks since there are some places where you have to walk on the lawn or on the road since there is no sidewalk.
215. Create better parks, Add more school crosswalks on the north side of town.
216. The broken sidewalks, missing crosswalks and trees.
217. Maybe more street lights so it is not as dark at night in some areas.
218. Where I live (Dairy Ave. intersects with business park) the park is very dark. There is about one light post and there are no benches or even trash cans in that park which is very unfortunate because there is already enough trash as it is. There should also be a shady part at that park and also whenever it rains the whole park fills up with nasty green water.
219. I would fix the sidewalks, crosswalks due to the safety of being a pedestrians. I would also make sure that there are more trees for shade on hot days.
220. Put more safe crosswalks and make the streets a little bit brighter.
221. Fixing the sidewalks will help out a lot because sometimes people feel like the streets are too dangerous so it's better to have plenty of sidewalks.
222. Ticket unsafe drivers, add more light posts, and make crosswalks and street lines brighter and more visible.
223. Get rid of the dirt path and replace it with concrete. Get the side of the bushes clipped off. Somehow widen the sidewalk a few inches to allow more room for the students.
224. Where I live I don't think there are any ways to fix those problem because the area wasn't really made for walking.
225. More crosswalks and wider sidewalks for us to walk on.
226. Putting lights around and fixing sidewalks and making the scenery prettier.
227. More lights and helping get stray dogs off the streets.
228. Perhaps post school crossing guards.
229. Patterson Ave. between 6 1/2 and Dairy Ave., the road needs to be fixed. The cars swerve to the side due to the road having pot holes. The road is not safe for pedestrians to walk on either ends of the sidewalk.
230. In the Corcoran community park, an improvement is to add a crosswalk near the parking lot and Family Dollar to make it safer for students and people to cross the street so they don't have to jaywalk to get across.
231. More sidewalks, and TICKET UNSAFE DRIVERS.
232. I would like there to be more light around Corcoran because I feel like a lot of people are scared to walk at night because of the dark and they think someone is going to do something to them.
233. Put a bench on the sidewalk.
234. Maybe have more noticeable crosswalks because some are not painted well which are sometimes hard to walk through.
235. I would place more streetlights around the city because it gets really dark and unsafe to walk at night.
236. I would like to improve the number of yards that don't contain any sidewalks which forces me to walk on the roads on the way to school. At night I would appreciate more light posts around town since in my area it tends to be very dark.
237. Some sidewalks are in need of fixing. But some rest benches would be so great.
238. Not enough crosswalks. I got hit by a car in 6<sup>th</sup> grade because the way to school had no crosswalks and you should be ticketing unsafe drivers because the person who hit me got away with it like if it never happened.
239. I would really highly advise to fix the broken sidewalks and ticket unsafe drivers near the schools.
240. One thing that would improve the walking in my area would be fixing the sidewalks. Another thing to help improve walking would be to ticket the unsafe drivers.
241. I would add more crosswalks.
242. More street lights.
243. Make sure people drive better, and respect the stop signs and stop lights. The stop lights in my town also do not tell people to stop turning, so drivers turn sometimes when the light is red and almost hit pedestrians.
244. The reckless drivers need to be worked on because they don't get it that they can hurt someone. Put more stop signs, crosswalks and stop signs. Drivers tend to drive fast on long street without stop signs. Make crosswalks more visible.
245. I would improve the four-way stops because I can't tell if a driver is going or not.
246. Everything is good so far.
247. I would like there to be more crosswalks in my area. I get nervous when I cross certain streets to get to my house due to the traffic. I believe crosswalks would reduce this fear and make it easier for myself and others to get from one place to another.
248. Fix sidewalks.
249. I would have animal control take away all the stray dogs and give them a home. It is unsafe for dogs to be walking without a leash in a community. I have gotten almost attacked by dogs or would have gotten attacked if they had not been on a leash. People with dogs in their front yards should be required to put up a fence in front of their houses if they don't have one

- for extra protection for those walking. They also should be required to have the dog on a leash at all times. It is way safer for walkers.
250. I think more lights would be better to be more safe.
  251. Put up more stop signs because not only can that help people walking but also drivers.
  252. Sidewalks and maybe add warning signs by the schools. Tell the bus drivers to open their stop signs when kids are crossing the opposite side of the bus, so that the cars are careful with the kids crossing. When I or the other kids try to cross the road the people driving can't see us because the bus is in the way. Hopefully you understand.
  253. Better lighting at night.
  254. Local communities need a vision for future investment in walking/bicycling pathways so that portions of impact fees can be devoted, and or improvements districts established to ensure long term support for maintenance.
  255. Use the "Green Book," (A Policy on Geometric Design of Highways and Streets) to plan and design the best of facilities rather than continue to permit mediocre projects which discourage walking (and cycling).
  256. At one time, I heard that there might be a bike/walk path between Hanford, and Lemoore. That would be great. Any flat paths in Lemoore would be great.
  257. Fix sidewalks. I like the idea that Fresno has with Woodward Park.
  258. Fix or install sidewalks.
  259. Ticket unsafe drivers, especially when children are going to or coming from school.
  260. More lighting.
  261. More access to natural areas.
  262. More paved recreational trails; better lighting in neighborhoods; wider sidewalks.
  263. Speed bumps by Lincoln Elementary. So many fast drivers around this area (Irwin Street).
  264. Improve the brightness of street lights.
  265. Ticket unsafe drivers. Plenty of drivers are doing about 50 mph in a 35 mph zone.
  266. I would place bigger trees. Also ban bicyclists from sidewalks.
  267. I think it would be a nice thing to have a dedicated path (without cars) to ride bikes and walk.
  268. Better lit streets and more stop signs for drivers.
  269. More and better street lighting. We need more crosswalks!
  270. Lack of sidewalks can be a huge deterrent.
  271. The city could use more walking paths/areas, maybe by creating more parks or utilizing current parks to add more resources there.
  272. I would like a general walking trail throughout the whole city of Lemoore. The city of Reedley has a beautiful one. It's sidewalk and black top, with benches, water fountains, and trees. I would like it to stretch from the north east side of Lemoore, down Hanford Armona Rd. heading west, then head to the south side of Lemoore following 19<sup>th</sup> Avenue. It needs to be well-lit, with trees and benches, and water fountains. It also needs to be large enough to allow people to walk on both sides (or ride bikes).
  273. Cut down on the plowing and spraying during the day hours.
  274. I only used the above park a few times. The park did have a nice walking path. The parking area should be larger and better marked.
  275. Visalia has walking/biking trails all over the city.
  276. Some drivers speed down Glacier Ave. between Fargo and Flint Avenues. The speed limit is 35. There are two parks along Glacier usually full of kids and families. Have a cop sit out there and start ticketing speeders.
  277. I would love to see dedicated bike/walk paths so that there is no risk of being hit by cars. I think that the canal banks could be a really awesome option for doing that.
  278. Sidewalk on the west side of Fox St. between Cinnamon and Hanford Armona Rd.
  279. Add or improve lighting.
  280. Install lights in poorly lit areas. Crosswalks on Bush and Champion St. going to City Park. Keep weeds cut down and keep them from taking over the sidewalks. Speed bumps to slow traffic. Fix non-working street lights west of Bellhaven going to West Hills.
  281. More lights.
  282. Sidewalk on Fox.
  283. I would install dog waste stations with poop bags and waste cans so that people would be more likely (?) to pick up after their dogs. You see this kind of set-up a lot at the coast. It IS the law, right? Also, it would be great to have trash cans available along popular walking areas to hopefully reduce littering. People seem to think that bushes are where they're supposed to throw away their soda cans and cups.



## B-4 | Survey Question #9

*Have we forgotten any general challenges to biking?*

1. It's tiring.
2. Rules of the road are not enforced. Bikers ride the wrong way, don't adhere to traffic lights. Education and enforcement are both needed to make biking safe for everyone.
3. Don't have a bike.
4. Trash.
5. No sidewalks.
6. Too few crosswalks.
7. Cars don't stop at crosswalks, don't give bikers time to cross.
8. Drivers are often very aggressive, especially before and after school hours. I think the police needs to spend more time patrolling the streets during these times to provide safety for our children.
9. Fallen trees.
10. Also, the south side is scary to ride through.
11. 11<sup>th</sup> Ave.
12. Drunk drivers.
13. Sometimes it's too dark so accidents could happen way more easily.
14. Carrying too many things.
15. Some people might not have bikes.
16. Lack of a comprehensive education system for cyclists.
17. Bike lanes that disappear.
18. Time in a busy schedule.
19. Low trees over sidewalks.
20. Don't like bike riding.
21. I have a child that has to be taken to daycare that makes the commute much longer.
22. Weeds, goat heads and other things that puncture tires.
23. I do not ride a bike. When I see bike riders in town or out in the country and have to drive by them it makes me uncomfortable.
24. Kidnappers.
25. North Hanford is a beautiful place to ride, especially in the outlying areas. However, there are drop-offs and no bike lanes in some areas, such as Fargo and 12<sup>th</sup> to Laton.
26. Some bike paths need clearing of goat heads.
27. Need street sweeping.
28. Narrow shoulders, not enough "Share the Road" signs.

## B-5 | Survey Question #10

*Where (if at all) do you bike for recreation or transportation? What do you most enjoy about biking there? What do you like least?*

1. I bike the Laton loop occasionally. I enjoy riding my bike. There is some pretty country out there. I least enjoy the bike lane on 12<sup>th</sup>, it has large bumps about every 10 feet. And motorists here are not cyclist-friendly. I've almost gotten hit, my friend just got hit yesterday riding home from work. We've had multiple friends in the cycling community get killed. I have kids, so now it's to the point I feel like it's too unsafe to ride around here. The bike lanes we do have in town have cars parked in them so I'm not sure why we even have them. We can't use them with cars parked in them.
2. I bike on Douty Street to my house after school. I don't enjoy it!!!
3. Fresh air.
4. I just like biking.
5. Silver Oaks, Hidden Valley and Freedom Park.
6. I like biking to a park nearby because I like to relax under a tree when I'm tired.
7. I don't like how the place is far away from where you are going to.
8. There is a lot of busy roads.
9. I only go to the park and I enjoy riding down the sidewalk, but sometimes it is uneven so I have to stop so that I won't fall.
10. I like that biking is very peaceful and also fun.
11. I like riding to my friend's house and biking around the neighborhood. And people can't really see you most of the time.
12. I like riding around with my friends, but I hate when it gets dark.
13. I love riding my bike to school. It's healthy and fun.
14. I like to bike just around downtown, the view is spectacular and there are several resting areas.
15. I enjoy biking to my cousin's house but there is no lane for me to bike in so I take the sidewalk. I also like going to Hidden Valley Park on my bike with my family.
16. I mostly enjoy the freedom that you get from riding a bike. I feel more free and enjoy it a lot.
17. I don't ride a bike.
18. Parents don't trust me to ride.
19. I like to just enjoy the breeze. I don't like crossing roads.
20. Neighborhood parks, to the store, and my kids ride to school.
21. I like to ride my bike in the park. What I like least is riding my bike by myself.

22. I bike around my house. People drive too fast sometimes. A road to bike on with no cars would be safe.
23. On canal paths in the country.
24. To parks nearby. Bike lanes are needed and sidewalks repaired.
25. I enjoy biking to my friends and cousin's house. What I enjoy most is the colorful leaves and what I like the least are stray dogs.
26. Kids and neighbors like biking to Pioneer Middle School and the high school bus stops. We don't like that there are missing sidewalks and bike lanes.
27. I like biking around or in a park where there is no traffic and you can feel safe.
28. Daughter rides bike to school. Least: not enough crosswalks.
29. My children ride their bikes to school every day to Pioneer Middle School. We live on the west side of 11<sup>th</sup> Avenue between Fargo and Flint. They love riding their bikes but I worry everyday about crossing 11<sup>th</sup> Avenue. There is no sidewalk for them to ride their bikes up to Flint so they can cross using a crosswalk. Unfortunately they cross at Saffron and 11<sup>th</sup> Avenue. Drivers are normally over the speed limit. On a daily basis my children also ride their bikes in our neighborhood. Off of 11<sup>th</sup> on Saffron the road curves so there are blind spots and it's a straight through road to Glacier, drivers drive way too fast and there are no speed limit signs down this road.
30. From Hanford to Layton. A nice ride except for no bike lanes and speeding cars.
31. We bike around our neighborhood. We also take our bikes when we go camping.
32. North Hanford: 11<sup>th</sup> and Douty between Flint and Fargo.
33. I bike almost everywhere in town. I avoid the main areas around Target and the mall due to the major traffic which is unfortunate because that is often the places that I need to go. The rest of the time I bike to work and to my families' houses. Neighborhoods and older streets like Irwin and Douty have nice shoulders to bike on.
34. I would like to bike for both recreation and to avoid using the car for small shopping trips. I would use the bike a lot more if there was a better way to share the road (bike lanes or wider streets).
35. I love to bike at Centennial Park or around my neighborhood. I don't like biking at Woodrow Wilson.
36. Cost Less Foods.
37. I bike in the street.
38. To the corner store and around the neighborhood.
39. Riding in the sidewalks.
40. I ride my bike around my neighborhood. It's peaceful and quiet. What I don't like is that there's nobody else, I think because their parents are scared that they're going to get lost or something.
41. Love biking.
42. I bike mainly in my neighborhood.
43. I love biking because sometimes you could feel the air and look at the beautiful weather and just so amazing.
44. I like to bike at the park.
45. To school.
46. I don't like biking and when you bike you gain more weight than running.
47. I like going to stores.
48. I get exercise.
49. To school.
50. That there are pretty lights around my neighborhood because it's time for Christmas.
51. When I go to my cousin there are too many stray dogs.
52. I bike around my neighborhood, I enjoy that there are fewer cracks in the road. There is little to no light in some areas.
53. To school.
54. There's space. I don't like it because there are uneven sidewalks.
55. I bike to A&W and nothing annoys me.
56. I go to the store, the sidewalk is smooth but there are lots of things that could pop the tire.
57. I don't like it because it's foggy.
58. More benches to rest or if there are water fountains if we get thirsty.
59. To the store to get stuff.
60. Cracks in the sidewalk.
61. There's a lot of space to go biking. What I don't like about it is that there's uneven sidewalks.
62. I like to ride my bike some times.
63. I don't really bike because it's too risky for me!
64. Looking around at all the trees and alleys, maybe eating at the same time.
65. That I can get fresh air that cars pass by.
66. Where I go to transportation with my bike is go somewhere where it has grass and little hills and to have fun. The most enjoy about biking is you have more energy to get up from watching TV and biking for me is fun because I race with my brother and it's fun and gives you a lot of energy and it helps you with your health and your bones to move more. I don't have nothing that is the least I know.
67. People try to steal my bike when it's chained up to a pole. They try to break the chain.
68. Freedom Park is where I go.
69. I walk a lot to school and to home and I get really hot and tired.

70. I ride my bike to the park for recreation and the only thing I do not enjoy is that traffic can be rough.
71. I like the way the wind goes to my hands.
72. I ride my bike to school and back and to my friends' houses or to the store. I mostly enjoy hanging out with my friends. I don't like the dangers of riding your bike.
73. I love the wind blowing in my hair.
74. I like biking places because it's fun with your friends. I like least about biking is that my legs hurt and I'm afraid my tires are going to pop then I have to walk.
75. I like to ride to stores and ride back.
76. Where I like to ride my bike is to the store and what I don't like I that there is a lot of bad drivers.
77. To my cousins house but I barely do it because of the cars.
78. They can put more paths.
79. I ride to my school and back but the sidewalks have a lot of uneven places.
80. I ride my bike with my mom and dad to the DMV and back home.
81. I ride my bike to my friend's house.
82. I mostly ride to my school; it's a lot of fun but there's sometimes busy roads.
83. I like to ride my bike to my grandma's and to my friends'.
84. I like to ride a bike at the park because it's safer and there are paths at the park.
85. I like to go to my friend's house but I don't like when the cars are going fast.
86. I like to go biking but the drivers are crazy. They act like they own the road.
87. I like to go around my house but the thing that I don't like is there are cracks.
88. I like to go around my block. There are a lot of speeding drivers.
89. I like to bike around my school (MLK) and my neighborhood. What I like least is crazy drivers.
90. I like to go the park. And I feel that a car is going to crash into me because I got hit before.
91. I like biking to my dad's house because it's a lot fun. I don't like it because there are not too many bike lanes.
92. I bike just for fun. What I like about it is you don't have to pay for gas or anything. Also I don't have a reason that there's a problem.
93. I like to go the park because it's a lot of fun to go out and ride my bike.
94. I ride my bike around my house.
95. I'm usually biking around my neighborhood it is somewhat nice because it's very quiet and you get to interact with other kids, but cars and ice cream trucks need to really watch out because they think it's nice to speed because they are in a neighborhood and they're almost home.
96. To school.
97. Where I live there are not too many bikes.
98. I like to bike in my neighborhood; I like it there because I feel safe and the neighbors are friendly. What I don't like is that there are a lot of stray cats near my home and another street where I often ride my bike at.
99. The park because we head there, then go to different parts of Hanford.
100. I bike and walk to Hidden Valley Park. I enjoy the big grass area there. I don't like the fact that some benches are in the middle of the biking and walking lane.
101. Crossing Grangeville is about the only reason I don't either ride my bike or walk to school, so the best thing that would fix it is if there would be a safer biking lane for kids trying to get to school.
102. At all the parks in Hanford there is a bike lane and I enjoy that but people get in the way so you can't get past.
103. I don't bike for recreation or transportation, but if I did I wouldn't enjoy it because of the people not watching where they are driving.
104. I don't bike, I walk.
105. To go to the skate park and ride the bike down the hill.
106. I like biking to the Civic Park and there is nothing wrong with it, it's perfect.
107. I bike to school sometimes. I enjoy the fresh ride in the mornings but I least like that there are no bike lanes on my way to school or my way home.
108. The park. I dislike the bumps on the way to the park but I like that we can ride there and there is a bike rack but I wish it was bigger to fit more bikes.
109. I bike for both recreation and transportation, and I like how it gets me places faster. What I don't like is that it is hard to ride when there is a lot of bumps on the sidewalk or that cars pass by to close.
110. I don't because the town is boring.
111. I sometimes go to my girlfriend's house or the store. I enjoy listening to my music on the way there. The thing I like the least is that there are dark/unsafe streets and there are not as many bike lanes.
112. My neighborhood. There isn't much traffic, so it is casual.
113. I like biking wherever there are bike lanes. I feel safer than utilizing streets without them.
114. Around Hanford for recreation. In central Hanford to work. Bike lanes are enjoyed most. Traffic and cars parked in bike lanes are liked least.
115. What I most like to do when I bike is that I like the wind in my face that really relaxes me and that is good for a ride. What I don't like is that there are not too many bike lanes.

116. Most: recreation.
117. I like to walk with my dog. I take her to my friend's house to play with her dogs and I just walk my dog because I want to.
118. I bike to the park. What I mostly like enjoying about biking there is the exercise.
119. I bike to the park and to school.
120. Like riding in the park.
121. What I like about riding my bike is that you can exercise, you can see pretty trees, and you can get fresh air the whole way. I go to places like friends' houses, parks and around the block.
122. I like to bike to the park because it makes my dog happy and I don't like how she tugs.
123. There aren't recreational bike routes (or a bike park) so bikers choose to ride their bikes on tracks at public parks even though it's prohibited.
124. I like biking around where I live. What I like least is that it can be sometimes scary because something could happen.
125. I love it when we bike to the park. I love the times when dad actually lets me get ice cream. I hate the heat!
126. I like it when I race with my friends.
127. I like to ride my bike around town, but not the south side of town. I like to ride my bike in the baseball park and to go through the park.
128. At the park, lots of places.
129. I bike to the park. The thing that I like is biking around the park and the thing I hate is there are a lot of bumps.
130. I hate the honking of car horns.
131. Downtown Hanford. Great shops and fun things to do at night.
132. My family and I enjoy biking around Armona Elementary School and the surrounding neighborhoods. We bike for recreation. Sidewalks along 14<sup>th</sup> Avenue are sporadic and in disrepair. This makes it difficult to ride.
133. I like biking around my block or when camping. I do not really bike to go to places because a lot of the places are too far and I do not have that much freedom yet.
134. I love to bike at Freedom Park because not a lot of people go there and once again it's lovely there.
135. I love biking. I love going to school.
136. I like biking at my neighborhood because it's very fun. I enjoy it because I'm having fun with my brother. What I don't like that much is cracks on the street because I almost fall down.
137. Having my friends with me.
138. I like biking because it's fun.
139. Sometimes on my road.
140. When I ride my bike to the donut shop, I feel unsafe because of the cars and there being no crosswalks.
141. I like how the cold air hits your face and say hi to all the people.
142. Downtown. It's pretty downtown.
143. Alone time.
144. The breeze hitting my face as I ride my bike.
145. I like to bike to the middle of town and back since it lets me see my community and if it's getting dark the main street has light.
146. I bike to the park a lot on my free time. I most enjoy the breeze hitting my face and the greenery and trees at the park.
147. Just looking around town while riding my bike is always great.
148. I love biking in the park but dark streets make it hard to.
149. I do not ever bike. I usually walk.
150. Around the park. It's fun and good exercise.
151. I do not bike but when I have done it a few times I had to ride in the road due to not having any sidewalks.
152. The park, or the stores to get needed items.
153. It lets you explore more around your local community.
154. Sometimes I will go bike riding around the town for fun with some friends. I often ride my bike to practice and I actually enjoy the exercise. The only difficult part of biking is that you can only carry so many things while riding.
155. I do not bike since I don't own a bike.
156. I bike around most of the time where I need to go. I enjoy getting exercise. I do not like that there are not enough bike lanes.
157. I ride my bike from my house to the park. What I most enjoy is simply riding my bike to the park. What I least enjoy is when there isn't a smooth sidewalk.
158. I don't bike very often.
159. Just around town. I like the wind, and I dislike distracted drivers.
160. Around town, streets are often empty so it's an easy ride. There are not enough bike lanes to safely travel.
161. Just to school and I keep going there because I have to and to see my friends.
162. I go to school and back.
163. I don't usually bike even though I do enjoy it.
164. Around town—smoother roads.
165. Sometimes I ride my bike in the neighborhood.
166. I like to bike around my neighborhood and I like that I don't have to worry about the whole town seeing me or getting run over by someone. My neighborhood is safe and people don't really go in unless they live there or are going to a party or something.



167. Around town.
168. It's quicker to get there. Least is it gets too dark
169. Like I wrote in the previous question I do not bike or walk anywhere for recreation or transportation.
170. Nowhere here locally. Great examples include natural bicycling pathways in Tucson, AZ, and places like Davis, CA where investment has made safe pathways separated from vehicular traffic.
171. I have a set route in northern Hanford for cycling. Wide, clean fairly new streets. I bike for transportation all around Hanford.
172. Occasionally during nice weather I ride my bike to work. The most annoying part is lack of bike lanes. I've gotten several flat tires due to debris and goat heads that puncture my tires on the road and sidewalks.
173. Hanford. It's fun, saves gas, recreation with children.
174. The exercise.
175. I bike 50 to 100 miles a month for recreation. Mostly go out of Hanford on rural roads.
176. I bike extensively around Lemoore, as my family only has one car and I use my bike as my primary means of transportation. I enjoy the bike lanes or large sidewalks where present, but they often disappear without any alternatives. Also, train tracks and several intersections create extremely dangerous bottlenecks for bikers, walkers, and drivers all pressed together.
177. Inconvenient in general for transportation, not very appealing for recreational riding. Farmland is not very conducive to riding.
178. Around my neighborhood, The Vineyards housing off Fargo and Fitzgerald. I enjoy walking around the grassy park. However, the street lights are horrible and they barely light the streets and sidewalks.
179. My kids bike while I run behind them. They love visiting the local Starbucks.
180. When we did bike we went to the grocery store. We have baskets on our bikes to carry groceries. Sometime just to take the kids around.
181. I have used my bike to run errands and for regular exercise. I don't ride my bike as often as walking/running.
182. A little in our neighborhood. We have a closed-off street that the kids can bike in; neighbors are pretty good about driving the 25 mph speed limit.
183. I bike in my neighborhood. I most enjoy biking there because it is close to my house. What I like the least is that cars sometimes block the driveways, causing me to have to go around.
184. I don't feel safe biking for recreation or transportation in Kings County. I usually drive to Clovis/Fresno to bike for recreation because there are designated biking routes away from car traffic. Bike lanes are also wider. I do like the bike lanes in Lemoore on Cinnamon Street because of the wide roads and clearly marked bike lanes. I avoid Lemoore's East Hanford Armona Road because drivers do speed there.
185. Grangeville, 16<sup>th</sup> Ave., Mt. Whitney, Laton, 43, 18<sup>th</sup> Ave., Laurel, etc. Most enjoy the Kings County Bike Club group. Least: rude car/truck drivers, rough shoulders (12<sup>th</sup> Ave, Grangeville).
186. Mt. Whitney Street from Riverdale to Laton.
187. I ride every area of Hanford from Hanford Armona Road north. I simply enjoy our town; it's like comfort food. I periodically ride to Laton or out to Hickey Park. I would do the latter much more often if the roads were in better shape and bike lanes were clearly marked.
188. Downtown, Lemoore Ave, Fox St and West Bush out to West Hills.
189. Out to West Hills College. Looking for less traffic and nice bike lanes.
190. We ride our bikes between Lemoore and Hanford, usually on Grangeville Blvd or Hanford Armona Rd for exercise and recreation. We also ride through the downtown and residential areas to be seen by motorists as safe riders. I enjoy riding on the few wide shoulders and bike lanes that exist and being outside seeing the countryside and livestock. I least enjoy riding where there is very little edge for bicycles and the fact that some drivers do not give us the legal 3 feet minimum distance when they pass us. Also there are some very rude and aggressive drivers who honk, yell, and drive way too close to our bicycles on purpose. We follow the rules of the road when we ride and expect drivers to understand that we are under the same rules as they are as it pertains to turning, stopping at signals, etc. The biggest issue in that regard is public education as to cyclists' right to be on the road and the rights, rules, and responsibilities of both motorists and cyclists.
191. When I bike or walk I love to smell the flowers and pick them for my parents and to see all the beautiful surroundings.
192. 11<sup>th</sup> Avenue is very difficult to ride on a bike due to the cars parked and the 2 lanes of traffic. Grangeville is similar but fewer cars are parked on it.
193. Missing bike lanes--or lanes that suddenly disappear
194. My son rides his bike to Pioneer Middle School every day. There aren't any crosswalks nearby & he has to ride down the busy road of 11th in Hanford. The sidewalk ends part way down 11th & doesn't go all the way to Flint where the only crosswalk is. Now on the east side of the road there is a sidewalk that goes all the way around to the school, but we live across the busy street of 11th & there's no way to get to the

other side of the road without riding all the way down to Flint. Many kids attempt to ride across the street with cars zooming down the road, which is very concerning as a parent.

195. I like to ride my bike around the block. I don't like that random people watch you I need it is disturbing. I like that the light shine bright throw the street.
196. The best part of riding to school is being with my friend but worst thing is the drivers I was riding to school on day but some lady was speeding me and one of my friends going fast because almost to school and there is a bus entrance and she straight up when in front of us and we had to stop really fast and we crashed into each other and she looked at us and left.
197. A few things I would do to improve Freedom park is educate the community members about bike lanes, provide additional areas for people to gather and hangout, not near the bike lane.
198. 11<sup>th</sup> Ave. between Fargo and 198 is a very hard street to navigate north or south. I would like an alternative bike route from north to south possibly using Redington or Irwin St.
199. I also find the lack of space for bikes on the road to be a main reason for not wanting to bike around town. My children are starting to get to the age where I would feel more comfortable with them biking to events if I felt that the roads were more compatible with bike traffic.
200. I like to go to the Hanford library.

## B-6 | Survey Question #11

*What is the one thing (or things) that you would do to improve biking in your area?*

1. Don't allow people to park in existing bike lanes in town. Is there anywhere in Hanford where we could put a biking/walking path? Most cities have them: Visalia, Porterville...
2. Fix the potholes or the rough and uneven pavement.
3. Fix potholes.
4. Smooth roads.
5. I would make more bike paths.
6. I would want to add more trees for shade.
7. I'm fine the way they are.
8. Stop signs.
9. More sidewalks.
10. A bike rack at Taco Bell.
11. I think just improving the sidewalk would be an improvement.
12. Some sidewalks aren't super safe to bike on.
13. More bike lanes.
14. I would make wider sidewalks and make drivers aware that there are people riding bikes.
15. Installing bike racks.
16. The sidewalks.
17. Putting a biking lane so people don't get hit.
18. Bike racks at stores and parks would be nice.
19. The safest thing would be to fix uneven sidewalks and potholes.
20. Put more bike racks and have bike to work days, because all the cars are polluting the air.
21. I think install more bike racks around stores.
22. Clearly abandoned vehicles parked in streets, or blocking sidewalks.
23. I think there should be more bike parking racks.
24. If I did go biking I would put stands for our bike.
25. Make specified bike paths, more than what is currently in place. More bike racks, and a bike trail would be great.
26. We need safe crosswalks and bike lanes that are not on the road.
27. Woodward Park-type area.
28. Something that would improve my biking area is for there to be more boundaries set for more control over stray dogs.
29. Flint Avenue between Glacier and 11<sup>th</sup> Avenue needs sidewalks and bike lanes in order for kids to be safe riding to/from school.
30. Bike lanes would be nice.
31. I would install wide bike paths that were lined off from traffic. I would love to see an area around Sierra Pacific have a bike path instead of the narrow sidewalks next to the new housing. A path that

- connected the College of the Sequoias area to Silver Oaks and the other housing would make a safe and great stretch for bikers and walkers.
32. There needs to be full sidewalk coverage down 11<sup>th</sup> Avenue to Flint on the west side of the road. Could reduce the speed down 11<sup>th</sup> Avenue and maybe put in a crosswalk. Also on East Saffron off 11<sup>th</sup> it would be beneficial to put in speed bumps or some other notification to drivers of the speed limit, to slow down and be aware of children playing. On Base the schools along with community promote the National Walk/Bike to School Day event. As an employee I have been a part of the event and it is a huge event and very successful. Would be good to see that type of event. It's in September and it also could remind drivers that school has started and to be aware of the children.
  33. Create paths/trails.
  34. Bike lanes.
  35. More bike lanes.
  36. Lighting.
  37. It might be a bit much but the installation of roundabouts rather than some four-way stops in neighborhoods. Bike signals in major intersections. General public education about sharing the road with bikes.
  38. Bike lanes should be considered when any street improvement is undertaken.
  39. I would improve covering holes and dirt paths because dirt gets in your eyes where you cannot see and you could bike ride and fall into a hole.
  40. Again, a path where people could walk or ride their bikes will help. There are a lot of driveways and fast drivers that make riding bikes in the neighborhood dangerous. My children do not even have bikes here because of this. They ride their bikes at my parents' house in another town because the road is fenced in and there are trails near them.
  41. That there should be a path for people to ride on but won't get lost or robbed; like a safe path that people can trust.
  42. Install bike racks.
  43. More bike lanes and more crosswalks that light up in the dark so cars could see better.
  44. Make a bike lane for bikers or give tickets to people who park on top of the bike lanes.
  45. Biking lanes and more shade.
  46. Fix the streets.
  47. Bike path.
  48. Bike lanes.
  49. More bike paths.
  50. More bike lanes and people need to drive more safer around bike people.
  51. Roads to be smoother.
  52. Have the sidewalk nice and smooth.
  53. Water fountains and shade places.
  54. Wider bike lanes.
  55. Biking routes and racks.
  56. Fix the sidewalks.
  57. Adding bike lanes to some roads.
  58. Look left and right.
  59. Should fix the sidewalks.
  60. Heaters on cold days and coolers on hot days.
  61. I think the sidewalk should be smother so the wheels don't pop.
  62. We could use more bike racks with lock and more bikeways because there is not that many of them here and the racks should be close to a restaurant if they get hungry.
  63. A bike that is safe to ride.
  64. To fix the sidewalks.
  65. One thing they can improve is keeping stray dogs away.
  66. Nothing, because I don't go biking at all.
  67. Fixing all the road cracks to avoid injuries.
  68. One thing that I would like to have more is more parks to have time to ride you bike and some you can only ride bikes and more things to put your bikes in.
  69. More parking poles/racks to chain up my bike.
  70. More bike lanes because there is only a little bit.
  71. One thing I would change to improve would be to put up signs making sure drivers are aware about cyclists.
  72. Having more bike racks.
  73. Have bike lanes.
  74. More crosswalks.
  75. They should make it safer by adding biking zones.
  76. One thing I suggest to improve is that there needs to be more bike lanes.
  77. To put up signs so that drivers don't go fast.
  78. One thing to improve biking in my area is to make a bike lane.
  79. Put more biking roads.
  80. Lower the speed limit.
  81. Install some more bike racks around Hanford.
  82. Add more bike lanes.
  83. Make sidewalks perfect, with no cracks.
  84. Fix the main roads and create a bike lane.
  85. Paint more bike lanes on the road.
  86. Have more bike lanes.
  87. Make bike trails and crossings for kids coming out of school and slower speed limit.
  88. Put more lights around Hanford.
  89. Put more stop signs.
  90. Add more bike lanes.
  91. In Hanford there needs to be a cop who watches the school areas. There needs to be better bike lanes. Keep people off the bike lanes. There needs to be more

- lights at night because it is too dark. We need better roads and better sidewalks and bike lanes and we need stray cats caught. We need more bike racks; often times people have to bring their bike inside the store, or they lean it on the wall where it might get stolen, or lock it to a pillar.
92. One thing to improve biking in my area is bike lanes so cars don't have to worry.
  93. I think you should put more street signs.
  94. I would make biking lanes.
  95. Get rid of the stray cats.
  96. One thing I would improve are the sidewalks. On University, there is this weird giant bump and it is so hard to ride over it on a bike. Most people who don't know about either fall off their bike or just ride over it.
  97. Have a lot more crosswalks and bike lanes. I would also install bike racks and better benches. Also, a restroom and or port-a-pottie.
  98. There should be more bike lanes on the road.
  99. Getting better bike lanes would be perfect, you have already seen my statement in the previous questions.
  100. I would put an area for bike lanes so you don't hit someone on the sidewalk.
  101. I would put up more biking lanes and less driving lanes.
  102. Maybe we can put more bike lanes so that people don't have to move out the way if someone has a bike and needs to get through.
  103. Rental bikes.
  104. I think more bike racks would be nice. I do not bike to school myself but this would be helpful to others.
  105. I would like to see more bike lanes and less potholes in the roads and fixed road signs; also more light-activated crosswalks, a four-way stop kind of system.
  106. Fix the sidewalks a little.
  107. There should be bike lanes; that way cars maintain a good distance.
  108. Make the town prettier.
  109. I would put more bike lanes and more street lamps.
  110. Unimpeded bike trails.
  111. I would like to have a lot more crosswalks in my area because we don't have any of them.
  112. I would want to have better sidewalks and not so bumpy.
  113. Pick up trash or move it out. There are too many leaves, gum, animal poop on the ground.
  114. Promote bike-to-work day, more bike racks, cycleways so that bikers can ride longer periods of time without interruption from traffic.
  115. There should be a bike lane alongside the road.
  116. Slow car limit.
  117. People need to slow down a lot.
  118. They should fix the roads and make them less rough.
  119. I think they should put more space for riding bikes.
  120. Make more bike trails that are wider.
  121. I would improve the bike routes and put more bike stands.
  122. More bike racks and bike lanes.
  123. A slower speed limit.
  124. Safety and room for cyclists.
  125. Making sidewalks and bike paths in Armona, particularly along 14<sup>th</sup> Avenue is a needed improvement. There is a lot of pedestrian/bike traffic throughout Armona, but the streets have no bike lanes, and road shoulders are rough and unfinished.
  126. I would add more bike lanes in the streets, I love biking around the streets.
  127. No more cracks.
  128. I would not do anything because it is perfect.
  129. One thing I can improve is getting more bike routes.
  130. More biking lanes, bike racks with auto locks.
  131. Bike lanes and more bike racks.
  132. We need more bike racks to put our bikes because more people are stealing other people's bikes.
  133. More bikeways or routes; I would like them to be visible since cars may not see them.
  134. More bike racks, more bike lanes.
  135. Maybe places you can get water because after a while you get tired from riding your bike and maybe you have run out of water.
  136. Improve on perhaps security and make the streets a lit bit more lit.
  137. To improve biking, there should be more benches and bike parking racks.
  138. "Biking for a cure" would be a cool project to end a disease or world hunger.
  139. More sidewalks or bike paths. More bike racks too.
  140. More bike racks and bike lanes.
  141. Putting lights around for bikers and making more bike lanes.
  142. They can improve trails or bike lanes.
  143. We need to add more bike lanes and the pavements near the YMCA need some work.
  144. More bike racks.
  145. More biking lanes and better sidewalks.
  146. More bike racks.
  147. We really need more bike racks around the community. We have hardly any so you can never leave your bike unattended for a long period of time.
  148. Install more bike racks.
  149. One thing to improve biking in my area would be to add bike lanes and install bike racks in more locations.
  150. I would fix the cracked roads and sidewalks.
  151. More bike lanes.
  152. Better stop lights.
  153. Install more bike lanes and bike racks.



154. The reckless drivers need to be worked on and put more stop signs, more crosswalks. Drivers tend to drive fast on long street without stop signs. They can get too close and hit the biker.
155. Make more bike paths and put more crosswalks and more stop signs and bike signs so they know not to drive fast.
156. I would make specific bike trails that those that enjoy biking could take. These trails would go out through the country and throughout the community. This would promote biking because there would actually be somewhere to bike and would make biking a more enjoyable experience.
157. Bike paths separated from the road.
158. Everything is good now.
159. Make more bike lanes/repaint them and add more bike racks.
160. I think that the bike lanes need to be repainted and that reflectors must be required in order to ride a bike. It is unsafe to ride one without them, especially at night. Lastly I would like more bike racks because then people could lock their bikes to them without having to worry about getting it stolen or damaged.
161. Bike racks.
162. More lights.
163. I would put up more bike lanes to help bikers out.
164. Maybe add more bike lines or sidewalks.
165. Easier to go on sidewalks.
166. Focus on a one-mile route that connects to a local park and travels along landscaped pathways that could be incorporated into future residential development edges. If a safe route is created people will use it just like how people flock to Rocky Hill Road just east of the City of Exeter where there is a nice scenic road that has little to no traffic and great views of the valley. This area is highly used by people who walk and bicycle and are willing to travel from adjacent communities even 20 miles away to enjoy.
167. Promote a comprehensive plan for cycling improvements such as the League of American Bicyclists "Bicycle Friendly America" program. It: 1. Sets standards for what constitutes a real bicycling culture and environment. 2. Affects decisions on how communities, businesses, universities and states grow. 3. Inspires action, involvement and coordination among people that want to improve conditions for bicyclists. 4. Guides progress by acting as a roadmap for what communities, businesses, universities and states should do next. 5. Rewards persistence as people respond to feedback, make changes and come back again and again to get recognition. 6. Raises expectations as to what really is expected and involved in making a great place for bicycling.
168. We need to devise a plan such as Fresno Woodward Park area has. It gets utilized by bikers, casual walkers and joggers.
169. Provide adequate bike lanes/paths.
170. Ticket unsafe drivers, community bike safety classes.
171. Bike lanes through railroad crossings and intersections, rather than ones that disappear and reappear on the other side, which suggest to the cars that you are also to disappear.
172. More bike paths in non-residential areas.
173. Multi-use trails.
174. Improve the brightness of street lights.
175. Definitely more bike racks. Can't really go into a store if you have nowhere to put your bike.
176. Fix the roads. Widen them. Fix blind intersections.
177. We used to do it a lot. Then the area got built up with developments but no bike lanes, street lighting on streets that lead to shopping and schools, and really poor street lighting.
178. I would love to see dedicated bike lanes for all major roads throughout Hanford (11<sup>th</sup>, 10<sup>th</sup>, 12<sup>th</sup>, Grangeville, Lacey, Arm Road). Some have it but there should be consistency along every major road.
179. Create more paths and lanes.
180. A designated bike route away from car traffic. Even though there are bike routes and signs to keep at least 3 feet away from bicyclist, the news about people getting hit does not instill confidence in the safety of the routes.
181. Fix the bumps on the shoulder of 12<sup>th</sup> Ave. and Grangeville...shoulder on the north side of Grangeville right before 16<sup>th</sup> Ave. is chewed up...Run a street sweeper on country roads to clean up the massive amount of debris.
182. A bike path to NAS Lemoore on Grangeville.
183. Dedicated bike/walk paths.
184. More lights in downtown area. Fix potholes, more bike lanes, install lighting in old part of Lemoore.
185. Bike lanes around town seem to be very broken. They are there for a few blocks and they disappear quickly. Many routes have goat heads on the road or paths.
186. The biggest thing that needs to be done is actual follow-through on implementing the existing bike routes plan that the County has had for decades. All the routes, projects, etc. are in the Kings County Regional Bicycle Plan, but no one actually makes the projects a reality by pursuing the funding that is available. How about an Action Committee instead of more planning?
187. Widen Lacey and Grangeville for bike lanes.
188. I would like to see the expansion of bike lanes throughout the city. Ideally, I would like to see miles of maintained trails that are away from traffic.

**October 16, 2018 Minutes  
Study Session  
City Council Meeting**

**CALL TO ORDER:**

*At 5:30 p.m., the meeting was called to order.*

ROLL CALL: Mayor: MADRIGAL  
Mayor Pro Tem: NEAL  
Council Members: BLAIR, BROWN  
Absent: CHEDESTER

City Staff and contract employees present: City Manager Olson; Assistant City Manager Speer; City Attorney Van Bindsbergen; Finance Director Corder; City Clerk Venegas.

**PUBLIC COMMENT**

*There was no Public Comment.*

**5:30 pm STUDY SESSION**

SS-1 Communities of Excellence

*Item postponed.*

**CLOSED SESSION PUBLIC COMMENT**

*There was no Closed Session Public Comment.*

*At 5:32 p.m., Council adjourned to Closed Session.*

**CLOSED SESSION**

1. Conference with Labor Negotiator  
Government Code Section 54957.6  
Agency Negotiator: Jenell Van Bindsbergen, City Attorney  
Employee Organizations: General Association of Service Employees, Lemoore  
Police Officers Association, Lemoore Police Sergeants Unit, Unrepresented  
Employees
2. Conference with Legal Counsel – Anticipated Litigation  
Government Code Section 54956.9  
Initiation of Litigation Pursuant to Paragraph (4) of Subdivision (d) of Section 54956.9  
(Deciding Whether to Initiate Litigation)  
One Case

3. Conference with Legal Counsel – Anticipated Litigation  
Government Code Section 54956.9  
Significant Exposure to Litigation Pursuant to Paragraph (2) or (3) of Subdivision (d) of Section 54956.9  
Two Cases (One case involves personnel complaint by Commander Margarita Ochoa submitted on October 3, 2018; One case involves personnel complaint by Police Chief Darrell Smith in August 2018)

#### ADJOURNMENT

*At 7:07 p.m., Council adjourned.*

### **October 16, 2018 Minutes Lemoore City Council Regular City Council Meeting**

#### **CALL TO ORDER:**

*At 7:30 p.m., the meeting was called to order.*

ROLL CALL: Mayor: MADRIGAL  
Mayor Pro Tem: NEAL  
Council Members: BLAIR, BROWN  
Absent: CHEDESTER

City Staff and contract employees present: City Manager Olson; Assistant City Manager Speer; City Attorney Van Bindsbergen; Public Works Director Rivera; Community Development Director Holwell; Police Chief Smith; Parks and Recreation Director Glick; Finance Director Corder; City Clerk Venegas; QK Engineer Joyner.

#### CLOSED SESSION REPORT OUT

*There was no report out.*

#### PUBLIC COMMENT

*Connie Wlaschin asked for clarification regarding the Vorhees contract and would like to know why he is still the property owner if did not fulfill obligations. Reviewed warrant register.*

*Amy Ward invited all to the Lemoore Raceway Chamber Mixer, Wednesday, October 17<sup>th</sup> from 6-8pm. There will be food and wine tasting.*

*Lynda Lahodny provided an update on the mural project. The final application has been submitted to the Planning Department and will be on the November 6<sup>th</sup> agenda for discussion and approval. A scaled color drawing was provide. The mural will go on the Kings County Office of Education wall that is visible when entering Lemoore on D Street.*

*Ashley Terrell submitted a letter regarding filing a formal complaint against Council Member Blair in reference to an incident at Starbucks while participating in the Recall for Blair.*

*City Manager Olson attended the ICSC event in Los Angeles with Jay Salyer of Kings Economic Development. Kmart is selling. Made contact with CrisCom to begin advertising the large Kmart retail space. Council Member Blair thanked City Manager Olson for moving so quickly to try to fill the expected void.*

#### CEREMONIAL / PRESENTATION – Section 1

##### 1-1 Lemoore Police Department Canine “Diesel” with Handler Officer Jacques

*Police Chief Smith introduced Handler Officer Jacques and his canine “Diesel.” Diesel is a triple threat as he is a patrol, narcotic and bite dog.*

*Avenal Police Chief Rusty Stivers presented Commander Mike Kendall with a crystal award for his exceptional efforts in assisting in the creation of the Avenal Police Department Canine Unit.*

*Adjourned at 7:49 p.m. for a Canine Demonstration outside of Council Chamber.  
Re-adjourned at 7:43 p.m.*

##### 1-2 Lemoore Police Department Red Ribbon Art Recipient

*Chief Smith recognized Justin Caldera as the 2018 Red Ribbon Week Design Winner. Red Ribbon Week is October 22-27, 2018. There are events throughout the week with closing ceremonies on October 27, 2018 from 10-1 p.m. at Lions Park.*

*Red Ribbon t-shirts were provided to all Council Members, City Manager and the City Attorney.*

#### DEPARTMENT AND CITY MANAGER REPORTS – Section 2

##### 2-1 Department & City Manager Reports

*Parks and Recreation Director Glick provided upcoming events.*

*Public Works Director Rivera stated the Design Camp for the Water Treatment Plant Project was held today and tomorrow.*

*Chief Smith informed stated Red Ribbon Celebration is Saturday, October 27, 2018 at Lions Park from 10am – 1pm.*

#### CONSENT CALENDAR – Section 3

- 3-1 Approval – Minutes – Regular Meeting – October 2, 2018
- 3-2 Approval – Investment Report for the Month Ended August 31, 2018
- 3-3 Approval – Notice of Completion – CIP 5209 – Supervisory Control and Data Acquisition (SCADA) Upgrade
- 3-4 Approval – Contract Award – CIP 5712 – Geotechnical Engineering Services for Police Dispatch Center
- 3-5 Approval – Purchase of BIO ENERGIZER from Probiotic Solutions



*Motion by Council Member Blair, seconded by Council Member Brown, to approve Consent Calendar.*

Ayes: Blair, Brown, Neal, Madrigal  
Absent: Chedester

#### PUBLIC HEARINGS – Section 4

*There were no Public Hearings.*

#### NEW BUSINESS – Section 5

##### 5-1 Report and Recommendation – Chamber of Commerce Holiday Stroll Contract

*Motion by Council Member Brown, seconded by Council Member Neal, to approve the contract with the Chamber of Commerce to assist in planning and facilitating the annual Holiday Stroll in Downtown Lemoore.*

Ayes: Brown, Neal, Blair, Madrigal  
Absent: Chedester

##### 5-2 Report and Recommendation – State of California Participating Addendum No. 7-14-99-22 Local Agency Subscription Agreement to Authorize the City's Participation in the State of California Purchase Card (Cal-Card) Program

*Motion by Council Member Blair, seconded by Council Member Brown, to approve, and authorize the Finance Director to execute, the proposed State of California Participating Addendum No. 7-14-99-22 Local Agency Subscription Agreement to enroll the City in the State of California Purchasing Card (CAL-Card) Program and authorize the Finance Director, or her designee, to complete, execute and submit all other forms and implementation/enrollment documentation necessary to enroll the City in the State of California Purchase Card (CAL-Card) Program.*

Ayes: Blair, Brown, Neal, Madrigal  
Absent: Chedester

#### CITY COUNCIL REPORTS AND REQUESTS – Section 6

##### 6-1 City Council Reports / Requests

*Council Member Blair watched the canine demo at MIQ School Fall Festival. Would like some type of appreciation for the Lemoore Volunteer Fire Department by the end of the year. City Manager Olson has talked to LVFD Chief German and LVFD does not want a public event. Chief German said thank you for the thought but do not want one.*

*Council Member Brown will attend the Kings County Commission on Aging meeting on Thursday at 2:30 p.m. The South Fork Kings Ground Water Sustainable Act board meeting is Thursday at 5:30 p.m. in Council Chamber. Was asked by a member of the public if Denny's was interested in Lemoore. The letter read earlier regarding Council Member Blair is shocking and said it is happening. Apologized for the actions.*

*Mayor Pro Tem Neal stated effort must be put forth to bring restaurants to Lemoore to see action. We must work together to bring businesses to the community. Actions speak louder than words. Mayor Pro Tem Neal was against the Vorhees project and the City should take back the property.*

*CrisCom has helped the Lemoore Police Department and they have done a lot for the community. They are doing a great job.*

*Mayor Pro Tem asked about the status of the water treatment project and was told the second stage was starting.*

*Mayor Madrigal had a good time at the Kings Day at the Lemoore Youth Sports Complex. The facilities look great! Meeting a lot of people lately and the impression received is that restaurants are not wanted in Lemoore. Council welcomes restaurants. With Kmart closing, recommends some type of committee to brain storm what to do and how to fill up the expected vacant Kmart location with potential creative lease agreements. Consensus was received for a study session item.*

#### ADJOURNMENT

*At 8:28 p.m., the meeting adjourned.*

*Approved the 6<sup>th</sup> day of November 2018.*

ATTEST:

APPROVED:

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Mary J. Venegas, City Clerk

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Ray Madrigal, Mayor



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## Staff Report

**Item No: 3-2**

**To: Lemoore City Council**

**From: Judy Holwell, Community Development Director**

**Date: October 22, 2018**

**Meeting Date: November 6, 2018**

**Subject: Mural Application – “The Fabric of Our Heritage” proposed by Sarah A. Mooney Museum**

### **Strategic Initiative:**

- |   |  |
|---|--|
| <input type="checkbox"/> Safe & Vibrant Community                       | <input type="checkbox"/> Growing & Dynamic Economy |
| <input type="checkbox"/> Fiscally Sound Government                      | <input type="checkbox"/> Operational Excellence    |
| <input checked="" type="checkbox"/> Community & Neighborhood Livability | <input type="checkbox"/> Not Applicable            |

### **Proposed Motion:**

Approve the attached mural, “The Fabric of Our Heritage”, proposed by Sarah A. Mooney Museum.

### **Subject/Discussion:**

The Sarah A. Mooney Museum (SAMM) received a \$5,000 grant from California Humanities for a mural to be painted in the community of Lemoore. The proposed mural represents the many nationalities that live in Lemoore, and symbolizes our cultural diversity and unification as Americans.

SAMM reached out to the community for ideas and artwork. The artwork selected is shown in draft form within hexagonal shapes depicting a patchwork quilt. The mural will eventually be painted on individual panels and mounted on the side of the Kings County Office of Education building located at 876 East Bush Street. A brief description of each panel is attached for your review.

Supervising the mural painting project is Lemoore High School Art Instructor, Mario Gonzalez. Mr. Gonzalez will draw the designs on the panels, and under his supervision, students and interested community members will paint them.

*“In God We Trust”*

**Financial Consideration(s):**

None.

**Alternatives or Pros/Cons:**

The addition of art in a community enhances the overall aesthetics. This mural represents the diverse population and provides a sense of community.

**Commission/Board Recommendation:**

N/A.

**Staff Recommendation:**

Knowing that a mural will typically grace the wall of a structure for many years, staff recommends careful review and consideration of the proposed mural.

**Attachments:**

- ☐ Resolution:
- ☐ Ordinance:
- ☐ Map
- ☐ Contract
- ☒ Other

List: Mural – proposed artwork  
Community Mural Project - explanation  
SAMM Board of Directors - approval of artwork

**Review:**

- ☒ Asst. City Manager
- ☒ City Attorney
- ☒ City Clerk
- ☒ City Manger
- ☒ Finance

**Date:**

10/26/18  
11/01/18  
11/02/18  
10/31/18  
10/29/18







## Community Mural Project: "THE FABRIC OF OUR HERITAGE"

This mural project is sponsored by the Sarah A. Mooney Museum and funded by a grant from the California Humanities. The mural will be drawn on panels by Lemoore High School Art instructor, Mario Gonzalez, and painted by any and all interested community members (under the supervision of Mr. Gonzalez) off site. Upon completion, the panels will be mounted on the Kings County Office of Education building on East D Street, highly visible upon entering and exiting the Lemoore City limits. The symbols featured on the mural were chosen as a result of input from various community members.

The mural, a red, white, and blue hexagonal patchwork quilt, is symbolic of the rich cultural diversity that exists within our community and the unification of all community members as **Americans** (represented by the borders of stars and stripes).

Each hexagon contains a symbol that is representative of one or more of the cultural groups that comprise the world-wide origins of the people who have settled in our area, historically and currently. The center hexagon features a design that symbolizes all of our global nationalities joining hands (of different skin-tones) to live united --- this design was provided by our local NAACP chapter. The flowers on the mural are symbolic to many nationalities, another representation of our common threads.

The specific symbols and what they represent to various nationalities included on the mural are as follows:

### Top row (left to right):

**Plumeria Flower:** National Flower of Nicaragua and Laos. Also in several Pacific islands, such as Tahiti, Fiji, Samoa, Hawaii, New Zealand, Tonga, and the Cook Islands plumeria are used for making  leis. The Plumeria is also important to other cultures in Indonesia, Malaysia, India, the Philipines, Eastern Africa, and Sri Lanka.

**Tachi Friendship Basket:** The Tachi tribe was peace-loving and never a "warring tribe." Tribal Council Vice Chairman, Elmer Thomas, felt this particular basket, woven by the Tachi's best represented his people.

**Chinese Calligraphy Symbol for "Happiness:"** Recommended by Virginia Lee as being the most representative of the Chinese culture that historically had a major presence in Lemoore --- even having a large "Chinatown" district located in the area of what is now bordered by F, G, Fox, and Hill Streets.

**The map of the African continent and the traditional African colors:** represent our African-American population whose ancestors originally hailed from various African countries and were part of the Lemoore-area in our earliest history (albeit not-allowed to own property or take up residence within the City limits, but rather lived in an area just south of town and in the Island area).

**Hibiscus Flower:** The hibiscus is a national flower of Haiti, the Solomon Islands South Korea, Malaysia, and the state flower of Hawaii.

Center row (left to right):

**Bayanihan House:** The Filipino cultural symbol that represents “Unity”

**Mexican Folklorico Dancers:** Representative of the colorfully dressed Mexican dancers who are symbolic of the Mexican people’s love of music, dancing, and “fiestas” to celebrate with family and friends.

Bottom row (left to right):

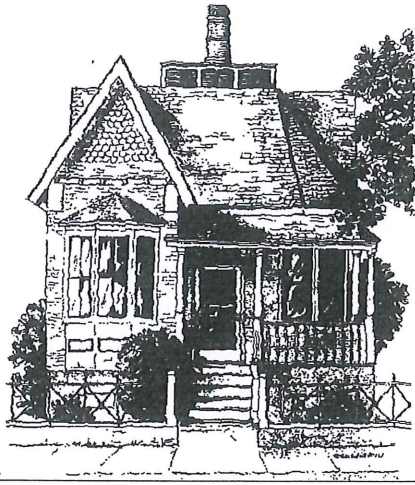
**Lotus Flower:** The lotus is the national flower of India and Vietnam.

**The map of the European continent:** represents our population who trace their roots to many of the countries on the European continent

**Orchid Flower:** Across the globe, different cultures and nations have taken on orchids as their own floral representation because of the flower’s beauty and wealth of meanings. These include: Columbia, Costa Rica, Brazil, Indonesia, Belize, Seychelles, Panama, Singapore, Venezuela, Honduras, and the Cayman Islands.

**Barcelos Rooster:** The **Rooster of Barcelos** is one of the most common emblems of Portugal, symbolizing our local Azorean- Portuguese population.

**Cherry Blossoms:** the national flower of Japan.<sup>[6]</sup>symbolic of the Japanese and represents acceptance of imperfections, gentleness and kindness



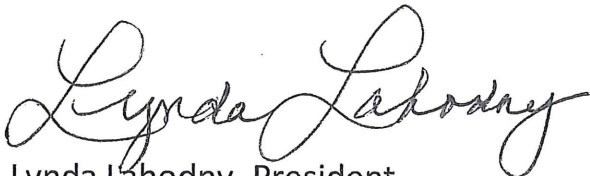
## **Sarah A. Mooney Museum**

**542 West D Street ~ Downtown Lemoore**

October 9, 2018

Attention: Lemoore City Councilmembers:

The Sarah Mooney Museum Board of Directors unanimously approved the mural artwork at the Museum's Board meeting on October 8, 2018.

  
Lynda Lahodny, President

**The Sarah A. Mooney Memorial Museum Board of Directors:**

Lynda Lahodny, President ~ Mike Betcher, Vice President  
Brenda Buford, Treasurer ~ Susan Drew, Recording Secretary  
Clayton Lahodny ~ Bill Black ~ JoAnn Corder ~ Debbie Muro ~ Betty Brown

P.O. Box 413  
Lemoore, California 93245-0413





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## Staff Report

**Item No: 3-3**

**To: Lemoore City Council**  
**From: Heather J. Corder, Finance Director**  
**Date: October 26, 2018 Meeting Date: November 6, 2018**  
**Subject: Hiring of Willdan for Continuing Annual Disclosure for the Enterprise Bond**

**Strategic Initiative:**

- |   |  |
|---|--|
| <input type="checkbox"/> Safe & Vibrant Community             | <input type="checkbox"/> Growing & Dynamic Economy         |
| <input checked="" type="checkbox"/> Fiscally Sound Government | <input checked="" type="checkbox"/> Operational Excellence |
| <input type="checkbox"/> Community & Neighborhood Livability  | <input type="checkbox"/> Not Applicable                    |

**Proposed Motion:**

Authorize the Finance Manager to negotiate and sign an agreement with Willdan to undertake continuing disclosure on the Enterprise Bond, following review and approval of the agreement by the City Attorney.

**Subject/Discussion:**

On November 7, 2017, City Council approved Resolution 2017-30 Regarding the Intention to Issue Tax Exempt Obligations to Finance Water Projects. In connection with the public offering of the proposed water revenue bonds, the City will execute an agreement to undertake continuing disclosure obligations pursuant to the requirements of the federal securities law.

As long as the bonds are outstanding, the City will have to prepare annual reports, containing information relevant to the security of the bonds, and notices regarding the occurrence of certain listed events. These reports and notices will be filed with the Municipal Securities Rule Making Board (MSRB) and posted on EMMA. EMMA is the internet-based information repository maintained by the MSRB for municipal bonds issued in the United States.

This Dissemination Agent will assist the City with preparation and filing of such reports and notices.

**Financial Consideration(s):**

The cost of the contract is for a base fee of \$1,250 plus a dissemination fee of \$100. All supplemental and amended reports are not to exceed \$950. Any notice of occurrences will be \$250 per notice.

**Alternatives or Pros/Cons:**

None Noted

**Commission/Board Recommendation:**

Not applicable.

**Staff Recommendation:**

Authorize the Finance Director to negotiate and sign an agreement with Willdan to undertake continuing disclosure on the Enterprise Bond, following review and approval of the agreement by the City Attorney.

.

**Attachments:**

**Attachments:**

- ☐ Resolution:
- ☐ Ordinance:
- ☐ Map
- ☒ Contract
- ☐ Other
- List:

**Review:**

**Review:**

- ☒ Asst. City Manager
- ☒ City Attorney
- ☒ City Clerk
- ☒ City Manger
- ☒ Finance

**Date:**

**Date:**

- 10/29/18
- 11/01/18
- 11/02/18
- 10/31/18
- 09/21/18

September 25, 2018

Ms. Heather J. Corder  
Finance Director  
City of Lemoore  
119 Fox Street  
Lemoore, California 93245

**RE: Agreement to Provide Continuing Disclosure Services for the City of Lemoore**

Dear Ms. Corder:

Enclosed is the agreement to provide Continuing Disclosure Services for the City of Lemoore. If acceptable, please sign the signature page and email a scanned copy to [lbromley@willdan.com](mailto:lbromley@willdan.com).

We look forward to serving the City of Lemoore and working with you and your staff. If you have any questions regarding this agreement, please contact me at your earliest convenience at (800) 755-6864.

Very truly yours,  
Willdan Financial Services



Dave Davies, Senior Project Manager  
Federal Compliance Group

Enclosures

## **AGREEMENT FOR PROFESSIONAL SERVICES**

THIS AGREEMENT is made and entered into this \_\_\_\_th day of October 2018, by and between **WILLDAN FINANCIAL SERVICES (“WFS”)**, a corporation, and the **City of Lemoore**, hereinafter referred to as “Client.”

WHEREAS, Client desires to employ WFS to furnish ongoing professional services in connection with **Continuing Disclosure Services**, hereinafter referred to as the “Project.”

NOW, THEREFORE, in consideration of the mutual premises, covenants and conditions herein contained, the parties agree as follows:

### **SECTION I – BASIC SERVICES**

WFS shall provide to the Client the basic services described in detail in “Exhibit A,” Scope of Services, attached hereto and incorporated herein by this reference.

### **SECTION II – ADDITIONAL SERVICES**

If authorized, WFS shall furnish additional services, which are in addition to the basic services. To the extent that the additional services have been identified in this Agreement, they are itemized in “Exhibit A” and will be paid for by Client as indicated in Section III hereof. As further additional services are requested by Client, this Agreement may be modified and subject to mutual consent by execution of an addendum by authorized representatives of both parties, setting forth the additional scope of services to be performed, the performance time schedule and the compensation for such services.

### **SECTION III – COMPENSATION**

WFS shall be compensated for basic services rendered under Section I, as in accordance with the terms and conditions indicated in “Exhibit B,” Fees for Services; and WFS will be compensated for any additional services rendered under Section II as more particularly described in a fully approved and executed addendum to this Agreement. If no addendum is executed, then WFS shall be compensated at its then-prevailing hourly rates for such additional services.

WFS may submit monthly statements for basic and additional services rendered. It is intended that Client will make payments to WFS within thirty (30) days of invoice. All invoices not paid within thirty (30) days shall bear interest at the rate of one and one-half (1½) percent per month or the then-legal rate allowed.



## SECTION IV – INDEMNITY; INSURANCE REQUIRED

A. **Indemnity.** WFS shall indemnify and hold harmless Client, its officers, officials, directors, employees, designated agents, and appointed volunteers from and against all claims, damages, losses and expenses, including attorney fees, arising out of the performance of the services described herein, to the extent caused in whole or in part by the negligent acts, errors, or omissions of WFS, any subconsultant, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except where caused by the active negligence or willful misconduct of Client or Client's officers, agents, or employees.

The parties shall cooperate with each other with respect to resolving any claim, liability or loss for which indemnification may be required hereunder, including by making, or causing the indemnified party to make, all commercially reasonable efforts to mitigate any such claim, liability or loss. Neither party shall have an obligation to indemnify the other party for any losses to the extent they are caused, contributed to or exacerbated by the actions or failure to act of the indemnified party, including without limitation, the failure to take actions to mitigate such losses.

B. **Insurance.** Without in any way limiting WFS' liability pursuant to the indemnification described above, WFS shall maintain, during the term of this contract, the following insurance:

Coverage	Minimum Limits
<b>General Liability</b> Comprehensive General Liability, including: Premises and Operations Contractual Liability Personal Injury Liability Independent Contractors Liability (if applicable)	<b>\$1,000,000 Combined Single Limit, per occurrence and general aggregate</b>
<b>Automobile Liability</b> Comprehensive Automobile Liability (including owned, non-owned and hired autos)	<b>\$1,000,000 Combined Single Limit, per occurrence</b>
<b>Workers' Compensation and Employer's Liability</b> Workers' Compensation Insurance Employer's Liability	<b>Statutory, \$1,000,000</b>
<b>Professional Liability</b> Professional Liability Insurance	<b>\$1,000,000 per claim and annual aggregate</b>

## **SECTION V – INDEPENDENT CONTRACTOR STATUS**

WFS shall be an independent contractor and shall have responsibility for and control over the details and means of providing the services under this Agreement.

## **SECTION VI – OWNERSHIP AND MAINTENANCE OF DOCUMENTS**

WFS may rely upon the accuracy of any documents provided to WFS by Client. All documents, including without limitation, reports, plans, specifications, field data, field notes, laboratory test data, calculations, estimates, schedules, spreadsheets, or other documents furnished by WFS pursuant to this Agreement, regardless of media (e.g., paper, electronic, magnetic, optical, Mylar, etc), are instruments of WFS' services in respect to this Project and not products. All such documents shall remain the property of WFS provided, however, that a copy of the final documents shall be made available to Client upon request. These documents are not intended, nor represented to be suitable for reuse by Client or any others on extensions of this Project or on any other project. These documents shall not be changed or reused without the prior written consent of WFS. Any modification or reuse without specific written verification and adoption by WFS for the specific purposes intended will be at user's sole risk. Client agrees to save, keep and hold harmless WFS from all damages, costs or expenses in law and equity including costs of suit and attorneys' fees resulting from such unauthorized reuse. Client further agrees to compensate WFS for any time spent or expenses incurred by WFS in defense of any such claim, in accordance with WFS' prevailing fee schedule.

Client acknowledges that its right to utilize the services and instruments of services of WFS will continue only so long as Client is not in default of the terms and conditions of this Agreement and Client has performed all obligations under this Agreement. Client further acknowledges that WFS has the unrestricted right to use the services provided pursuant to this Agreement, as well as to all instruments of service provided pursuant to this Agreement.

Client agrees not to use or permit any other person to use any instruments of service prepared by WFS, which are not final and which WFS does not sign. Client agrees to be liable for any such use of non-final instruments of service not signed, stamped or sealed by WFS and waives liability against WFS for their use.

WFS shall be entitled to rely upon, with no obligation to verify, the completeness and accuracy of all information, data, reports, studies, plans and specifications provided by Client or by Client's attorney(s), engineer(s), accountant(s), consultant(s) or employee(s) to Consultant. Client shall make no claim against WFS alleging that WFS should not have relied upon such information provided by Client to WFS.

WFS' records, documents, calculations, test information and all other instruments of service shall be kept on file in legible form for a period of not less than two (2) years after completion of the services covered in this Agreement.

## **SECTION VII – SUSPENSION OF SERVICES**

Client may, at any time, by thirty (30) days' written notice, suspend further performance by WFS. All suspensions shall extend the time schedule for performance in a mutually satisfactory manner and WFS shall be paid for all services performed and reimbursable expenses incurred prior to the suspensions date.

## **SECTION VIII – TERMINATION**

Either party may terminate this Agreement at any time by giving thirty (30) days' written notice to the other party of such termination. If this Agreement is terminated as provided herein, WFS will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of WFS covered by this Agreement, less payments of compensation previously made.

## **SECTION IX – COMPLIANCE WITH LAW**

Each party hereto will use reasonable care to comply with applicable laws in effect at the time the services are performed hereunder, which to the best of their knowledge, information and belief apply to their respective obligations under this Agreement.

## **SECTION X – SUCCESSORS AND ASSIGNS**

This Agreement shall be binding on the successors and assigns of the parties; but either party, without written consent of the other party, shall not assign it.

## **SECTION XI – ATTORNEYS' FEES**

In the event that any judgment is entered in any action upon this Agreement, the party hereto against whom such judgment is rendered agrees to pay the amount equal to the reasonable attorneys' fees of the prevailing party in such action and that such amount may be added to and made a part of such judgment.

## **SECTION XII – ALTERNATIVE DISPUTE RESOLUTION**

If a dispute arises between the parties relating to this Agreement, the parties agree to use the following procedure prior to either party pursuing other available remedies:

A. A meeting shall be held promptly between the parties, attended by individuals with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute.

B. If, within thirty (30) days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will jointly appoint a mutually-acceptable neutral person not affiliated with either of the parties (the "neutral"), seeking assistance in such regard if they have been unable to agree upon such appointment within forty (40) days from the initial meeting. The parties shall share the fees of the neutral equally.

C. In consultation with the neutral, the parties will select or devise an alternative dispute resolution procedure (“ADR”) by which they will attempt to resolve the dispute, and a time and place for the ADR to be held, with the neutral making the decision as to the procedure, and/or place and time (but unless circumstances require otherwise, not later than sixty (60) days after selection of the neutral) if the parties have been unable to agree on any of such matters within twenty (20) days after initial consultation with the neutral.

D. The parties agree to participate in good faith in the ADR to its conclusion, as designated by the neutral. If the parties are not successful in resolving the dispute through the ADR, then the parties may agree to submit the matter to binding arbitration or a private adjudicator, or either party may seek an adjudicated resolution through the appropriate court.

### **SECTION XIII – RECORDS**

Records of WFS’ direct labor costs, payroll costs, and reimbursable expenses pertaining to the Project covered by this Agreement will be kept on a generally recognized accounting basis and made available during normal business hours upon reasonable notice.

WFS’ records will be available for examination and audit if and as required.

### **SECTION XIV – MISCELLANEOUS PROVISIONS**

This Agreement is subject to the following special provisions:

A. The titles used in this Agreement are for general reference only and are not a part of the Agreement.

B. This Agreement shall be interpreted as though prepared by both parties.

C. Any provision of this Agreement held to violate any law shall be deemed void, and all remaining provisions shall continue in full force and effect.

D. This Agreement shall be interpreted under the laws of the State of California.

E. This Agreement comprises a final and complete repository of the understandings between the parties and supersedes all prior or contemporary communications, representations, or agreements, whether oral or written, relating to the subject matter of this Agreement.

F. Any notices given pursuant to this Agreement shall be effective on the third business day after posting by first class mail, postage prepaid, to the address appearing immediately after the signatures below.

G. WFS shall not be liable for damages resulting from the actions or inactions of governmental agencies, including, but not limited to: permit processing, environmental impact reports, dedications, General Plans, and amendments thereto; zoning matters, annexations, or consolidations; use or Conditional Use Permits; project or plan approvals; and building permits.



H. WFS' waiver of any term, condition, or covenant, or breach of any term, condition, or covenant, shall not constitute the waiver of any subsequent breach of any other term, condition, or covenant.

I. Client acknowledges that WFS is not responsible for the performance of services by third parties, provided that said WFS has not retained third parties.

**IN WITNESS WHEREOF**, the parties hereto have accepted, made and executed this Agreement upon the terms, conditions, and provisions above stated, as of the day and year first above written.

**Willdan Financial Services**

**City of Lemoore**

By: \_\_\_\_\_

Anne C. Pelej

Title: Vice President & Group Manager

Address: 27368 Via Industria, Suite 200  
Temecula, California 92590

Date: \_\_\_\_\_

By: \_\_\_\_\_

Heather J. Corder

Title: Finance Director

Address: 119 Fox Street  
Lemoore, CA 93245

Date: \_\_\_\_\_

# Exhibit A

## **SCOPE OF SERVICES**

### ***Task 1: Define Compliance Needs and Provide Implementation Schedule***

**Objective:** Collect bond documents relating to the debt issue, including but not limited to, the official statement, financial statements and Annual Continuing Disclosure Information Statement ("Disclosure Report").

**Description:** WFS will review the bond documents and establish an annual reporting schedule.

**Deliverable:** Reporting schedule and instruction relating to online tracking systems.

### ***Task 2: Compile Data Necessary to Complete Disclosure Report***

**Objective:** Collect data and other third-party information required to be included in the Disclosure Report directly from Client, trustees, fiscal agents, state and county agencies and others.

**Description:** Review the information for accuracy and appropriateness.

### ***Task 3: Report Preparation and Review***

**Objective:** Create a draft of the Disclosure Report for review.

**Description:** WFS will discuss with Client staff any relevant issues and provide suggestions regarding industry standards.

**Deliverable:** Disclosure Report.

### ***Task 4: Report Dissemination***

**Objective:** Provide timely Disclosure Report filings to the municipal market.

**Description:** Once authorization to disseminate has been received, WFS will post the report on EMMA and provide confirmation of the date and time of the posting.

**Deliverable:** Upload completed and approved Disclosure Report to EMMA, or the currently recognized public repository, and post on the tracking system at [www.willdan.com](http://www.willdan.com).

### ***Task 5: Notices of Occurrence of Listed Events and Supplemental Reporting***

**Objective:** Provide timely Notice of Occurrence of Listed Events to the municipal market and supplement annual filings as necessary.

**Description:** WFS will prepare Notices of Occurrence of Listed Events covering events enumerated in Rule 15c2-12(b). WFS will also prepare Supplemental Disclosure Reports, as necessary.

**Deliverable:** Upload Notices of Occurrence of Listed Events and Supplemental Disclosure Reports to EMMA, or the currently recognized public repository. Provide confirmation of the date and time of the posting.

### ***Task 6: Investor Support***

**Objective:** Present a unified message to the municipal market.

**Description:** WFS will respond to investor calls either directly or after consultation with your staff.

**Deliverable:** Investor Call Support.

### ***Task 7: Ongoing Regulatory Education***

**Objective:** Ensure communication with the secondary market meets current regulatory requirements and is mindful of enforcement actions and investor concerns.

**Description:** WFS will monitor information releases from the SEC and the MSRB regarding enforcement actions and regulatory changes. If requested, WFS will review draft disclosure documents for new issues.

**Deliverable:** Upon request.

## Exhibit A

### Client Responsibilities

The Client will submit to WFS:

- Financial and Operating Information, including but not limited to: Adopted Budget, Audited and Unaudited Financial Statements (if audited financials are not available), and current fund balances.
- Timely review of draft Disclosure Report
- Authorization to disseminate Disclosure Report
- All information relating to any change to the credit ratings or the occurrence of Listed Events as identified in the Continuing Disclosure Agreement within 3 business days from the date of occurrence of such event.
- All Ratings Reports sent to Client by any Rating Agencies. Authorization for Rating Agencies, Trustees, and any other third parties to send information directly to WFS.

## Exhibit B

### FEES FOR SERVICES

Disclosure Services	Fee
Base Fee	\$1,250
Dissemination Fee	\$100
Supplemental/Amended Reports	\$250 - \$950
Notice of Occurrence of Listed Events	\$250 per Notice
Annual Third-Party Expenses	At Cost

Billed invoices are required to be paid within 30 days.

### Reimbursable Expenses

Any additional expense from outside services will be billed to the Client. Charges for meeting and consulting with counsel, the Client, or other parties regarding services not listed in the scope of work above will be at our then-current hourly rates (see “Hourly Rates” section).

In the event that a third party requests any documents, WFS may charge such third party for providing said documents in accordance with WFS’ applicable rate schedule.

### Hourly Rates

Additional authorized services will be billed at WFS’ then-current hourly consulting rates. Our current hourly rates are presented below.

Title	Hourly Rate
Principal Engineer	\$ 210
Group Manager	200
Principal Consultant	200
Senior Project Manager	165
Project Manager	145
Senior Project Analyst	130
Senior Analyst	120
Analyst	100
Analyst Assistant	75
Property Owner Services Representative	55
Support Staff	50





711 West Cinnamon Drive • Lemoore, California 93245 • (559) 924-6700 • Fax (559) 924-6708

## Staff Report

**Item No: 3-4**

**To: Lemoore City Council**

**From: Frank Rivera, Public Works Director**

**Date: October 9, 2018**

**Meeting Date: November 6, 2018**

**Subject: Purchase of a New CNG Front-Loading Refuse Truck – CIP 5400**

### **Strategic Initiative:**

- |  |  |
|--|--|
| <input type="checkbox"/> Safe & Vibrant Community            | <input type="checkbox"/> Growing & Dynamic Economy         |
| <input type="checkbox"/> Fiscally Sound Government           | <input checked="" type="checkbox"/> Operational Excellence |
| <input type="checkbox"/> Community & Neighborhood Livability | <input type="checkbox"/> Not Applicable                    |

### **Proposed Motion:**

Approve the specifications and authorization to use the Sourcewell (formerly NJPA) procurement contract for the acquisition of a new front-loading refuse truck for a total amount not to exceed \$335,382.66.

### **Subject/Discussion:**

The refuse department has been working towards replacing rear-loading trucks with front loading vehicles. This new front-loading refuse truck will give the staff the ability to service larger dumpsters (up to 8 cubic yards). This truck will be a CNG vehicle, which will work towards the reduction of greenhouse gas (GHG) emissions.

Replacement of worn-out vehicles and equipment is an on-going effort to sustain fleet reliability and maintainability. Replacing vehicles and equipment at the end of their useful life reduces out-of-commission time and helps ensure safety. The vehicle being replaced (rear loader #109) is no longer economically maintainable and is out of compliance on state emission standards.

The City received a quote through Sourcewell, which is a public agency service cooperative that serves over 50,000 members. Through national solicitations, they provide the opportunity for members to purchase through nationally leveraged, competitively bid contracts. Sourcewell is a Municipal Contracting agency established to

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allow participating municipal agencies to reduce the cost of procurement by leveraging the benefits of contract purchasing.

A Sourcwell quote was prepared for the City on May 17, 2018 with a price of \$335,382.66 for a new CNG front-loading refuse truck.

**Financial Consideration(s):**

CIP 5400 has an approved budget of \$345,000. The price for the new CNG front-loading refuse truck is \$335,382.66. The City has secured Congestion Mitigation and Air Quality (CMAQ) Improvement funds in the amount of \$120,000 to be reimbursed after the purchase of the vehicle. Therefore, the overall cost from CIP 5400 will be \$215,382.66.

**Alternatives or Pros/Cons:**

None proposed.

**Commission/Board Recommendation:**

Not applicable.

**Staff Recommendation:**

Staff recommends that Council approve the purchase of a new front-loading refuse truck.

**Attachments:**

- ☐ Resolution:
  - ☐ Ordinance:
  - ☐ Map
  - ☐ Contract
  - ☒ Other
- List: Estimate

**Review:**

- ☒ Asst. City Manager
- ☒ City Attorney
- ☒ City Clerk
- ☒ City Manger
- ☒ Finance

**Date:**

- 10/29/18
- 11/01/18
- 11/02/18
- 10/31/18
- 10/29/18

# RUCKSTELL

CALIFORNIA SALES CO., INC.

P.O. Box 12543

Fresno, CA 93778

## Estimate

Date

5/17/2018

Estimate #

03211 - R

Name / Address

City of Lemoore

119 Fox St.

Lemoore, CA 93245

**Sourcewell Cooperative Purchasing Agreement - Contract #112014-NWY**

Rep

EI

Requested by:

PURCHASING

FOB

FRESNO

P.O. No.

Item	Description	Qty	Cost	Total
Equipment	2019 / 520 PETERBILT ( LEFT HAND DRIVE W / RIGHT HAND STAND UP ) W/ L9N CUMMINS ALTERNATE FUEL ENGINE	1	147,851.00	147,851.00T
Equipment	34 YARD NEWAY FRONT LOADER W/ THE FOLLOWING OPTIONS ( INCLUDING 75 DGE / CNG TAILGATE MOUNTED FUEL SYSTEM INCLUDING FMM, FRONT FILL & SLOW FILL ON CURB SIDE )	1	129,948.31	129,948.31T
Equipment	SERVICE HOIST	1	3,142.48	3,142.48T
Equipment	LED WORK LIGHTS ( 2 IN HOPPER / 1 ON CANOPY )	1	380.91	380.91T
Equipment	LED MID BODY BACK UP LIGHTS	1	380.91	380.91T
Equipment	LED BACK-UP LIGHTS ON TAILGATE ( 2 ) LIGHTS	1	440.13	440.13T
Equipment	STROBE LIGHT ( SURFACE MOUNT )	1	362.61	362.61T
Equipment	INTEGRATED STROBE LIGHT PACKAGE ( 2 ROUND LIGHTS UPPER TAILGATE )	1	617.81	617.81T
Equipment	INTEGRATED STROBE LIGHT PACKAGE ( 2 ROUND LIGHTS LOWER TAILGATE )	1	524.24	524.24T
Equipment	BACK-UP ALARM AUTO VOLUME ADJUSTABLE ( 87 - 112 DB )	1	168.39	168.39T
Equipment	OVER HEIGHT WARNING BUZZER ( ARMS ABOVE CAB )	1	569.04	569.04T
Equipment	ELECTRONIC FILTER BY-PASS INDICATOR IN CAB	1	271.74	271.74T
Equipment	8000 LB LIFT RATING ON WEST COAST BODY	1	493.55	493.55T
Equipment	FORK WIDTH ADJUSTABLE HYDRAULIC ( BOTH SIDES 18" EACH )	1	3,516.42	3,516.42T
Equipment	DECELERATION ON ARMS DOWN FUNCTION	1	1,109.04	1,109.04T
Thank you for your business.			<b>Subtotal</b>	
			<b>Sales Tax (7.25%)</b>	
			<b>Total</b>	

Signature

Phone #

559-233-3277

Fax #

559-233-9844

E-mail

info@ruckstell.com

# RUCKSTELL

CALIFORNIA SALES CO., INC.

P.O. Box 12543

Fresno, CA 93778

## Estimate

Date	Estimate #
5/17/2018	03211 - R

Name / Address

City of Lemoore  
119 Fox St.  
Lemoore, CA 93245

		Rep	Requested by:	FOB	P.O. No.
		EI	PURCHASING	FRESNO	
Item	Description	Qty	Cost	Total	
Equipment	SHOVEL / BROOM RACK ( MOUNTED MID BODY CURB SIDE )	1	211.36	211.36T	
Equipment	EXTENDED CLEANING TOOL W / BROOM AND HOLDER	1	306.58	306.58T	
Equipment	STEEL TOOL BOX 18" X 18" X 24"	1	565.55	565.55T	
Equipment	DRIP PAN BELOW TAILGATE SEAL	1	783.88	783.88T	
Equipment	4 CAMERA SYSTEM W/ 7" SPLIT SCREEN	1	3,120.84	3,120.84T	
Equipment	5 GALLON SPILL KIT W/ MOUNTING BRACKET	1	273.30	273.30T	
Equipment	POLY COATING ON TOP OF CANOPY	1	643.19	643.19T	
Equipment	EXTENDED FLAT FLOOR TO REAR OF BODY	1	3,964.56	3,964.56T	
	2 YEAR CYLINDER WARRANTY				
	1 YEAR BODY WARRANTY				
	1 YEAR HYDRAULIC WARRANTY				
	DENISON LONG LIFE VANE PUMP				
	ACRYLIC URETHANE ENAMEL PAINT ( WHITE )				
Equipment	TIRE RECYCLING FEE	1	17.50	17.50	
Equipment	DOCUMENTARY FEE	1	45.00	45.00	
Equipment	ADMINISTRATION FEE	1	250.00	250.00	
Equipment	EXTENDED WARRANTY ON L9N CUMMINS MOTOR ( 5 YEAR / 300,000 MILE FOR ENGINE )	1	5,700.00	5,700.00	
Freight	OUT BOUND FREIGHT TO FRESNO	1	8,000.00	8,000.00	
	NOTE: YOUR CHASSIS COMES WITH THE CHROME KIT FOR THE WHEELS AND 12 KEYS.				
	THIS IS YOUR NJPA APPROVED PRICING				
Thank you for your business.			<b>Subtotal</b>	\$313,658.34	
Valid for 20 days from date of estimate. This estimate is not a contract or a bill. It is what we would expect the total price to complete the work stated above, based upon our initial inspection. If additional parts and/or labor are required, we will inform you prior to proceeding with the work. A signed estimate is required prior to beginning work stated above.			<b>Sales Tax (7.25%)</b>	\$21,724.32	
			<b>Total</b>	\$335,382.66	

Signature \_\_\_\_\_

Phone #	559-233-3277	Fax #	559-233-9844	E-mail	info@ruckstell.com
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711 West Cinnamon Drive • Lemoore, California 93245 • (559) 924-6700 • Fax (559) 924-6708

## Staff Report

**Item No: 3-5**

**To: Lemoore City Council**

**From: Frank Rivera, Public Works Director**

**Date: October 24, 2018**

**Meeting Date: November 6, 2018**

**Subject: Purchase of a New Side-Loading Refuse Truck – CIP 5404**

**Strategic Initiative:**

- |  |  |
|--|--|
| <input type="checkbox"/> Safe & Vibrant Community            | <input type="checkbox"/> Growing & Dynamic Economy         |
| <input type="checkbox"/> Fiscally Sound Government           | <input checked="" type="checkbox"/> Operational Excellence |
| <input type="checkbox"/> Community & Neighborhood Livability | <input type="checkbox"/> Not Applicable                    |

**Proposed Motion:**

Approve the specifications and authorization to use the Sourcwell (formerly NJPA) procurement contract for the acquisition of a new side-loading refuse truck for a total amount not to exceed \$276,993.40.

**Subject/Discussion:**

On August 21, 2018, City Council approved an additional refuse worker for the refuse department. With the addition of staff, there is a need for an additional side-loading refuse truck. An additional residential route will be added due to the addition of 800 new households over the last several years.

The City received a quote through Sourcwell, which is a public agency service cooperative that serves over 50,000 members. Through national solicitations, they provide the opportunity for members to purchase through nationally leveraged, competitively bid contracts. Sourcwell is a Municipal Contracting agency established to allow participating municipal agencies to reduce the cost of procurement by leveraging the benefits of contract purchasing.

E.M. Tharp Inc. prepared a Sourcwell quote for the City on October 18, 2018 with a price of \$276,993.40 for a new side-loading refuse truck.

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**Financial Consideration(s):**

CIP 5404 has an approved budget of \$360,000. The price for the new side-loading refuse truck is \$276,993.40.

**Alternatives or Pros/Cons:**

None proposed.

**Commission/Board Recommendation:**

Not applicable.

**Staff Recommendation:**

Staff recommends that Council approve the purchase of a new side-loading refuse truck.

**Attachments:**

- ☐ Resolution:
  - ☐ Ordinance:
  - ☐ Map
  - ☐ Contract
  - ☒ Other
- List: Estimate

**Review:**

- ☒ Asst. City Manager
- ☒ City Attorney
- ☒ City Clerk
- ☒ City Manger
- ☒ Finance

**Date:**

- 10/29/18
- 11/01/18
- 11/02/18
- 10/31/18
- 10/29/18

**E.M. Tharp Inc., d.b.a. Golden State Peterbilt**

15243 Road 192 Porterville, CA 93257 (559) 782-5800 Phone (559) 746-0346 Fax

City of Lemoore  
711 W. Cinnamon Dr.  
Lemoore Ca. 93245  
(559) 423-3618  
Chris Banuelos

Stock Number: Sourcewell SL  
Quote Number: 96587

Customer Proposal Letter  
October 18, 2018

Thank you for the opportunity to earn your business. We look forward to working with you on your business needs.  
Please accept the following proposal

Year	Make	Model	Description	Mileage
2019	Peterbilt	520	Garbage/Refuse Truck	0
Estimated Delivery Date: June 10, 2019				
Quantity		1		Total
Vehicle Price per Unit			\$119,609.00	\$119,609.00
Bridgeport ASL			\$124,900.00	\$124,900.00
15 spare keys, maintenance books, chrome kit			\$2,000.00	\$2,000.00
Contract #081-716-PMC			\$0.00	\$0.00
N/A			\$0.00	\$0.00
N/A			\$0.00	\$0.00
N/A			\$0.00	\$0.00
Federal Excise Tax			\$0.00	\$0.00
Federal Excise Tax Tire Credit			\$0.00	\$0.00
Net Sales Price			\$246,509.00	\$246,509.00
Estimated License, License Transfer, Reg. Fee			\$0.00	\$0.00
State & Local Taxes	7.250%		\$17,871.90	\$17,871.90
Tire Recycling Fee			\$17.50	\$17.50
Documentary Fee			\$45.00	\$45.00
Administration Fee			\$250.00	\$250.00
Out of State Delivery			\$0.00	\$0.00
Optional Extended Warranty (ies) / Non Taxable Items				
Delivery fee			\$600.00	\$600.00
Flooring			\$4,500.00	\$4,500.00
PX9 Proction 1 engine & aftertreatment warranty 5/250			\$7,200.00	\$7,200.00
DMV to be completed by E.M. Tharp, Inc. at time of delivery			\$0.00	\$0.00
N/A			\$0.00	\$0.00
Total Sales Price			\$276,993.40	\$276,993.40
Trade Allowance			*	\$0.00

Proposal Valid for: 10 Days

\*See DISCLAIMER (page 2)

# E.M. Tharp Inc., d.b.a. Golden State Peterbilt

15243 Road 192 Porterville, CA 93257 (559) 782-5800 Phone (559) 746-0346 Fax

Quote Number: 96587

## NEW EQUIPMENT ORDERS & CHARGES:

Customer has 15 days from the estimated delivery date to accept delivery of the vehicle. After 15 days from the estimated delivery date the Dealer reserves the right to access a monthly charge of .83% percent on the cash price of vehicle. On any new vehicle orders that are canceled, there will be a loss of Non-Refundable Deposit.

Sales Representative

Signature

Chad Everett

Printed Name

Purchaser

Signature

Printed Name

Title

Date

Accepted by  
Dealer General Sales Manager  
Vice President or President

Signature

Title

Note: The above Customer Proposal is a quotation only. Sale terms subject to Dealer approval.

**DISCLAIMER:** Any order based on this Proposal subject to Customer executing Dealer's standard form Retail Order Incorporating above terms. Any documentary fees, state tax, title, registration, F.E.T., and license fees subject to adjustment and change. Manufacturer has reserved the right to change the price to Dealer of any vehicle not currently in Dealer's stock, without notice to Dealer. If Quoted Vehicle(s) not currently in Dealer's stock, Dealer reserves right to change Quotation Total to reflect any price increases from Manufacturer. This Proposal is based upon Dealer's current and expected inventory, which is subject to change. Dealer not obligated to retain any specific vehicles in stock, nor maintain any specific inventory level. Dealer shall not be obligated to fulfill proposal in event quoted vehicle(s) not in stock or available within requested delivery schedule at time Proposal accepted. Dealer shall not be liable for any delay in providing or inability to provide Quoted Vehicle(s), where such inability or delay is due, in whole or in part, to any cause beyond the reasonable control of Dealer or is without the gross negligence or intended misconduct of Dealer. Above listed Trade Value based upon current appraisal of Trade Vehicle(s). Dealer may adjust Trade Value of Trade Vehicle(s) to reflect changes in condition and/or mileage of Trade Vehicle(s) between date of current appraisal and acceptance of this Proposal by Customer.





711 West Cinnamon Drive • Lemoore, California 93245 • (559) 924-6700 • Fax (559) 924-6708

## Staff Report

**Item No: 3-6**

**To: Lemoore City Council**

**From: Janie Venegas, City Clerk / Human Resources Manager**

**Date: October 30, 2018**

**Meeting Date: November 6, 2018**

**Subject: Denial of Claim for Mr. Jeff Fabry**

**Strategic Initiative:**

- |   |  |
|---|--|
| <input type="checkbox"/> Safe & Vibrant Community             | <input type="checkbox"/> Growing & Dynamic Economy |
| <input checked="" type="checkbox"/> Fiscally Sound Government | <input type="checkbox"/> Operational Excellence    |
| <input type="checkbox"/> Community & Neighborhood Livability  | <input type="checkbox"/> Not Applicable            |

**Proposed Motion:**

Approve the Denial of Claim for Mr. Jeff Fabry.

**Subject/Discussion:**

The City of Lemoore received a claim from Kahn, Soares & Conway, LLP on behalf of Mr. Jeff Fabry on May 21, 2018 for an incident that occurred on March 12, 2018. The claim was returned insufficient on May 22, 2018. An amended claim was submitted on August 27, 2018. Mr. Fabry claims allegations of ADA violations which may have contributed to his wheelchair falling backwards while at the Lemoore Little League Complex.

The City submitted the claim to the third-party administrator of liability claims, Acclamation Insurance Management Services (AIMS). AIMS concluded their investigation and are recommending the City reject the claim, thereby starting the six-month statute of limitations deadline.

**Financial Consideration(s):**

Unknown at this time.

**Alternatives or Pros/Cons:**

Not applicable.

**Commission/Board Recommendation:**

Not applicable.

**Staff Recommendation:**

Staff recommends denial of the claim for Mr. Jeff Fabry, as recommended by AIMS.

**Attachments:**

- ☐ Resolution:
  - ☐ Ordinance:
  - ☐ Map
  - ☐ Contract
  - ☒ Other
- List: Claim

**Review:**

- ☒ Asst. City Manager
- ☒ City Attorney
- ☒ City Clerk
- ☒ City Manger
- ☒ Finance

**Date:**

10/30/18  
11/01/18  
11/02/18  
10/31/18  
10/30/18

## CENTRAL SAN JOAQUIN VALLEY RISK MANAGEMENT AUTHORITY

## CLAIM FORM

CITY CLERK'S OFFICE

(Please Type Or Print)

AUG 27 2018

CLAIM AGAINST City of Lemoore

(Name of Entity)

RECEIVED

Claimant's name: Jeff R. FabrySS#: \_\_\_\_\_ DOB: \_\_\_\_\_ Gender: Male ☒ Female \_\_\_\_\_

Claimant's address: \_\_\_\_\_ Telephone: \_\_\_\_\_

Address where notices about claim are to be sent, if different from above: Rissa A. Stuart  
c/o Kahn, Soares & Conway, LLP, 219 N. Douty Street, Hanford, CA 93230Date of incident/accident: 03/19/2018Date injuries, damages, or losses were discovered: See Claim Attachment, attached hereto and incorporated herein by this reference as Exhibit "1."Location of incident/accident: See Claim Attachment, attached hereto and incorporated herein by this reference as Exhibit "1."What did entity or employee do to cause this loss, damage, or injury? See Claim Attachment, attached hereto and incorporated herein by this reference as Exhibit "1."

(Use back of this form or separate sheet if necessary to answer this question in detail.)

What are the names of the entity's employees who caused this injury, damage, or loss (if known)? See Claim Attachment, attached hereto and incorporated herein by this reference as Exhibit "1."What specific injuries, damages, or losses did claimant receive? See Claim Attachment, attached hereto and incorporated herein by this reference as Exhibit "1."

(Use back of this form or separate sheet if necessary to answer this question in detail.)

What amount of money is claimant seeking or, if the amount is in excess of \$10,000, which is the appropriate court of jurisdiction. Note: If Superior and Municipal Courts are consolidated, you must represent whether it is a "limited civil case" [see Government Code 910(f)]

See Claim Attachment, attached hereto and incorporated herein by this reference as Exhibit "1."How was this amount calculated (please itemize)? See Claim Attachment, attached hereto and incorporated herein by this reference as Exhibit "1."

(Use back of this form or separate sheet if necessary to answer this question in detail.)

Date Signed: August 23, 2018 Signature \_\_\_\_\_

If signed by representative:

Representative's Name Rissa A. Stuart Address 219 N. Douty St., Hanford, CA 93230Telephone # (559) 584-3337Relationship to Claimant Attorney at Law

Claim Form of Jeff R. Fabry

## EXHIBIT "1"

ATTACHMENT 1 to CLAIM FORM

CLAIM OF JEFF R. FABRY

TO: City of Lemoore

Pursuant to California Government Code §§ 900, *et seq.*, Claimant, Jeff R. Fabry, makes this claim against the City of Lemoore ("City") for damages resulting from the acts, practices and omissions for which the City is responsible, and makes the following statements in support of his claims:

- A. Claimant's address is Lemoore, CA 93245.
- B. All notices concerning this claim should be sent to Richard C. Conway/Rissa A. Stuart at Kahn, Soares & Conway, LLP, 219 N. Douty Street, Hanford, CA 93230. Mr. Conway and Ms. Stuart can also be reached at [rconway@kschanford.com](mailto:rconway@kschanford.com), [rstuart@kschanford.com](mailto:rstuart@kschanford.com) or (559) 584-3337.
- C. The dates and places and other circumstances surrounding the occurrences which give rise to the claims asserted are as follows:

**1. Introduction:**

On the evening of Monday, March 19, 2018, Claimant was at the Lemoore Little League facility, located on Lemoore Avenue and W. Iona Avenue, owned, maintained, managed, operated, and/or controlled by the City of Lemoore, which also includes the parking facilities and areas along with Iona Avenue (hereinafter referred to as the "**Premises**"), to watch his son's baseball game. His son was playing on Becker Field which is located on the north side of West Iona Avenue. There was no parking available on the north side of Iona Avenue, so Claimant parked on the south side of West Iona Avenue, which was also used for parking for attendees at the Little League games. There are no street lights on West Iona Avenue near the Premises.

After his son's game ended, Claimant, his wife, and some other parents were gathered on the grass area behind the Becker Field press box, talking, as they often did after a game. At approximately 9:30 p.m., shortly after the game ended, the baseball field lights were suddenly and without warning turned off while Claimant and the other parents were gathered on the Premises. The field lights are controlled from the Becker Field press box, and Lemoore Little League board member, Wendy Ramos, turned them off. Claimant recalls that Rich, another parent, asked Ms. Ramos "Why did you guys turn the lights off?" and also said to her "We can't see, the lights are off." The lights were not turned back on.

After the field lights were turned off, everyone headed toward their respective vehicles and left the Premises. Claimant and his wife had taken separate vehicles to the game and she left ahead of him. Claimant was in his wheelchair and to get to his vehicle, he had to cross dirt, grass and gravel before reaching the asphalt road (Iona Ave.) which he had to cross to get to his parked vehicle. Once Claimant reached the gravel area, he started rolling his wheelchair backwards because his experience had proven it was easier to travel through gravel that way. Claimant knew that the transition from gravel to asphalt involved maneuvering his wheelchair up a 5"-6"



lip. However, the field lights were always on when he had done this before. While cautiously rolling backwards and trying to look for the transition lip in the dark, he suddenly hit the lip, which caused Claimant to fall backwards out of his wheelchair and on to the roadway. At this time, Claimant was alone, but Rich was following a short distance behind him and reached him after he had fallow out of his wheelchair. Claimant, whose right arm was amputated at the elbow 15 years prior, tried to use his arms to break his fall, which prevented his head from hitting the road. He was able to get himself up and back into his chair after the fall. Claimant thought he was okay to drive home but began to experience pain in his left shoulder as he drove home. As a direct result of the incident and the City's acts and omissions related to the Premises and surrounding areas, Claimant sustained serious personal injuries to his person, including injury to his left shoulder, which required surgical repair and other related injuries and monetary damages. Claimant reported the incident to Tiffany Travis, a Lemoore Little League board member, that evening.

At the time of the incident, there was a limited Memorandum of Understanding agreement between the City of Lemoore and the Lemoore Little League, for the use of the Premises, for the term of February 7, 2018 through December 31, 2018, unless terminated sooner by either party.

## **2. Negligent Failure to Protect Against Dangerous Condition**

The incident which injured Claimant occurred on the Premises, near Becker Field which is located on W. Iona Avenue just west of Lemoore Avenue and includes nearby parking areas. The Premises were designed, constructed, owned, controlled, managed, and/or maintained by the City. The City owed a duty to all users, including those in wheelchairs, like Claimant, to provide and ensure the Premises were in a safe condition. At the time of the incident, dangerous conditions existed on these Premises, posing a substantial, foreseeable, and unreasonable risk of injury to disabled persons, including Claimant, of the kind suffered by Claimant.

The Premises, including the Lemoore Little League Fields and surrounding parking, were owned, designed, constructed, controlled, managed, and/or maintained by the City in such a manner, that disabled invitees or users of the Premises, despite the exercise of reasonable care, were exposed to an unreasonable risk of injury or death as a result of the dangerous conditions. The conditions which gave rise to said risk of harm included, but were not limited to, design, construction and maintenance of the Premises in a manner that lacks accessible paths of travel to and from parking lots or parking areas to all fields, participation and play areas; lack of walkways/sidewalks provided to connect accessible facilities at the Lemoore Little League fields; lack of sufficient warning signs regarding the dangerous conditions, and lack of adequate lighting and/or illumination, for the Premises, including the parking areas.

The City had actual knowledge that the Premises lacked accessible paths of travel to and from parking lots/areas to all fields or participation and play areas, for disabled persons and lacked walkways/sidewalks to connect accessible facilities, as said problems were specifically cited in the "City of Lemoore American With Disabilities Action Transition Plan" which was approved by the City on September 3, 2013. Further, the City had actual and/or constructive knowledge that there was a lack of adequate lighting and/or illumination for the Premises, including the parking areas, and that these conditions were more dangerous at night, especially if

the lights were prematurely turned off while guests or invitees were on the Premises, including the parking areas.

Despite the fact that the City had, for several years prior to the incident, actual and/or constructive notice of the dangers posed by the conditions at the Premises, the City unreasonably failed to take measures to protect against the dangerous conditions. As a proximate result of the City's negligent failure to protect against the dangerous conditions described herein, Claimant suffered injury to his person.

### **3. Failure to Warn**

The City, which owned, designed, constructed, controlled, managed, and/or maintained the Premises where Claimant was injured, unreasonably failed to warn users of the Premises, including, but not limited to, disabled persons such as Claimant, of the dangerous conditions at the Premises. Despite the City's prior knowledge of those dangerous conditions, which included, but were not limited to: design, construction, control, management, and maintenance of the Premises in a manner that lacks accessible paths of travel to and from parking lots/or parking areas to all fields, participation and play areas; lack of walkways/sidewalks to connect accessible facilities, lack of sufficient warning signs regarding the dangerous conditions, and lack of adequate lighting and/or illumination of the Premises and/or parking areas. Said failure to warn disabled persons, including Claimant, of said dangerous conditions created a substantial, foreseeable risk of injury of the kind suffered by Claimant.

The City had actual knowledge that the Premises lacked accessible paths of travel to and from parking lots/areas to all fields, or participation and play areas for disabled persons and lacked walkways/sidewalks to connect accessible facilities as said problems were specifically cited in the "City of Lemoore American With Disabilities Action Transition Plan" which was approved on September 3, 2013. Further, the City had actual and/or constructive knowledge that there was a lack of adequate lighting and/or illumination for the Premises including parking areas, and that these conditions were more dangerous at night, especially if the lights were prematurely turned off while guests or invitees were on the Premises.

Despite the fact that the City had, for several years prior to the incident, actual and/or constructive notice of the dangers posed by the conditions at the Premises, the City unreasonably failed to take measures to protect against the dangerous conditions. As a proximate result of the City's negligent failure to protect against the dangerous conditions described herein, Claimant suffered injury to his person.

### **4. Negligent Design**

The City failed to exercise reasonable care in the design of the Premises, which failure created substantial, foreseeable, and unreasonable risk that disabled persons, despite the exercise of reasonable care, would suffer injury or death as invitees to the Premises. The conditions giving rise to said risks of harm included, but were not limited to: design, construction and maintenance of the Premises in a manner that lacks accessible paths of travel to and from parking lots/areas to all participation and play areas; lack of walkways/sidewalk to connect accessible facilities at the Premises; lack of sufficient warning signs regarding the dangerous conditions, and lack of adequate lighting and/or illumination for the Premises, including parking areas.



The City had actual knowledge that the little league fields lacked accessible paths of travel to and from parking lots/areas to all fields or participation and play areas for disabled persons and lacked walkways/sidewalks to connect accessible facilities as said problems were specifically cited in the "City of Lemoore American With Disabilities Action Transition Plan" which was approved on September 3, 2013.

Further, the City had actual and/or constructive knowledge that there was a lack of adequate lighting and/or illumination for the Premises, and that these conditions were dangerous more at night, especially if the lights were prematurely turned off while guests or invitees were on the Premises, including parking areas.

The City's negligence in the design of the Premises proximately caused injury to Claimant's person.

#### **5. Negligent Construction**

The City failed to exercise reasonable care in the construction of the Premises, which failure created substantial, foreseeable, and unreasonable risk that disabled persons, including Claimant, despite the exercise of reasonable care, would suffer injury or death as invitees to the Premises, including the ball fields and parking areas. The conditions giving rise to said risks of harm included, but were not limited to: design, construction and maintenance of the Premises in a manner that lacks accessible paths of travel to and from parking lots to all fields, participation and play areas; lack of walkways/sidewalks to connect accessible facilities at the Premises; lack of sufficient warning signs regarding the dangerous conditions, and lack of adequate lighting and/or illumination on the Premises, including parking areas.

The City had actual knowledge that the Premises lacked accessible paths of travel to and from parking lots/areas to all fields or participation and play areas for disabled persons and lacked walks/sidewalks to connect accessible facilities as said problems were specifically cited in the "City of Lemoore American With Disabilities Action Transition Plan" which was approved on September 3, 2013. Further, the City had actual and/or constructive knowledge that there was a lack of adequate lighting and/or illumination for the Premises, and that these conditions were dangerous more at night, especially if the lights were prematurely turned off while guests or invitees were on the Premises, including parking areas.

The City's negligence in the construction of Premises caused injury to Claimant's person.

#### **6. Negligent Maintenance**

The City failed to exercise reasonable care in the maintenance of the Premises, which failure created substantial, foreseeable, and unreasonable risk that disabled persons, despite the exercise of reasonable care, would suffer injury or death as invitees to the Premises. The conditions giving rise to said risks of harm included, but were not limited to: design, construction and maintenance of the Premises in a manner that lacks accessible paths of travel to and from parking lots/areas to all participation and play areas; lack of walk/sidewalk to connect accessible facilities at the Premises; lack of sufficient warning signs regarding the dangerous conditions, and lack of adequate lighting and/or illumination.

The City had actual knowledge that the little league fields lacked accessible paths of travel to and from parking lots to all fields or participation and play areas for disabled persons and lacked walks/sidewalks to connect accessible facilities as said problems were specifically cited in the "City of Lemoore American With Disabilities Action Transition Plan" which was approved on September 3, 2013. The City had actual and/or constructive knowledge that there was a lack of adequate lighting and/or illumination on the Premises, including the parking areas.

The City's negligence in the maintenance of the Lemoore Little League Fields proximately caused injury to Claimant's person.

**7. Negligent Supervision and Training of Agents and Invitees**

The City entered into an MOU with the Lemoore Little League, regarding the use of the Premises. This MOU did not adequately address the responsibilities and duties of the League related to the operations or events at the Premises. The City's negligence in addressing said issues is and was a cause of Claimant's incidents as there were no rules, directions, or training regarding safe operation of the Premises. The League was obviously acting within the scope of their authority and with the consent and permission of the City at the time of the incident.

The City negligently and carelessly failed to properly train, instruct, oversee and/or supervise the Lemoore Little League and its officers and directors, as permitted users and operators of the Premises, regarding safe operations of the Premises, dangerous conditions at the Premises, the need to maintain the lights on until all patrons had left the field or provision of notice, warnings or warning signs to other users of the Premises prior to turning off the lights at the Premises. It was reasonably foreseeable that someone could be injured on the Premises if the lights were turned off without warning. As a direct result of the City's negligence, Claimant suffered significant personal injuries and damages.

**8. Failure to Discharge a Mandatory Duty**

Government Code §815.6 provides that "where a public entity is under a mandatory duty imposed by an enactment that is designed to protect against the risk of a particular kind of injury, the public entity is liable for an injury of that kind proximately caused by its failure to discharge the duty..." Here, the City failed to build, construct, or put in place appropriate walkways/sidewalks and to connect accessible facilities with an accessible path of travel for use by persons in wheelchairs or otherwise disabled, to comply with the federal laws of the Americans with Disability Act. The City was aware of this duty in 2013 and failed to discharge the same. As a direct result of this failure, Claimant sustained personal injuries and damages.

**9. Vicarious Liability for Conduct of Little League Board, Officers, Directors, Officials, or Agents**

The City as the owner of the Premises, is vicariously liable for any negligence by the Lemoore Little League, or its agents or officials, which resulted in the incident and injuries and damages to Claimant, as more specifically discussed above.

D. A general description of the indebtedness, obligation, injury, damage, or loss incurred so far as it may be known at the time is as follows:



1. Claimant sustained significant physical injury to his left shoulder which required surgical repair, and other medical and therapeutic services, as well as emotional trauma and distress.
2. Economic loss (past, present, and future), including, but not limited to, lost wages or earnings, and medical and therapeutic expenses, in an amount according to proof;
3. Loss of earning capacity;
4. General damages, including, but not limited to, pain and suffering, in an amount according to proof;
5. Prejudgment interest at the legal rate; and
6. Expenses and costs associated with said claims.

E. The names of City employees, agents and invitees causing the injury, damage, or loss are as follows:

1. Unknown directors, officers, agents, and/or employees of the City who are in some manner responsible for Claimant's harm as alleged above. The names and identities of these individuals are not known to the Claimant at this time and are herein referred to as Does 1 through 100, inclusive.
2. Unknown directors, officers, agents and/or employees of Lemoore Little League who are in some manner responsible for Claimant's harm as alleged above. The names and identities of these individuals are not known to the Claimant at this time and are herein referred to as Does 1 through 100, inclusive

F. The amount of total damages claimed by Claimant is over \$10,000.00 and this case would be filed as an unlimited civil case, with damages over \$25,000.00. Claimant's damages include, but are not limited to the damages identified in Section D above.

Dated: August 23, 2018

KAHN, SOARES & CONWAY, LLP

By: 

Richard C. Conway/Rissa A. Stuart, Attorneys  
for Claimant, Jeff R. Fabry





711 West Cinnamon Drive • Lemoore, California 93245 • (559) 924-6700 • Fax (559) 924-6708

## Staff Report

Item No: 4-1

**To:** Lemoore City Council

**From:** Steve Brandt, AICP

**Date:** October 11, 2018

**Meeting Date:** November 6, 2018

**Subject:** **General Plan Amendment No. 2017-01, Zone Change No. 2017-01, and Site Plan Review No. 2016-03:** A request by CV Housing, LLC (agent: Brett Fugman) to change the General Plan land use designations and zoning from Mixed Use (MU) and Neighborhood Commercial (NC) to Medium Density Residential (RMD) and Neighborhood Commercial (NC) and to approve a site plan for a 176-unit multi-family apartment complex, located at the southeast corner of Highway 41 and Hanford-Armona Road (APN 021-660-031) Resolution 2018-46 and Ordinance 2018-08

### Strategic Initiative:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Safe & Vibrant Community            | <input type="checkbox"/> Growing & Dynamic Economy |
| <input type="checkbox"/> Fiscally Sound Government                      | <input type="checkbox"/> Operational Excellence    |
| <input checked="" type="checkbox"/> Community & Neighborhood Livability | <input type="checkbox"/> Not Applicable            |

**Proposed Motion:** City staff recommends that the City Council adopt Resolution No. 2018-46 approving General Plan Amendment No. 2017-01, a Mitigated Negative Declaration, and Major Site Plan Review No. 2016-03, and Ordinance 2018-08 approving Zone Change No. 2017-01.

**Subject/Discussion:** The project if approved, would allow a 176-unit multi-family apartment complex that would be constructed in two phases. The commercial area shown on the site plan is conceptual only, and would not be approved or constructed at this time. Currently, the southernmost 8 acres of the project site has a General Plan land use designation of Mixed Use and is zoned Mixed Use (MU). The northwest corner of the site is unzoned without a General Plan land use designation, and the remaining 5.8 acres has a General Plan land use designation and zoning designation of Neighborhood Commercial (NC). The proposed project will result in a General Plan land use designation and zoning designation of Neighborhood Commercial (NC) for the undesignated areas and change the Mixed Use (MU) zoned area and a portion of the Neighborhood Commercial (NC) zoned area to Medium Density Residential (RMD).

*"In God We Trust"*

Approval of the proposed General Plan Amendment and Zone Change will result in the southern 10.69 acres of land designated and zoned Medium Density Residential (RMD), and the northernmost 4.57 acres designated and zoned as Neighborhood Commercial (NC). The change is supported by staff because Medium Density Residential housing is a permitted use in the Mixed-Use Zone. However, the rezoning is requested because the proposed Project is designed such that the residential development will be separate from the commercial uses and will not include a mix of residential, commercial, or office development on the site. With approval of the General Plan Amendment and Zone Change, the Project will remain consistent with the goals and policies of the City of Lemoore 2030 General Plan, therefore, the findings necessary to support the project can be made.

The Lemoore Housing Element projects proposed numbers of residential units for vacant or underdeveloped sites zoned for residential uses. According to Appendix B Table B-2d: Residential Land Inventory – City of Lemoore of the Housing Element, the project site was anticipated to develop with 71 units. With the proposal to construct 176 units, more than what was projected, the General Plan Amendment is consistent with the Housing Element, keeping the General Plan internally consistent.

**Environmental Assessment:**

As Lead Agency under the California Environmental Quality Act (CEQA), the City staff reviewed the project to determine whether it could have a significant effect on the environment because of its development. In accordance with CEQA Guidelines Section 15382, “[s]ignificant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An Initial Study was prepared. The Initial Study found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project in the form of mitigations have been made by or agreed to by the project proponent. A Mitigated Negative Declaration was prepared and is attached for review.

Mitigation measures are included to reduce impacts to less than significant. In response to a letter received from the Santa Rosa Rancheria Tribe, Mitigation Measure MM CUL-2 requires the applicant to offer interested Tribes the opportunity to provide a Native American Monitor during ground disturbing activities during construction.

**Financial Consideration(s):** There is no financial impact to the City regarding the General Plan Amendment, Zone Change, and Site Plan Review.

**Alternatives or Pros/Cons:** Alternatively, the City Council could choose to deny the application, in which case the site would retain its current General Plan designations and zoning of Mixed Use (MU), Neighborhood Commercial (NC), and remain partially unzoned with no land use designation.

**Commission/Board Recommendation:** The Planning Commission held a public hearing on October 8, 2018. The Planning Commission adopted Resolution No. 2018-09 recommending approval of General Plan Amendment No. 2017-01, Zone Change No. 2017-01, and Major Site Plan Review No. 2016-03.

*“In God We Trust”*

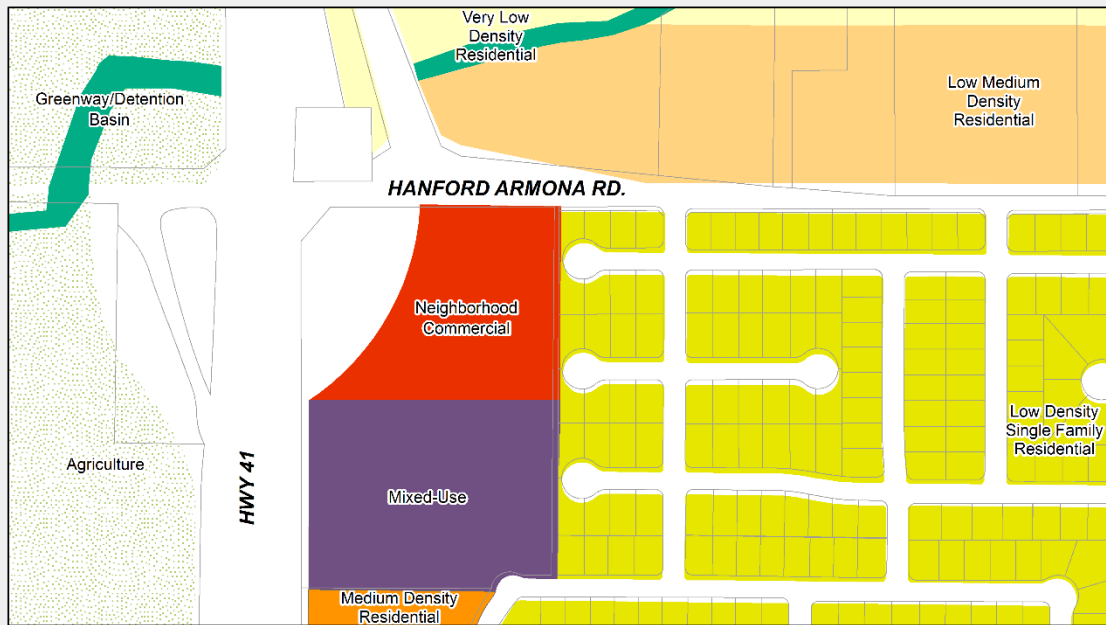
An anonymous public comment letter was submitted to the City the afternoon of the Planning Commission hearing. As a result, City staff has worked with the applicant to address comments and concerns raised in the letter and during the public hearing. Key changes include revising the drive approach at the northeast corner of the project site to improve site visibility and addition of a pedestrian gate at the Persimmon Street entrance.

After the Planning Commission hearing, the City received a letter from Caltrans on October 15. The letter (attached) provides comments on both the Initial Study / Mitigated Negative Declaration and the traffic impact analysis. One key comment is Comment No. 5, which requests that the City require the developer provide an irrevocable offer of dedication to Caltrans for property that would be needed for widening Highway 41 and for constructing a future interchange at Hanford-Armona Road.

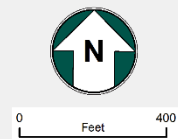
City staff had met with Caltrans in 2017 to discuss this future interchange. Caltrans stated at that time that there was no timeline for construction of the interchange, but it is definitely not going to occur in the near future. The traffic impact analysis concludes that the proposed project is not generating enough traffic to require the interchange. State and federal law requires that when a city requires land dedication there must be a reasonably related connection between the required dedication and the impact generated by the project, and that the requirement must be roughly proportional to the impact. While it is true that there is a reasonable relationship between increased traffic and road improvements, the requirement to dedicate land for a future interchange does not appear to be roughly proportional to the increased traffic generated by the project. Since that is a legal requirement to make a land dedication, City staff is not recommending that the dedication be made a condition of approval. Furthermore, if the City was to require the dedication, the landowner would be entitled to compensation. Since the interchange is not listed as a current Caltrans project, Caltrans cannot pay for the dedication. Payment would then be the responsibility of the City.

**Staff Recommendation:** Staff recommends approval of the Mitigated Negative Declaration and approval of General Plan Amendment No. 2017-01, Zone Change No. 2017-01, and Major Site Plan Review No. 2016-03 in accordance with the Planning Commission recommendation, the site plan comments, and with the modifications to the entrances to improve site visibility and pedestrian access.

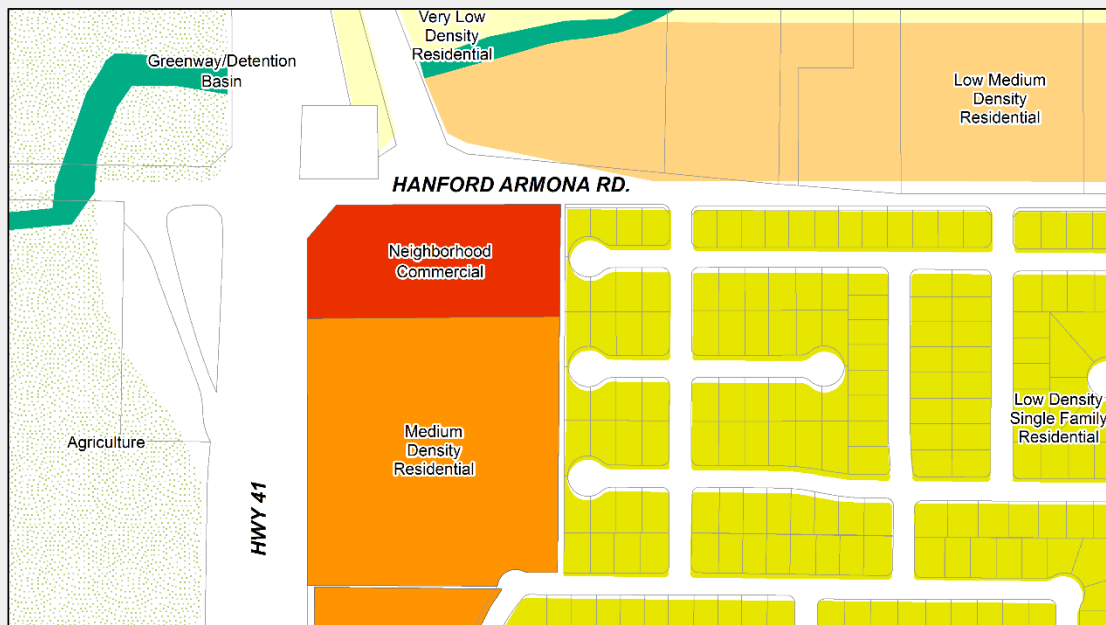
<b>Attachments:</b>	<b>Review:</b>	<b>Date:</b>
<input checked="" type="checkbox"/> Resolution: 2018-46	<input checked="" type="checkbox"/> Asst. City Manager	10/29/18
<input checked="" type="checkbox"/> Ordinance: 2018-08	<input checked="" type="checkbox"/> City Attorney	11/01/18
<input checked="" type="checkbox"/> Map	<input checked="" type="checkbox"/> City Clerk	11/02/18
<input type="checkbox"/> Contract	<input checked="" type="checkbox"/> City Manager	10/31/18
<input checked="" type="checkbox"/> Other	<input checked="" type="checkbox"/> Finance	10/29/18
List:		
Major Site Plan Review 2016-03 comments		
Mitigated Negative Declaration		
Public comment letter October 8, 2018		
Letter from Caltrans dated October 15, 2018		
Planning Commission Resolution 2018-09		



**Before General Plan Amendment**



**After General Plan Amendment**



**Map of Existing & Proposed General Plan Land Use Designations**

**RESOLUTION NO. 2018-46**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LEMOORE  
APPROVING GENERAL PLAN AMENDMENT NO. 2017-01 AND MAJOR SITE PLAN  
REVIEW NO. 2016-03 FOR A 176-UNIT MULTI-FAMILY UNITS AND 4.57 ACRES OF  
COMMERCIAL DEVELOPMENT AT THE SOUTHEAST CORNER OF HIGHWAY 41  
AND HANFORD-ARMONA ROAD IN THE CITY OF LEMOORE**

**WHEREAS**, CV Housing, LLC (agent: Brett Fugman) has requested to change the General Plan land use designations from Mixed Use and Neighborhood Commercial to Medium Density Residential and Neighborhood Commercial and to approve a site plan for a 176-unit multi-family apartment complex on the proposed site; and

**WHEREAS**, the site is located at the southeast corner of Highway 41 and Hanford-Armona Road (APN 021-660-031); and

**WHEREAS**, the site is currently vacant; and

**WHEREAS**, the site contains land that was not given a land use designation in the 2008 General Plan Update, and was not zoned in the 2012 Zoning Ordinance Update; and

**WHEREAS**, the applicant has also requested a change of zoning, Zone Change 2017-01, from Mixed Use (MU) and Neighborhood Commercial (NC) to Medium Density Residential (RMD) and Neighborhood Commercial (NC), which will be acted upon by Ordinance; and

**WHEREAS**, as Lead Agency under the California Environmental Quality Act (CEQA), the City staff reviewed the project to determine whether it could have a significant effect on the environment because of its development. In accordance with CEQA Guidelines Section 15382, “[s]ignificant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An Initial Study was prepared. The Initial Study found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project in the form of mitigations have been made by or agreed to by the project proponent. A Mitigated Negative Declaration (MND) was prepared; and

**WHEREAS**, the Lemoore Planning Commission held a duly noticed public hearing at its October 8, 2018, meeting and recommended approval of the proposed project and adoption of the MND.

**NOW THEREFORE, BE IT RESOLVED** that the City Council of the City of Lemoore finds that no significant environmental impacts would result from the identified project and adopts the Mitigated Negative Declaration that has been prepared.

**BE IT FURTHER RESOLVED** that the City Council of the City of Lemoore approves General Plan Amendment 2017-01 in accordance with the Planning Commission recommendation



to designate the southern 10.69 acres of land Medium Density Residential, and the northernmost 4.57 acres as Neighborhood Commercial, based on the evidence present and the following specific findings:

1. The General Plan amendment is in the public interest and the General Plan, as amended, will remain internally consistent.
2. Private property without any General Plan land use designation applied to it could be detrimental to the City and would not be in the public interest.
3. Any potential significant effects on the environment resulting from the proposed project will be reduced to a level less than significant with the mitigation measures contained in the Mitigated Negative Declaration,

**BE IT FURTHER RESOLVED** that the City Council of the City of Lemoore approves Major Site Plan Review 2016-03 in accordance with the Planning Commission recommendation to approve 176 units on 10.69 acres, based on the following specific findings:

1. The proposed project is consistent with the objectives of the General Plan, and complies with applicable zoning regulations, specific plan provisions, and improvement standards adopted by the City.
2. The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community.
3. The architecture, character, and scale of the building and the site are compatible with the character of buildings on adjoining and nearby properties.
4. The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation.

**BE IT FURTHER RESOLVED** that the City Council of the City of Lemoore approves Major Site Plan Review No. 2016-03 for 176 multi-family units subject to the following conditions:

1. The site shall be developed consistent with the approved Site Plan, Elevations, and its conditions; Major Site Plan Review No. 2016-03 comments, and applicable development standards found in the Zoning Ordinance and City Municipal Code.
2. The project would be developed in three phases. The first two phases cover the apartment complex. The third phase will consist of the commercial development and will require the application for and approval of a separate site plan review application. Site Plan Review No. 2016-03 reviews the multifamily development and street layout only.
3. All mitigation measures in the Mitigated Negative Declaration approved with General Plan Amendment 2017-01 and Zoning Map Amendment 2017-01 and Site Plan Review 2016-03 shall be complied with.

4. Plans for all public and private improvements, including but not limited to, water, sewer, storm drainage, road pavement, curb and gutter, sidewalk, street lights, landscaping, and fire hydrants shall be approved by the City Engineer, and these improvements shall be completed in accordance with the approved plans to the satisfaction of the Public Works Department.
5. A public facilities maintenance district (PFMD) shall be formed at time of building permit for Phase 1 to provide the maintenance costs for common landscaping and other improvements, in accordance with existing City policy. Annexation into an existing PFMD is acceptable.
6. The project shall be subject to the applicable development impact fees adopted by resolution of the City Council.
7. A noise and odor easement shall be recorded on the property, in a form acceptable to the City Attorney, to acknowledge the presence of nearby industry and railroad, and the right of the industry and railroad to continue to emit such noise and odors as are otherwise allowable by law and to ensure that industry in these areas is not unreasonable hindered by residential users and owners that move nearby at a later date.
8. The developer shall comply with the standards, provisions, and requirements of the San Joaquin Valley Air Pollution Control District that relate to the project.
9. Fire hydrant types and locations shall be approved by the Lemoore Volunteer Fire Department.
10. Street trees from the city approved street tree list shall be planted with root barriers as per Public Works Standards and Specifications.
11. Street lights shall be provided within the project as per City local street lighting standards.
12. Any existing roadway, sidewalk, or curb and gutter that is damaged during construction shall be repaired or replaced to the satisfaction of the Public Works Department.
13. All signs shall require a sign permit separate from the building permit.
14. The project and all subsequent uses must meet the requirements found in Section 9-5B-2 of the Zoning Ordinance related to noise, odor, and vibration, and maintenance.
15. This Site Plan Review approval shall expire within two years, unless an extension is granted by the City.

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**PASSED AND ADOPTED** by the City Council of the City of Lemoore at a Regular Meeting held on 6<sup>th</sup> day of November 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

APPROVED:

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Mary J. Venegas  
City Clerk

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Ray Madrigal  
Mayor

**ORDINANCE NO. 2018-08**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LEMOORE  
APPROVING ZONE CHANGE NO. 2017-01, CHANGING THE ZONING MAP TO  
ZONE TO NEIGHBORHOOD COMMERCIAL (NC) AND MEDIUM DENSITY  
RESIDENTIAL (RMD) FOR PROPERTY LOCATED ON THE SOUTHEAST CORNER  
OF HIGHWAY 41 AND HANFORD-ARMONA ROAD (APN 021-660-031)**

**THE CITY COUNCIL OF THE CITY OF LEMOORE HEREBY DOES ORDAIN:**

**SECTION 1. FINDINGS.**

- (a) The property owner of property located on the southeast corner of Highway 41 and Hanford-Armona Road (APN 021-660-031) has requested a zone change to Medium Density Residential (RMD) and Neighborhood Commercial (NC).
- (b) On October 8, 2018, the Planning Commission of the City of Lemoore held a public hearing, reviewed the proposal, and recommended approval of the zone change to the City Council.
- (c) This ordinance is consistent with the City of Lemoore General Plan, Lemoore Municipal Code, and the Zoning Ordinance and would not be detrimental to the public interest, health, safety, convenience, and welfare of the City.
- (d) Pursuant to the California Environmental Quality Act (CEQA), a Mitigated Negative Declaration has been prepared and adopted for this project.
- (e) The City Council held a public hearing on November 6, 2018.

**SECTION 2.** The property located on the southeast corner of Highway 41 and Hanford-Armona Road (APN 021-660-031) is hereby zoned as follows: the southern 10.69 acres is zoned Medium Density Residential (RMD) and the northern 4.57 acres is zoned Neighborhood Commercial (NC). The official Zoning Map shall be amended to reflect this change.

The foregoing Ordinance was introduced at a Regular Meeting of the City Council of the City of Lemoore held on the 6<sup>th</sup> day of November 2018, by the following vote:

AYES:

NOES:

ABSTAINING:

ABSENT:

ATTEST:

APPROVED:

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Mary J. Venegas, City Clerk

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Ray Madrigal, Mayor



711 W. Cinnamon Drive • Lemoore, CA 93245 • Planning (559) 924-6740  
Community Development Department

## Site Plan Review

**To:** CV Housing, LLC  
**From:** Steve Brandt, City Planner  
**Date:** October 9, 2018  
**Subject:** **Major Site Plan Review No. 2016-03:** a request by CV Housing, LLC for site plan review for a 176-unit multi-family residential apartment complex.

### **Building plans shall be submitted based on the following comments.**

Any deviation from the approved plans shall require an amendment to the prior approvals or approval of a new permit as determined by the City. Phase 1 and 2 consists of a multi-family apartment complex. Phase 3 consists of a commercial site and is not being approved at this time. A Site Plan Application(s) shall be submitted for the commercial development prior to application for building permit of Phase 3.

The proposed residential portion of the site is 10.69 acres. The proposed apartment complex includes a community room and a pool, along with five open spaces each with a children's play area. Provided parking includes carports and uncovered stalls. The two-story buildings will house one-, two-, and three-bedroom units. The commercial portion of the site is 4.57 acres. There will be 0.93 acres dedicated for the widening of the Hanford-Armona Road right of way. It is recognized that the commercial area would be in a future phase.

### **Zoning/General Plan:**

Currently, the southernmost 8 acres of the project site is zoned Mixed Use (MU), the northwest corner of the site is unzoned, and the remaining 5.8 acres is zoned Neighborhood Commercial (NC). The project requires a general plan amendment and a zone change to change the Mixed Use area to Medium Density Residential (RMD) to allow for the construction of an apartment complex on 10.69 acres and change the unzoned area to Neighborhood Commercial (NC) to allow for a total of 4.57 acres of future commercial development. These applications are in process with this site plan review.

The proposed RMD zone will allow multi-family units to a density of up to one unit per 1,700 square feet. The proposed unit count of 176 units is within the allowed density. The conceptual



commercial uses are below the maximum lot coverage ratio and within the allowed floor area ratio for the proposed NC zone.

### **Right of Way and Access:**

The General Plan recommends that the ultimate configuration of Hanford-Armona Road be four travel lanes, bike lanes, and necessary turning lanes with a center median to control turning movements.

Improvements required on Hanford-Armona Road for Phase 1 include the installation of curb, gutter, sidewalk, and paveout from the east property line of the site to the property line where it meets the Caltrans right of way, with an appropriate transition to the Caltrans intersection. The final configuration is to be approved by the City Engineer with Caltrans input.

Coordinate with Kings Area Rural Transit (KART) for the design of the future bus turnout.

If the commercial area (Phase 3) is further subdivided in the future, a shared parking and access easement that runs with the land shall be required so that the commercial area operates as one shopping center.

An encroachment permit shall be obtained prior to commencement of work in a public right of way.

No on-street parking shall be allowed on Hanford Armona Road.

A 15-foot wide landscape setback area will be required on the commercial area (Phase 3) when it is developed in the future.

### **Area, Setback, Height, and Coverage Standards:**

#### *9-5A-4: GENERAL ZONING DISTRICT DEVELOPMENT STANDARDS*

The residential portion of the project meets all standards in Table 9-5A-4A. The commercial portion (Phase 3) will be evaluated at a later date.

### **Design Standards:**

All development standards found in Article B of Title 9 of the Zoning Ordinance shall apply. All infrastructure shall meet adopted City standards.

#### *9-5C-3 DESIGN STANDARDS FOR RESIDENTIAL PROJECTS:*

The project meets the standards found in this section that are applicable to multi-family developments.

The elevations for the multi-family development include tile roofs, stone-wrapped columns, balconies, shutters, variations in paint colors, and decorative attic vents. The carports include tile roofs.

*k. Multi-family project developments with twenty-five (25) units or more shall provide at least one on site recreational area of at least ten thousand (10,000) square feet in size, or five percent (5%) of the overall site, whichever is greater.*

The Site Plan proposes five open space areas, totaling 35,892 square feet, that together meet this requirement.

*l. Except for senior housing developments, multi-family developments shall provide one play area (e.g., tot lot) for every forty (40) dwelling units in the project. Each play area size shall be a minimum of seven hundred fifty (750) square feet and shall be equally spaced from each other. Each play area shall be fenced and include play equipment.*

Proposed 176 units divided by 40 equals 4.4 play areas required. The provision of five play areas meets this requirement.

#### **9-5C-4 DESIGN STANDARDS FOR COMMERCIAL PROJECTS:**

The project is required to meet the standards found in this section that are applicable to commercial developments. Since the commercial development is conceptual, no specific changes to the site plan have been identified at this time.

#### **9-5D1-2: LANDSCAPE STANDARDS**

A minimum 15 feet width of landscaping is required along Hanford-Armona Road. Future Site Plan Review for Phase 3 will evaluate compliance with this requirement.

Other landscaped locations on the site plan are acceptable.

The applicant shall submit a landscape plan at time of building permit submittal. The landscape plan shall be compliant with MWEL, including but not limited to the following conditions:

- a. Plan shall include square footages of landscaped area shown, water use calculations, and the material to be utilized.
- b. Turf shall be limited to no more than 25% of total landscape area. Fescue is not a permitted ground cover, per the City Ordinance.
- c. Water use classifications shall be based on WUCOLS IV.

Street trees are required along Hanford-Armona Road and Persimmon Street. Species shall be from the City street tree list. Development of Phases 1 and 2 requires street trees be planted along Persimmon Street only. Street trees on Hanford-Armona Road can be deferred to Phase 3.

Meet all landscape planting size, spacing, and planter widths found in Section 9-5D1-2D of the Zoning Ordinance.

#### **Parking:**

#### **9-5E-3: GENERAL PARKING REGULATIONS:**

The number of multi-family units requires a minimum of 328 parking spaces on site. A total of 359 are shown.

#### ***9-5E-5: DESIGN AND DEVELOPMENT STANDARDS FOR OFF STREET PARKING AREAS***

The parking areas as shown on the site plan meet the design and development standards (space size, aisle width, etc.) of Section 9-5E-5 of the Zoning Ordinance. The site plan appears to be consistent with these standards. Final review will occur at time of building permit submittal.

#### ***9-5E-7: BICYCLE PARKING REQUIREMENTS:***

Provide bicycle parking per the building code.

#### **Signage:**

All signage shall meet the requirements of Chapter 5F of the Zoning Ordinance. Signs require a sign permit.

#### **Trash Enclosures:**

Trash enclosures shall be constructed per City design standards.

Trash enclosures shall be designed to accommodate refuse and recycling bins. The trash enclosures shall also include a roof structure and enclosed by a finished block wall.

#### **Utilities:**

The project shall connect to existing sewer, storm drain, and water lines. Sewer, storm drain, and water services shall be installed per plans approved by the City Engineer.

Water lines are available in Persimmon Avenue and Hanford-Armona Road. An easement for a city water line is required in the open space area and the driveway on the east side of the project. This will allow the City to loop the water system. If the City Engineer determines it to be feasible, the new line shall also connect to existing stubbed water lines in the adjacent cul de sacs of Peachwood Circle, Lime Circle, and Orange Circle. A water line shall also be installed in Hanford-Armona Road with plans to be approved by the City Engineer.

Fire hydrant and FDC locations for Phases 1 and 2 are acceptable as submitted. The two fire hydrants shown along Hanford-Armona Road shall be constructed with construction of Hanford-Armona Road.

A storm drainage line and a sewer line are available in Persimmon Avenue. Extension of these lines will also need to be sized to serve Phase 3. During review of the improvement plans, the Public Works Director will determine if the lines should be upsized and put into a City easement so that they can serve other future development sites north of Hanford-Armona Road.

### **Environmental Assessment:**

A Mitigated Negative Declaration has been prepared in accordance with the California Environmental Quality Act (CEQA).

In addition, the State of California requires a Fish & Wildlife fee of \$2,370.75 when the environmental document is filed with the County Clerk. A check for State and County filing fees made payable to Kings County to be submitted to the City of Lemoore within 3 days after project approval by the City Council.

The developer shall comply with all applicable San Joaquin Valley Air Pollution Control District (SJVAPCD) standards and all applicable dust control requirements including Rule 9510 (indirect source review) and Regulation VIII (fugitive dust) Rules.

### **Lighting:**

The applicant shall submit a Site Photometric (lighting) Plan at time of building permit submittal consistent with 9-5B-4 of the City Municipal Code. The plan shall demonstrate how project lighting shall be designed, located, installed, and maintained in order to prevent glare, light trespass, and light pollution.

Outdoor lighting shall utilize energy efficient fixtures and lamps, such as LED, high pressure sodium, metal halide, low pressure sodium, hard wired compact fluorescent, or other lighting technology that is of equal or greater efficiency. All new outdoor lighting fixtures shall be energy efficient with a rated average bulb life of not less than ten thousand (10,000) hours.

Architectural features may be illuminated by up lighting, provided that the lamps are low intensity to produce a subtle lighting effect and no glare or light trespass is produced. Wherever feasible, solar powered fixtures should be used.

### **Other:**

Apartment unit identification shall be appropriately sized and located on buildings as directed by police and fire departments. Fire hydrant and fire department connection locations shall be located according to the site plan.

### **Planning Commission Comments added at the hearing:**

An ADA compliant pedestrian entrance shall be included at the multi-family entrance from Persimmon Street.

Main drive approach on Hanford-Armona Road:

The lanes entering and exiting the main drive approach shall be at least 15' wide.

- a. Move entire drive approach toward the west to improve the line of site for traffic exiting the driveway. After shifting the drive approach, the driveway can curve back and line up with the driveway shown on the current site plan.
- b. Move median toward back so that it does not interfere with pedestrian crossing.
- c. Add an ADA ramp to the northeast corner of the drive approach.

- d. Show the location of the home that is adjacent to the northeast property line near the main drive approach.

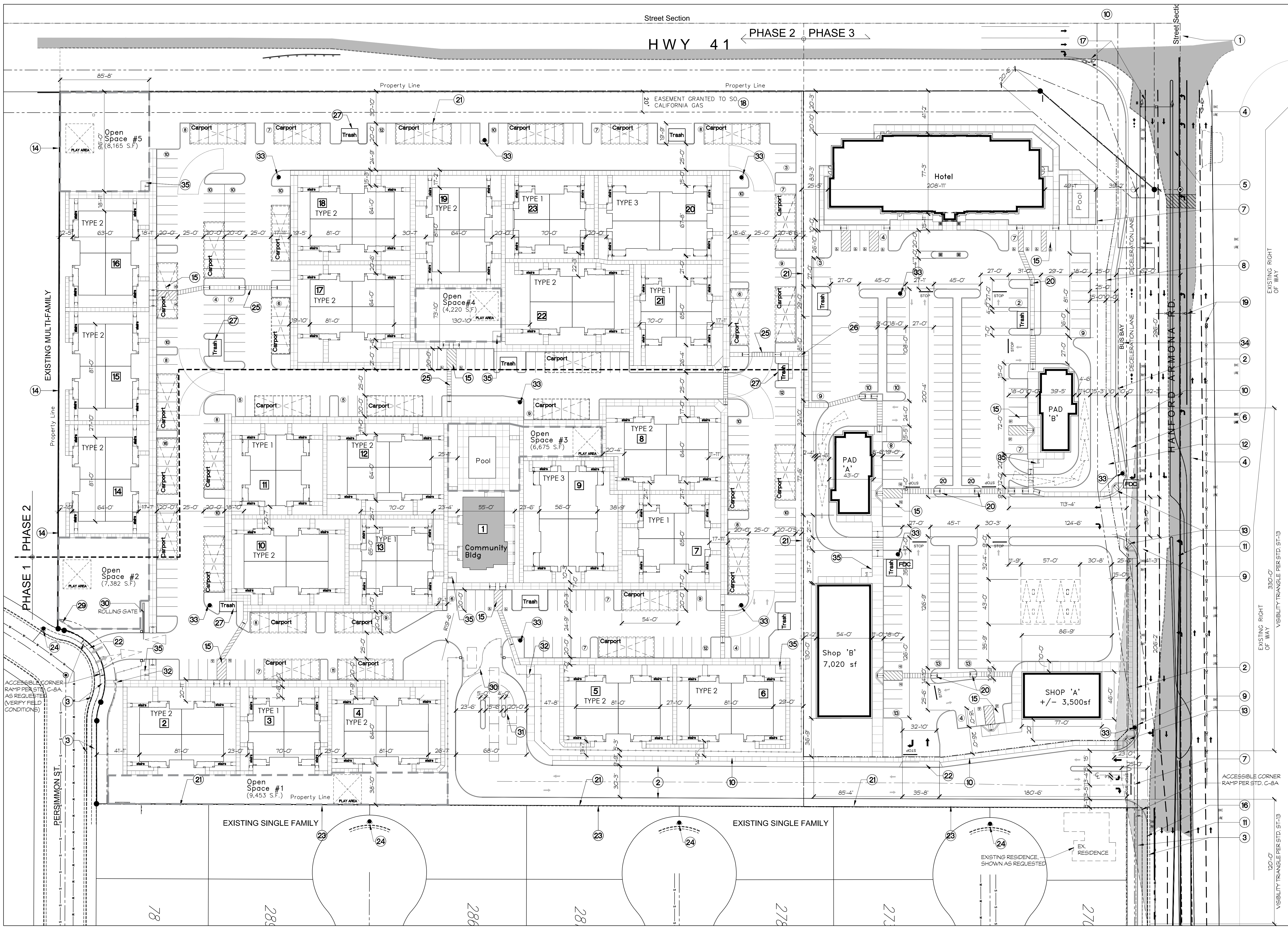
Number 11 on Hanford-Armona Road indicates Left Turn Pocket for westbound traffic turning south into the development. Striping on Hanford-Armona Road will be required during Phase 1 and will need to be shown on civil improvement drawings.

Correct number 26 and locate numbers 18, 20, 24, and 28.

The ADA ramp at the Multi-Family Main Gate shall be removed.

Modify the drive approach on Persimmon in accordance with City Standard No. C-8A.





PRELIMINARY  
OVERALL SITE PLAN  
PHASE 1 AND PHASE 2

SCALE: 1" = 40'-0"

#### SITE KEYNOTES

No.	Description	No.	Description	No.	Description
1	EXISTING CENTER LINE OF STREET	14	EXISTING 6" HIGH BLOCK WALL	26	3' WIDE PEDESTRIAN GATE AND CONNECTIVITY TO COMMERCIAL CENTER
2	CURB AND GUTTER PER STD. P-1	15	ACCESSIBLE PARKING STALL, LOADING AISLE, SIGNAGE AND CURB RAMP	27	TRASH ENCLOSURE PER CITY STD. M-6
3	EXISTING CURB, GUTTER & SIDEWALK PATCH AND REPAIR AS NEEDED	16	EXISTING STREET LIGHT TO REMAIN	28	NOT USED
4	DASHED LINE INDICATES EXISTING EDGE OF AC PAVEMENT OF HANFORD ARMONA RD.	17	EXISTING TRAFFIC LIGHT	29	6" HIGH WROUGHT IRON FENCE
5	PROPOSED ONE LEFT TURN LANE AND MEDIAN ISLAND	18	EASEMENT GRANTED TO SOUTHERN CAL GAS	30	6" HIGH WROUGHT IRON SWINGING VEHICULAR GATE AT MAIN ENTRY, AND ROLLING GATE AT SECONDARY ACCESS WITH KNOX BOX PER CITY STANDARDS FOR FIRE AND EMERGENCY VEHICULAR ACCESS.
6	PROPOSED ONE RIGHT TURN LANE	19	EXISTING OVERHEAD POWER LINES	31	DIRECTORY CALL BOX AND BY PASS TURNING RADIUS OF 34'
7	20' SOUTHERN CALIFORNIA GAS PIPE EASEMENT	20	NEW ALTERNATE WHEELCHAIR RAMP PER CITY STANDARDS	32	3' WIDE WROUGHT IRON PEDESTRIAN GATE WITH LEVER HARDWARE AND PANIC HARDWARE TO EXIT
8	10' PUBLIC UTILITY EASEMENT	21	6" HIGH BLOCK WALL PER CITY STD. M-5	33	NEW FIRE HYDRANT PER CITY STANDARDS
9	DRIVE APPROACH WITH 25' RADIUS	22	DRIVE APPROACH PER CITY STD.	34	BUS BAY PER CITY STANDARD, P-20
10	PUBLIC SIDEWALK NON-CONTIGUOUS PER STD. P-3	23	EXISTING 6" HIGH WOOD FENCE	35	5-STALL BIKE RACK ON CONC. PAD
11	LEFT TURN POCKET	24	EXISTING FIRE HYDRANT		
12	LANDSCAPE AREA	25	PEDESTRIAN PATH OF TRAVEL		
13	HANDICAP WHEELCHAIR RAMP PER STD. P-2				

#### PHASE 1 & 2 (MULTI-FAMILY)

##### BUILDING AREA:

COMMUNITY BUILDING	
OCCUPANCY B	
1 STORY BUILDINGS	
BUILDING AREA = 3,000 SQ. FT.	
APARTMENTS	
OCCUPANCY R2:	
2 STORY BUILDINGS	
8 FLEX BUILDINGS	
BUILDING TYPE 1:	
A1 & A2 UNITS	= 182/28A
LIVING	= 907 SF
PATIO/ENTRY	= 84 SF
WH/STO	= 36 SF
WH/STO	= 9 SF
SUB TOTAL	= 930 SF
TOTAL 930 X (8)	= 7,440 SF

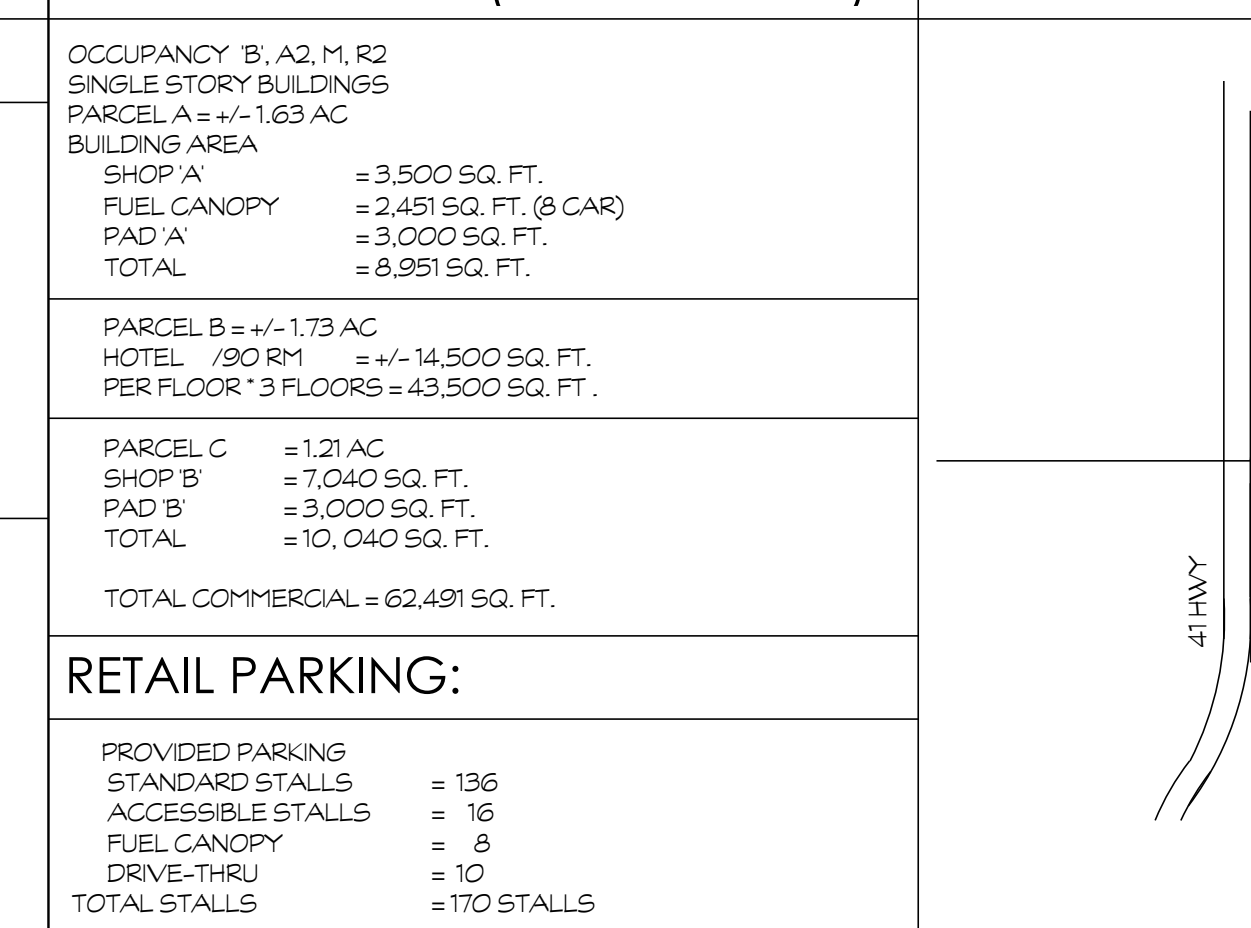
##### UNIT COUNT & MIX:

BUILDING TYPE 2:	
B2 UNITS	= 282/28A
LIVING	= 1048 SF
PATIO/ENTRY	= 120 SF
WH	= 11 SF
SUB TOTAL	= 1179 SF
TOTAL 1179 X (4)	= 4,716 SF
TOTAL BLDG TYPE 2	= 9,306 SF
BUILDING TYPE 3:	
C1 & C2 UNITS	= 382/28A
LIVING	= 1244 SF
PATIO	= 76 SF
ENTRY	= 39 SF
WH/STO	= 17 SF
SUB TOTAL	= 1,376 SF
TOTAL BLDG TYPE 3	= 1,376 SF
TOTAL 1,376 X (8)	= 11,008 SF

##### PHASE 3 - FUTURE (COMMERCIAL)

OCCUPANCY B, A2, M, R2	
SINGLE STORY BUILDINGS	
PARCEL A = 4.11 AC	
BUILDING AREA	
SHOP A	= 3,500 SQ. FT.
FUEL CANOPY	= 2,451 SQ. FT. (8 CAR)
PAD A	= 3,000 SQ. FT.
TOTAL	= 8,951 SQ. FT.
PARCEL B = 4.173 AC	
HOTEL / 90 RM	= 47,145 SQ. FT.
PER FLOOR * 3 FLOORS = 43,500 SQ. FT.	
PARCEL C = 1.21 AC	
SHOP B	= 7,040 SQ. FT.
PAD B	= 3,000 SQ. FT.
TOTAL	= 10,040 SQ. FT.
TOTAL COMMERCIAL = 62,491 SQ. FT.	
RETAIL PARKING:	
PROVIDED PARKING	= 136
STANDARD STALLS	= 16
ACCESSIBLE STALLS	= 8
FUEL CANOPY	= 10
DRIVE-THRU	= 10
TOTAL STALLS	= 170 STALLS

#### VICINITY MAP



#### PROJECT DATA: PHASE 1 & PHASE 2 (MFR)

PROPOSED 2 STORY FLAT APARTMENT COMMUNITY	
SITE ADDRESS:	SEC W. HANFORD ARMONA ROAD & HIGHWAY 41 LEMOORE, CA 93245
A.P.N.:	021-66-031
OWNER:	CV HOLDING, LLC ATTN: BRETT EUGMAN 680 W. SHAW AVENUE, SUITE 200 FRESNO, CA 93704 TEL: (559) 490-2500
EXISTING ZONING:	NC & MU (NEIGHBORHOOD COMMERCIAL & MIXED USE)
EX. GEN. PLAN DESIG.:	NEIGHBORHOOD COMMERCIAL & MIXED USE
PROPOSED ZONING:	RMD / MU / NC
PROPOSED DENSITY:	17 D.U./AC.
ALLOWABLE DENSITY:	12-17 D.U./AC.
PROPOSED GEN. PLAN DESIG.:	MEDIUM DENSITY MULTI-FAMILY RESIDENTIAL & NEIGHBORHOOD COMMERCIAL / MIXED USE

#### BUILDING DATA:

OCCUPANCY USE	OCCUPANCY	NUMBER OF STORES
DWELLING UNITS	R-2	TWO STORY
COMMUNITY BUILDING	A-3	SINGLE STORY
CARPORTS	U-1	SINGLE STORY
CONSTRUCTION TYPE:		
DWELLING UNITS, COMMUNITY BUILDING, & CARPORTS	5B	

#### PARKING:

REQUIRED PARKING:	1-BR UNITS: 1.5 STALL / D.U. (1 STALL / D.U. TO BE COVERED)
	2 & 3-BR UNITS: 2.0 STALLS / D.U. (1 STALL / D.U. TO BE COVERED)

TENANT OPEN	TENANT COVERED
1BR = 48 UNITS X 1.5 D.U. = 72 STALLS	48 STALLS
2BR & 3BR = 128 UNITS X 2.0 D.U. = 256 STALLS	128 STALLS
TOTAL STALLS REQUIRED = 328 STALLS	
PROVIDED PARKING:	
OPEN STALLS (TENANTS) = 152 STALLS	179 STALLS
CARPORT STALLS (TENANTS) = 28 STALLS	
OPEN STALLS (GUESTS) = 28 STALLS	
TOTAL STALLS PROVIDED = 180 STALLS	329 STALLS (2.03 STALLS / D.U.)

#### SITE AREA AND COVERAGE:

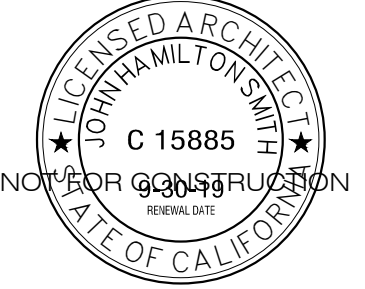
SITE AREA (OVERALL):	= 16.19 ACRES
SITE AREA (DEDICATIONS):	= 0.93 ACRES (4,406,646 S.F.)
SITE AREA (PHASE 1 & 2):	= 10.69 ACRES (4,655,730 S.F.)
SITE COVERAGE:	= 20.9%
SITE AREA (FUTURE PHASE 3):	= 4.57 ACRES (1,999,279 S.F.)

#### OPEN SPACE:

REQUIRED OPEN SPACE (5% REQMT)	= 23,286 S.F.
PROPOSED OPEN SPACE	= 23,286 S.F.
OPEN SPACE #1	= 9,453 S.F.
OPEN SPACE #2	= 7,382 S.F.
OPEN SPACE #3	= 6,675 S.F.
OPEN SPACE #4	= 4,220 S.F.
OPEN SPACE #5	= 8,165 S.F.
TOTAL PROPOSED OPEN SPACE	= 35,892 S.F.
PERCENTAGE OF OPEN SPACE	= 38.68% S.F. / 4,655,730 S.F.
	= 7.7%



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#### FOR PLANCHECK ONLY

#### MIXED USE DEVELOPMENT

No.	DATE	DESCRIPTION	No.	DATE	DESCRIPTION
1	10/17	SRI / GRAY / C2 SUBMITTAL			
2	5/23/18	SRI / C1 REV.			
3	10/20/18	PLANNING COMMISSION REV.			
SHEET NAME: SITE PLAN					
SHEET NUMBER: A1.1					



**RESOLUTION NO. 2018-09**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LEMOORE  
RECOMMENDING APPROVAL OF GENERAL PLAN AMENDMENT NO. 2017-01,  
ZONE CHANGE NO. 2017-01, AND MAJOR SITE PLAN REVIEW NO. 2016-03 TO ALLOW FOR  
176 MULTI-FAMILY UNITS AND 4.67 ACRES OF COMMERCIAL DEVELOPMENT LOCATED AT THE  
SOUTHEAST CORNER OF HANFORD-ARMONA ROAD AND HIGHWAY 41  
IN THE CITY OF LEMOORE (APN 021-660-031)**

At a Regular Meeting of the Planning Commission of the City of Lemoore (City) duly called and held on October 8, 2018, at 7:00 p.m. on said day, it was moved by Commissioner ETCHEGOIN, seconded by Commissioner MEADE, and carried that the following Resolution be adopted:

**WHEREAS**, CV Housing, LLC has requested approval of a General Plan Amendment, Zone Change, and Major Site Plan Review for a project located at the southeast corner of Highway 41 and Hanford-Armona Road in the City of Lemoore (APN 021-660-031); and

**WHEREAS**, the proposed site is 16.19 acres in size, and is zoned both Mixed Use (MU) and Neighborhood Commercial (NC), along with an unzoned portion; and

**WHEREAS**, the project proposes a General Plan Amendment and Zone Change to designate and zone 10.69 acres for Medium Density Residential (RMD), and 4.57 acres as Neighborhood Commercial (NC); and

**WHEREAS**, the proposed project contains 176 multi-family units in the portion of the site to be zoned RMD, and 4.57 acres of future commercial development in the portion of the site to be zoned NC; and

**WHEREAS**, as part of General Plan Amendment No. 2017-01 and Zone Change No. 2017-01, a Mitigated Negative Declaration contemplating approximately 176 multi-family residential units and 4.57 acres of neighborhood commercial development was prepared pursuant to the California Environmental Quality Act (CEQA); and

**WHEREAS**, the City Planning Commission held a duly noticed public hearing at its October 8, 2018, meeting.

**NOW THEREFORE, BE IT RESOLVED** that the Planning Commission of the City of Lemoore hereby makes the following findings regarding the proposed projects:

1. The General Plan Amendment is in the public interest, and the General Plan, as amended, will remain internally consistent.
2. The zoning change is consistent with the general plan goals, policies, and implementation programs.

3. The proposed project is consistent with the objectives of the general plan and complies with applicable zoning regulations, specific plan provisions, and improvement standards adopted by the City.
4. The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community.
5. The architecture, character, and scale of the building and the site are compatible with the character of buildings on adjoining and nearby properties.
6. The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation.
7. Any potential significant effects on the environment resulting from the proposed project will be reduced to a level less than significant with the mitigation measures contained in the Mitigated Negative Declaration, and the conditions of approval set forth below.

**BE IT FURTHER RESOLVED** that the Planning Commission of the City of Lemoore recommends approval of General Plan Amendment 2017-01 and Zone Change 2017-01;

**BE IT FURTHER RESOLVED** that the Planning Commission of the City of Lemoore recommends approval of Major Site Plan Review No. 2016-03 for 176 multi-family units subject to the following conditions:

1. The site shall be developed consistent with the approved Site Plan, Elevations, and its conditions; Major Site Plan Review No. 2016-03 comments, and applicable development standards found in the Zoning Ordinance and City Municipal Code.
2. The project would be developed in three phases. The first two phases cover the apartment complex. The third phase will consist of the commercial development and will require the application for and approval of a separate site plan review application. Site Plan Review No. 2016-03 reviews the multifamily development and street layout only.
3. All mitigation measures in the Mitigated Negative Declaration approved with General Plan Amendment 2017-01 and Zone Change 2017-01 and Site Plan Review 2016-03 shall be complied with.
4. Plans for all public and private improvements, including but not limited to, water, sewer, storm drainage, road pavement, curb and gutter, sidewalk, street lights, landscaping, and fire hydrants shall be approved by the City Engineer, and these improvements shall be completed in accordance with the approved plans to the satisfaction of the Public Works Department.
5. A public facilities maintenance district (PFMD) shall be formed at time of building permit for Phase 1 to provide the maintenance costs for common landscaping and other improvements, in accordance with existing City policy. Annexation into an existing PFMD is acceptable.
6. The project shall be subject to the applicable development impact fees adopted by resolution of the City Council.

7. A noise and odor easement shall be recorded on the property, in a form acceptable to the City Attorney, to acknowledge the presence of nearby industry and railroad, and the right of the industry and railroad to continue to emit such noise and odors as are otherwise allowable by law and to ensure that industry in these areas is not unreasonable hindered by residential users and owners that move nearby at a later date.
8. The developer shall comply with the standards, provisions, and requirements of the San Joaquin Valley Air Pollution Control District that relate to the project.
9. Fire hydrant types and locations shall be approved by the Lemoore Volunteer Fire Department.
10. Street trees from the city approved street tree list shall be planted with root barriers as per Public Works Standards and Specifications.
11. Street lights shall be provided within the project as per City local street lighting standards.
12. Any existing roadway, sidewalk, or curb and gutter that is damaged during construction shall be repaired or replaced to the satisfaction of the Public Works Department.
13. All signs shall require a sign permit separate from the building permit.
14. The project and all subsequent uses must meet the requirements found in Section 9-5B-2 of the Zoning Ordinance related to noise, odor, and vibration, and maintenance.
15. This Site Plan Review approval shall expire within two years, unless an extension is granted by the City.

Passed and adopted at a Regular Meeting of the Planning Commission of the City of Lemoore held on October 8, 2018, by the following votes:

**AYES:** ETCHEGOIN, MEADE, BOERKAMP, FRANKLIN, CLEMENT

**NOES:** MARVIN


**ABSTAINING:**

**ABSENT:** KOELEWYN

**APPROVED:**

  
\_\_\_\_\_  
Bob Clement, Chairperson

**ATTEST:**

  
\_\_\_\_\_  
Kristie Baley, Planning Commission Secretary



**DEPARTMENT OF TRANSPORTATION****DISTRICT 6**

1352 WEST OLIVE AVENUE

P.O. BOX 12616

FRESNO, CA 93778-2616

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FAX (559) 445-4088

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06-KIN-41-R42.15

Initial Study

Hanford-Armona Mixed Development

Ms. Kristie Baley  
Community Development Department  
711 W. Cinnamon Drive  
Lemoore, CA 93245

Dear Ms. Baley:

Thank you for the opportunity to review the Initial Study (IS) / Mitigated Negative Declaration (MND) for the Hanford-Armona Mixed Development. The project proposes to construct a 3-phase residential / commercial development. Phase 1 will include 12 apartment buildings with 96 dwelling units and a community center; phase 2 will include 10 apartment buildings with 80 dwelling units; and phase 3 is currently undefined but will include a mix of retail stores and drive-thru restaurants. The project is located at the southeast corner of State Route (SR) 41 and Hanford-Armona Road in the City of Lemoore.

Based on the information provided, Caltrans has the *following comments* consistent with the State's smart mobility goals that support a vibrant economy and sustainable communities:

1. Please include a tentative timeframe for each phase of the project.
2. Page 3-84, middle paragraph, states "State Route (SR) 41 is an existing north-south two-to four-lane conventional highway...". This segment of SR 41, from the junction of SR 198 to Excelsior Avenue is classified as a 4-lane expressway. Please revise.
3. Page 3-85, third paragraph, states that Phase 1 of the project would add a few more seconds of average intersection delay to the intersection, but did not mention any improvement for this phase. Please be advised that even though the average intersection delay is less than 5 seconds per vehicle, the delay on the westbound leg may be higher. As recommended in the Traffic Impact Analysis (TIA), the paragraph should mention that adding an additional lane (either left or right lane) would alleviate the delay and queue for this approach.
4. Page 3-85, fourth paragraph; The TIA identifies that the intersection of SR 41 and Hanford-Armona Road would operate below the established LOS threshold and



the recommended improvement to alleviate this impact. This should be mentioned in the fourth paragraph.

Comments for the Traffic Impact Analysis (TIA)

5. Based on the preliminary layout of the future L-9 type Interchange (IC), the proposed western driveway appears to be too close to the future northbound off-ramp and may not meet the design requirement for access spacing from the off-ramp. The carports on the north side of the development may also be in conflict. Caltrans recommends no structures be built within the footprint of the future northbound off-ramp. According to Caltrans Transportation Concept Report (TCR), the ultimate configuration of this segment of SR 41 is a 6-lane freeway with the interchange and planned to require 305 feet of right-of-way. Caltrans right-of-way maps show this segment existing at 166 feet. An irrevocable offer of dedication to Caltrans may be required to meet the ultimate configuration of SR 41.
6. Page 14, second paragraph; Caltrans recommends the proposed driveway 2 (eastern driveway or node 3 in the figures) be constructed in Phase 1 while preserving the space for driveway 1 (western driveway) for future phases. Phase 1 may not require both driveways. In addition, please include language recommending that the raised median be constructed along Hanford-Armona Road, from the intersection of SR 41 to driveway 2 (eastern driveway).
7. Page 42, Figure 12: The spacing between nodes (intersections) 6 and 7 may need to be extended further to accommodate the required SSD. This is dependent on which profile is preferred for the potential future interchange, whether SR 41 retains its vertical profile and Hanford-Armona Road is elevated or vice-versa. If the SR 41 profile is elevated at this location, the construction of the future interchange would be substantially more expensive.
8. Table XXII; Please add a footnote indicating that the listed queue in the table does not include the bay taper. Bay tapers (not the approach tapers) are needed for all turn lanes.
9. Appendixes D through F, under the printouts from the Synchro analysis; Change the intersection summary report from HCM 2000 to HCM 6. The use of "U-turn and left turn" movement for the northbound (NB) is not correct. Use the "Control-U" key for the U-turn movement in the NB.
10. The City of Lemoore should explore multi-modal alternatives and focus on ways to eliminate trips in addition to enhancing capacity. Transportation alternatives the City should consider include standard highway solutions along with the following:
  - a. Park and ride facilities on site or within the proximity of this project.

- b. A study of the general accommodation and provision of mass transit in this area to provide insight on ways to increase transit usage.
- c. Exploring the potential of commuter shuttles.
- d. Extending the existing Hanford-Armona Road class II bicycle lane from the east end of the development through the project frontage.

If you have any questions, please feel free to contact Kevin Lum, Transportation Planner, at (559) 488-4260.

Sincerely,



Michael Navarro, Acting Chief  
Transportation Planning - South





FRONT ELEVATION - BUILDING TYPE 1

3/16"=1'-0"



SIDE ELEVATION - BUILDING TYPE 1

3/16"=1'-0"





FRONT ELEVATION - BUILDING TYPE 2

3/16"=1'-0"



SIDE ELEVATION - BUILDING TYPE 2

3/16"=1'-0"





FRONT ELEVATION - BUILDING TYPE 3

3/16"=1'-0"



SIDE ELEVATION - BUILDING TYPE 3

3/16"=1'-0"





EAST ELEVATION



NORTH ELEVATION

3/16"=1'-0"



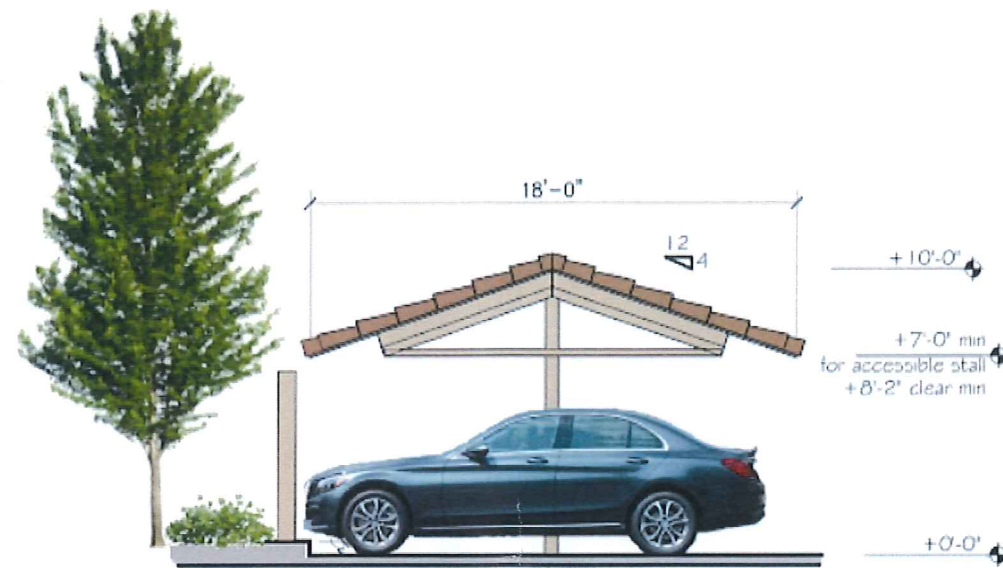
WEST ELEVATION



SOUTH ELEVATION

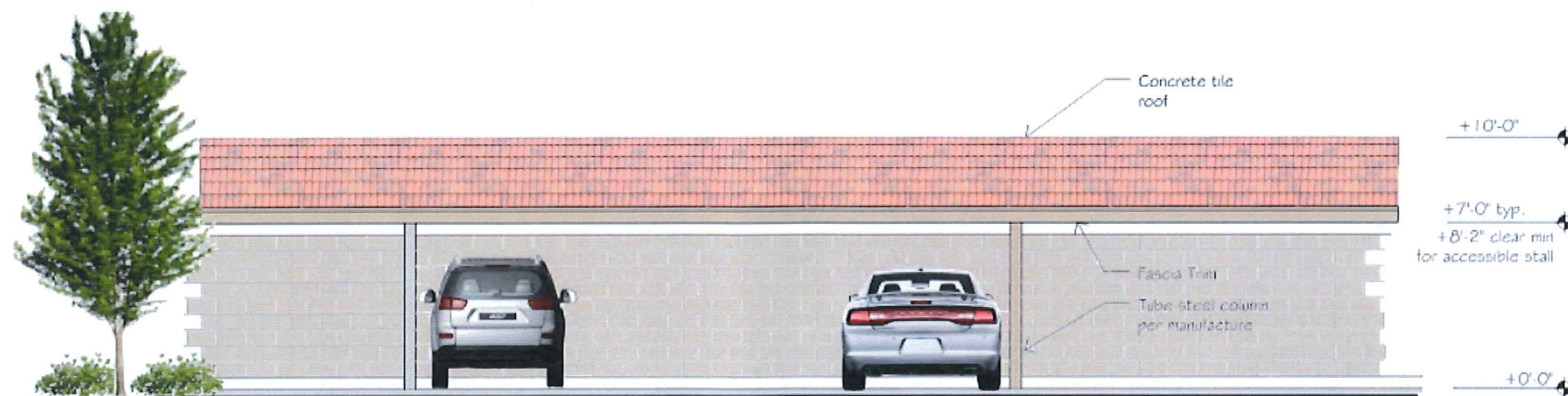
3/16"=1'-0"





**SIDE ELEVATION**

1/4"=1'-0"



**FRONT ELEVATION**

1/4"=1'-0"





SHOP B SIDE ELEVATION

1/8"=1'-0"



SHOP B FRONT ELEVATION

1/8"=1'-0"



DRIVE THRU SIDE ELEVATION PAD A

PAD B SIMILAR

1/8"=1'-0"



FRONT ELEVATION PAD A

PAD B SIMILAR

1/8"=1'-0"



SIDE ELEVATION PAD A

PAD B SIMILAR

1/8"=1'-0"





FRONT ELEVATION HOTEL

REAR SIMILAR

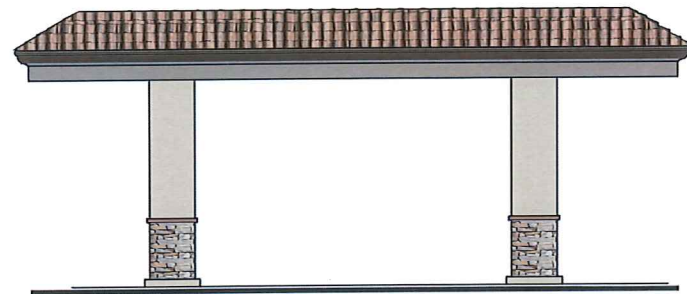
1/8"=1'-0"



SIDE ELEVATION HOTEL

LEMOORE MIXED USE PROJECT





FUEL CANOPY

1/8"=1'-0"



FRONT ELEVATION SHOP A

1/8"=1'-0"



SIDE ELEVATION SHOP A

1/8"=1'-0"



ELEVATION SHOP A

1/8"=1'-0"

LEMOORE MIXED USE PROJECT





# INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

---

## **CITY OF LEMOORE HANFORD-ARMONA MIXED DEVELOPMENT**

Comments must be received by: October 8, 2018 (20 days after notice)

**SEPTEMBER 2018**

---



# INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

## HANFORD-ARMONA MIXED DEVELOPMENT

### **Prepared for:**

City of Lemoore  
711 West Cinnamon Drive  
Lemoore, CA 93245  
Contact Person: Judy Holwell, Community Development Director  
Phone: (559) 924-6740

### **Consultant:**



901 East Main Street  
Visalia, CA 93292  
Contact: Steve Brandt, City Planner  
Phone: (559) 733-0440  
Fax: (559) 733-7821

September 2018

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Project #180002.02

## Table of Contents

<b><i>Mitigated Negative Declaration .....</i></b>	<b><i>1</i></b>
<b><i>SECTION 1 - Introduction .....</i></b>	<b><i>1-1</i></b>
1.1 - Overview .....	1-1
1.2 - CEQA Requirements.....	1-1
1.3 - Impact Terminology.....	1-1
1.4 - Document Organization and Contents.....	1-2
<b><i>SECTION 2 - Project Description .....</i></b>	<b><i>2-1</i></b>
2.1 - Introduction .....	2-1
2.2 - Project Location.....	2-1
2.3 - Surrounding Land Uses .....	2-1
2.4 - Proposed Project .....	2-1
<b><i>SECTION 3 - Evaluation of Environmental Impacts .....</i></b>	<b><i>3-1</i></b>
3.1 - Environmental Checklist and Discussion .....	3-1
3.2 - Environmental Factors Potentially Affected: .....	3-3
3.3 - Determination .....	3-3
3.4 - Evaluation of Environmental Impacts .....	3-5
3.4.1 - Aesthetics .....	3-7
3.4.2 - Agriculture and Forestry Resources .....	3-10
3.4.3 - Air Quality .....	3-16
3.4.4 - Biological Resources .....	3-26
3.4.5 - Cultural Resources.....	3-41
3.4.6 - Geology and Soils.....	3-45
3.4.7 - Greenhouse Gas Emissions.....	3-52
3.4.8 - Hazards and Hazardous Materials.....	3-54
3.4.9 - Hydrology and Water Quality.....	3-58
3.4.10 - Land Use and Planning.....	3-66
3.4.11 - Mineral Resources.....	3-68
3.4.12 - Noise .....	3-70
3.4.13 - Population and Housing.....	3-75
3.4.14 - Public Services.....	3-77
3.4.15 - Recreation .....	3-81
3.4.16 - Transportation and Traffic .....	3-83
3.4.17 - Tribal Cultural Resources.....	3-89
3.4.18 - Utilities and Service Systems .....	3-91
3.4.19 - Mandatory Findings of Significance .....	3-95
<b><i>SECTION 4 - References.....</i></b>	<b><i>98</i></b>

## List of Figures

Figure 2-1 Project Site Map.....	2-2
Figure 2-2 Regional Location .....	2-3
Figure 2-3 Project Location in City.....	2-4
Figure 2-4 Surrounding Land Uses .....	2-5
Figure 3.4.2-1 Farmland Mapping and Monitoring Program (FMMP).....	3-14
Figure 3.4.2-2 Williamson Act Contracts .....	3-15
Figure 3.4.4-1 CNDDDB Special-Status Birds .....	3-35
Figure 3.4.4-2 CNDDDB Special-Status Invertebrates, Fish, Amphibians and Reptiles.....	3-36
Figure 3.4.4-3 CNDDDB Special-Status Mammals .....	3-37
Figure 3.4.4-4 CNDDDB Sensitive Natural Communities and Special-Status Plant Species .....	3-38
Figure 3.4.4-5 USFWS Critical Habitat.....	3-39
Figure 3.4.4-6 National Wetland Inventory and Hydrologic Information .....	3-40
Figure 3.4.6-1 Project Site Soil Map .....	3-51
Figure 3.4.9-1 100-Year Floodplain .....	3-65

## List of Tables

Table 3.4.3-1 SJVAPCD Pollutant Thresholds of Significance .....	3-17
Table 3.4.3-2 Unmitigated Construction Emissions .....	<b>Error! Bookmark not defined.</b>
Table 3.4.3-3 Unmitigated Operation Emissions.....	<b>Error! Bookmark not defined.</b>

## List of Appendices

- Appendix A: Air Quality Analysis Report
- Appendix B: Traffic Impact Analysis



## **MITIGATED NEGATIVE DECLARATION**

As Lead Agency under the California Environmental Quality Act (CEQA), the City of Lemoore reviewed the Project described below to determine whether it could have a significant effect on the environment because of its development. In accordance with CEQA Guidelines Section 15382, “[s]ignificant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the Project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

### ***Project Name***

Hanford-Armona Mixed Development

### ***Project Location***

The proposed site is located at the southeast corner of W. Hanford-Armona Road and SR 41 in western region of the City of Lemoore. The Project is within Assessor’s Parcel Number (APN) 021-660-031, which totals 16.19 acres in size.

### ***Project Description***

A request by SIM + PBK on behalf of CV Housing, LLC for a major site plan review, zone change, and general plan amendment for residential/commercial development. The Project includes 22 apartment buildings with a total of 176 dwellings, along with land zoned for future neighborhood commercial uses. This development would be built in three phases. The site size is approximately 16 acres.

### ***Mailing Address and Phone Number of Contact Person***

Bryan Sassano  
Authorized Agent  
7594 N. Ingram Avenue, Suite 101  
Fresno, CA 93711  
(559) 448-8400

### ***Findings***

As Lead Agency, the City finds that the Project will not have a significant effect on the environment. The Initial Study (IS) (see *Section 3 - Environmental Checklist*) identified one or more potentially significant effects on the environment, but revisions to the Project have been made before the release of this Mitigated Negative Declaration (MND) or mitigation measures would be implemented that reduce all potentially significant impacts to less-than-significant levels. The City further finds that there is no substantial evidence that this Project would have a significant effect on the environment.

## ***Mitigation Measures Included in the Project to Avoid Potentially Significant Effects***

### ***MITIGATION MEASURE(S)***

**MM AQ-1:** Construction and operation of the proposed Project shall be conducted in compliance with applicable rules and regulations set forth by the San Joaquin Valley Air Pollution Control District. Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged.

- a. Land Preparation, Excavation, and/or Demolition. The following dust control measures shall be implemented:
  - i. All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall take place a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
  - ii. All clearing, grading, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over one hour), if disturbed material is easily windblown, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property.
  - iii. All fine material transported on-site a freeboard limit of at least six inches shall be maintained and fine material shall be either sufficiently watered or securely covered to prevent excessive dust.
  - iv. Areas disturbed by clearing, earth moving, or excavation activities shall be minimized at all times.
  - v. Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.
  - vi. Where acceptable to the Fire Department, weed control shall be accomplished by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.
- b. Site Construction. After clearing, grading, earth moving, and/or excavating, the following dust control practices shall be implemented:
  - i. Once initial leveling has ceased, all inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.
  - ii. All active disturbed soil areas shall be sufficiently watered at least twice daily to prevent excessive dust.
  - iii. The project proponent and/or its contractor(s) shall comply with the provisions of SJVAPCD Rule 4601 - Architectural Coatings, during the construction of all buildings and facilities. Application of architectural coatings shall be completed in

- a manner that poses the least emissions impacts whenever such application is deemed proficient.
- iv. The project proponent and/or its contractor(s) shall comply with the provisions of SJVAPCD Rule 4641 during the construction and pavement of all roads and parking areas within the project area. Specifically, the applicant shall not allow the use of rapid cure cutback asphalt, medium cure cutback, or slow cure cutback or emulsified asphalt.
- c. Vehicular Activities. During all phases of construction, the following vehicular control measures shall be implemented:
- i. On-site vehicle speed shall be limited to 15 miles per hour.
  - ii. All areas with vehicle traffic shall be paved, treated with dust palliatives, or watered a minimum of twice daily.
  - iii. Streets adjacent to the project site shall be kept clean, and project-related accumulated silt shall be removed.
  - iv. Access to the site shall be by means of an apron into the project site from adjoining surfaced roadways. The apron shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly or other such device shall be used on the road exiting the project site, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires.

**MM AQ-2:** The project proponent and/or its contractor(s) shall implement the following measures during construction of the proposed Project:

- a. All equipment shall be maintained as recommended by manufacturer manuals.
- b. Equipment shall be shut down when not in use for extended periods of time.
- c. Construction equipment shall operate no longer than eight cumulative hours per day.
- d. Electric equipment shall be used whenever possible in lieu of diesel- or gasoline-powered equipment.
- e. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO<sub>x</sub> emissions.
- f. On- and off-road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines.
- g. On- and off-road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines.
- h. All construction workers shall be encouraged to shuttle (car-pool) to retail establishments or to remain on-site during lunch breaks.
- i. All construction activities within the project area shall be discontinued during the first stage smog alerts.
- j. Construction and grading activities shall not be allowed during first stage ozone alerts. First stage ozone alerts are declared when the ozone level exceeds 0.20 ppm (one-hour average).

**MM AQ-3:** Prior to the issuance of building and grading permits, the Project proponent shall provide the City of Lemoore Community Development Department with proof that an

Indirect Source Review application has been approved by the San Joaquin Valley Air Pollution Control District, if applicable.

**MM BIO-1:** A qualified biologist shall conduct a pre-construction survey on the Project site and within 500 feet of its perimeter within 14 days and no more than 30 days prior to the start of construction activities.

If any evidence of occupation of the Project site by listed or other special-status species is subsequently observed, a buffer shall be established by a qualified biologist that results in sufficient avoidance to comply with applicable regulations. If sufficient avoidance cannot be established, the United States Fish and Wildlife Service and California Department of Fish and Game shall be contacted for further guidance and consultation on additional measures. The Project proponent shall obtain any required permits from the appropriate wildlife agency. Copies of all permits and evidence of compliance with applicable regulations shall be submitted to the lead agency.

The following buffer distances shall be established prior to construction activities:

- San Joaquin kit fox or American badger potential den: 50 feet;
- San Joaquin kit fox known den: 100 feet;
- San Joaquin kit fox or American badger pupping den: contact the California Department of Fish and Game and United States Fish and Wildlife Service;
- Burrowing owl burrow outside of breeding season: 160 feet;
- Burrowing owl burrow during breeding season: 250 feet;
- Swainson's hawk nest during breeding season: 0.5 mile;
- Other protected raptor nests during the breeding season: 300 feet;
- Other protected nesting migratory bird nests during the breeding season: 50 feet; and
- Other special-status wildlife species: as recommended by qualified biologist.

**MM BIO-2:** A qualified biologist shall be obtained to assist in the removal of the on-site trees. The removal of trees shall be done between February 15 to August 15 to avoid potential impacts with nesting birds.

**MM BIO-3:** If initial grading activities are planned during the potential nesting season for migratory birds/raptors that may nest on or near the Project site, the preconstruction survey shall evaluate the sites and accessible lands within an adequate buffer for active nests of migratory birds/raptors. If any nesting birds/raptors are observed, a qualified biologist shall determine buffer distances and/or the timing of Project activities so that the proposed Project does not cause nest abandonment or destruction of eggs or young. This measure shall be implemented so that the proposed Project remains in compliance with the Migratory Bird Treaty Act and applicable state regulations.

If nesting raptors are identified during the surveys, active raptor nests should be avoided by 500 feet and all other migratory bird nests should be avoided by 250 feet. Avoidance buffers may be reduced if a qualified and approved on-site monitor determines that encroachment into the buffer area is not affecting nest building, the rearing of young, or otherwise affect



the breeding behaviors of the resident birds. Avoidance buffers can also be reduced through consultation with the CDFW and USFWS. If Swainson's hawks are found to nest within the survey area, active Swainson's hawk nests shall be avoided by 0.5 mile unless this avoidance buffer is reduced through consultation with the CDFW and/or USFWS.

No construction or earth-moving activity shall occur within a non-disturbance buffer until it is determined by a qualified biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid Project construction areas. This typically occurs by early July, but September 1 is considered the end of the nesting period unless otherwise determined by a qualified biologist. Once raptors have completed nesting and young have fledged, disturbance buffers will no longer be needed and can be removed, and monitoring can be terminated.

**MM BIO-4:** If any burrowing owl burrows are observed during the preconstruction survey, avoidance measures shall be consistent and in accordance with protocols outlined in the Burrowing Owl Survey Protocol and Mitigation Guidelines (Burrowing Owl Consortium 1993) and the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Active burrows shall be avoided, but if avoidance is not possible then compensation shall be provided for the active or passive displacement of western burrowing owls, and habitat acquisition and the creation of artificial dens for any western burrowing owls shall be provided for any owls relocated from construction areas. These measures are outlined as follows:

1. A pre-construction survey of construction area, including a 150-meter buffer (500 feet), shall be conducted no less than 14 days and no more than 30 days prior to ground disturbing activities. If more than 30 days lapse between the time of the pre-construction survey and the start of ground-disturbing activities, another pre-construction survey shall be completed. The second survey (or other subsequent surveys if necessary) shall be conducted and timed to occur sometime between 30 days and 24 hours prior to ground disturbance.
2. If western burrowing owls are present on the construction site (or within 500 feet of the construction site), exclusion fencing shall be installed between the nest site or active burrow and any earth-moving activity or other disturbance. Exclusion areas shall extend 160 feet around occupied burrows during the non-breeding season (September 1 through January 31) and extend 250 feet around occupied burrows during the breeding season (February 1 through August 31) as described in The California Burrowing Owl Consortium's Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium 1993).
3. If western burrowing owls are present in the non-breeding season and must be passively relocated from the Project site, passive relocation shall not commence until October 1 and must be completed by February 1. Passive relocation must only be conducted by a qualified biologist or ornithologist and with approval by CDFW. After passive relocation, the area where owls occurred and its immediate vicinity shall be monitored by a qualified biologist daily for one week and once per week for an additional two weeks to document that owls are not reoccupying the site.
4. If permanent impacts to nesting, occupied and satellite burrows, or burrowing owl habitat occur, compensation shall be based upon the number of owls or pairs of owls

relocated from the construction area. Compensation acreage shall be determined as described in the CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012).

**MM BIO-5:** The measures listed below shall be implemented during construction:

1. Pre-construction surveys shall be conducted no fewer than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities. If any San Joaquin kit fox dens are found during preconstruction surveys, exclusion zones shall be placed in accordance with USFWS Recommendations using the following:

**San Joaquin kit fox USFWS Exclusion Zone Recommendations**

Den Type	Recommendation
Potential Den	50-foot radius
Known Den	100-foot radius
Natal/Pupping Den (Occupied and Unoccupied)	Contact U.S. Fish and Wildlife Service for guidance
Atypical Den	50-foot radius

2. If any den must be removed, it must be appropriately monitored and excavated by a trained wildlife biologist. Destruction of natal dens and other "known" kit fox dens must not occur until authorized by USFWS. Replacement dens will be required if such dens are removed. Potential dens that are removed do not need to be replaced if they are determined to be inactive by using standard monitoring techniques (e.g., applying tracking medium around the den opening and monitoring for San Joaquin kit fox tracks for three consecutive nights).
3. Project-related vehicles shall observe a daytime speed limit of 15-mph throughout the site in all Project areas, except on County roads and State and federal highways; this is particularly important at night when kit foxes and badgers are most active. Night-time construction shall be minimized to the extent possible. However, if construction at night does occur, then the speed limit shall be reduced to 10-mph. Off-road traffic outside of designated Project areas shall be prohibited.
4. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than two-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the USFWS and the CDFW shall be contacted at the addresses provided below.
5. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of four inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is

discovered inside a pipe, that section of pipe shall not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.

6. All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from a construction or Project sites.
7. No pets, such as dogs or cats, shall be permitted on the Project sites to prevent harassment, mortality of kit foxes, or destruction of dens.
8. Use of rodenticides and herbicides in Project areas shall be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional Project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide shall be used because of a proven lower risk to kit fox.
9. A representative shall be appointed by the Project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the USFWS.
10. An employee education program shall be conducted. The program shall consist of a brief presentation by persons knowledgeable in San Joaquin kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the Project. The program shall include: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the Project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during Project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the previously referenced people and anyone else who may enter the Project sites.
11. Upon completion of the Project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. shall be re-contoured if necessary, and revegetated to promote restoration of the area to pre-Project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the Project, but after Project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the USFWS, CDFW, and revegetation experts.
12. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the USFWS shall be contacted for guidance.

13. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFW immediately in the case of a dead, injured or entrapped kit fox. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or CDFW representative, the wildlife biologist, at (530) 934-9309. The USFWS shall be contacted at the numbers below.
14. The Sacramento Fish and Wildlife Office of USFWS and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during Project-related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The USFWS contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFW contact can be reached at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.
15. All sightings of the San Joaquin kit fox shall be reported to the California Natural Diversity Database (CNDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed shall also be provided to the Service at the address below.

**MM CUL-1:** If prehistoric or historic-era cultural materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified archaeologist can evaluate the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants. If the qualified archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation.

The qualified archaeologist shall determine the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the CEQA Guidelines. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing, and data recovery, among other options. Any previously undiscovered resources found during construction within the Project area shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance. No further ground disturbance shall occur in the immediate vicinity of the discovery until approved by the qualified archaeologist.

**MM CUL-2:** Prior to any ground disturbance, the applicant shall offer interested Tribes the opportunity to provide a Native American Monitor during ground disturbing activities during construction. Tribal participation would be dependent upon the availability and interest of the Tribe.

**MM-CUL 3:** Upon coordination with the City of Lemoore Community Development Department, any archaeological artifacts recovered shall be donated to an appropriate Tribal



custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.

**MM CUL-4:** During any ground disturbance activities, if paleontological resources are encountered, all work within 25 feet of the find shall halt until a qualified paleontologist as defined by the Society of Vertebrate Paleontology Standard can evaluate the find and make recommendations regarding treatment. Paleontological resource materials may include resources such as fossils, plant impressions, or animal tracks preserved in rock. The qualified paleontologist shall contact the Natural History Museum of Los Angeles County or other appropriate facility regarding any discoveries of paleontological resources. If the qualified paleontologist determines that the discovery represents a potentially significant paleontological resource, additional investigations and fossil recovery may be required to mitigate adverse impacts from Project implementation. If avoidance is not feasible, the paleontological resources shall be evaluated for their significance. If the resources are not significant, avoidance is not necessary. If the resources are significant, they shall be avoided to ensure no adverse effects, or such effects must be mitigated. Construction in that area shall not resume until the resource appropriate measures are recommended or the materials are determined to be less than significant. If the resource is significant and fossil recovery is the identified form of treatment, then the fossil shall be deposited in an accredited and permanent scientific institution. Copies of all correspondence and reports shall be submitted to the Lead Agency.

**MM CUL-5:** If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the county coroner.

**MM GEO-1:** Prior to final design, a geotechnical study shall be prepared for the Project site and recommendations of the study shall be incorporated into final design of the Project. A copy of the report shall be submitted to the City of Lemoore Community Development Department for review.

**MM HYD-1:** Prior to ground-disturbing activities, the City shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that specifies best management practices (BMP), with the intent of keeping all products of erosion from moving offsite. The SWPPP shall include contain a site map that shows the construction site perimeter, existing and proposed man-made facilities, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the Project site. Additionally, the SWPPP shall contain a visual monitoring program and a chemical monitoring program for non-visible pollutants to be implemented (if there is a failure of best

management practices). The requirements of the SWPPP and BMPs shall be incorporated into design specifications and construction contracts. Recommended best management practices for the construction phase may include the following:

- Stockpiling and disposing of demolition debris, concrete, and soil properly;
- Protecting any existing storm drain inlets and stabilizing disturbed areas;
- Implementing erosion controls;
- Properly managing construction materials; and
- Managing waste, aggressively controlling litter, and implementing sediment controls.

**MM TRA-1:** Prior to the first development of the commercially zoned site, the Project shall coordinate with Kings Area Rural Transit (KART) to determine the best location for the placement of a bus turnout along the Project's frontage to Hanford-Armona Road.

**MM TRA-2:** Prior to the first development of the commercially zoned site, the full build-out of the south side of Hanford-Armona Road shall be completed. At the corner of State Route 41 and Hanford-Armona Road, a westbound left-turn lane shall be added, the westbound left-through-right lane shall be modified to a through lane, a westbound right-turn lane shall be added, and the traffic signal shall be modified to accommodate the added lanes while maintaining the east-west split phasing.

## **SECTION 1 - INTRODUCTION**

### **1.1 - Overview**

A request by SIM + PBK on behalf of CV Housing, LLC for a major site plan review, zone change, and general plan amendment for residential/commercial development. The Project includes 22 apartment buildings with a total of 176 dwelling units. The conceptual site plan for the commercial development includes two retail shops, two pad buildings, and a three-story 90-room hotel. Future application(s) for Site Plan review will be required for the commercial development. This Project would be built in three phases. The Project site is approximately 17 acres.

### **1.2 - CEQA Requirements**

The City of Lemoore is the Lead Agency for this Project pursuant to the CEQA Guidelines (Public Resources Code Section 15000 et seq.). The Environmental Checklist (CEQA Guidelines Appendix G) or Initial Study (IS) (see *Section 3 – Initial Study*) provides analysis that examines the potential environmental effects of the construction and operation of the project. Section 15063 of the CEQA Guidelines requires the Lead Agency to prepare an IS to determine whether a discretionary project will have a significant effect on the environment. A Mitigated Negative Declaration (MND) is appropriate when an IS has been prepared and a determination can be made that no significant environmental effects will occur because revisions to the project have been made or mitigation measures will be implemented that reduce all potentially significant impacts to less-than-significant levels. The content of an MND is the same as a Negative Declaration, with the addition of identified mitigation measures and a Mitigation Monitoring and Reporting Program (MMRP) (see *Appendix A – Mitigation Monitoring and Reporting Program*).

Based on the IS, the Lead Agency has determined that the environmental review for the proposed application can be completed with an MND.

### **1.3 - Impact Terminology**

The following terminology is used to describe the level of significance of project environmental impacts.

- A finding of “no impact” is appropriate if the analysis concludes that the project would not affect a topic area in any way.
- An impact is considered “less than significant” if the analysis concludes that it would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered “less than significant with mitigation incorporated” if the analysis concludes that it would cause no substantial adverse change to the environment with the inclusion of environmental commitments that have been agreed to by the proponent.

- An impact is considered “potentially significant” if the analysis concludes that it could have a substantial adverse effect on the environment.

## **1.4 - Document Organization and Contents**

The content and format of this IS/MND is designed to meet the requirements of CEQA. The report contains the following sections:

- *Section 1 – Introduction:* This section provides an overview of CEQA requirements, intended uses of the IS/MND, document organization, and a list of regulations that have been incorporated by reference.
- *Section 2– Project Description:* This section describes the Project and provides data on the site’s location.
- *Section 3 – Environmental Checklist:* This section contains the evaluation of 18 different environmental resource factors contained in Appendix G of the CEQA Guidelines. Each environmental resource factor is analyzed to determine whether the proposed Project would have an impact. One of four findings is made which include: no impact, less-than-significant impact, less than significant with mitigation, or significant and unavoidable. If the evaluation results in a finding of significant and unavoidable for any of the 18 environmental resource factors, then an Environmental Impact Report will be required.
- *Section 4 – References:* This section contains a full list of references that were used in the preparation of this IS/MND.



## **SECTION 2 - PROJECT DESCRIPTION**

### **2.1 - Introduction**

A request by SIM + PBK on behalf of CV Housing, LLC for a major site plan review, zone change, and general plan amendment for residential/commercial development. The Project includes 22 apartment buildings with a total of 176 dwelling units, along with 4.57 acres of commercial development. This development would be built in three phases. The Project site is approximately 17 acres.

### **2.2 - Project Location**

The proposed site is in Section 4, Township 19 South, Range 20 East, Mount Diablo Base and Meridian, within the incorporated City of Lemoore, County of Kings, California. The site is located at the southeast corner of Hanford-Armona Road and State Route (SR) 41 (Figures 2-1 and 2-2). The Project is identified as Assessor's Parcel Number (APN) 021-660-031, which totals approximately 17 acres of undeveloped land.

### **2.3 - Surrounding Land Uses**

The area surrounding the proposed site consists of undeveloped land to the west (beyond SR 41). Single family residential is located east of the site and multi-family development is to the south. North of the site is undeveloped land, with a small portion dedicated to SoCalGas (public utility). Land uses and development surrounding the site are depicted on Figure 2-4.

### **2.4 - Proposed Project**

SIM + PBK, on behalf of CV Housing requests the approval of a major site plan review, zone change, and general plan amendment for residential/commercial development. The Project includes three phases, two of which are for a total of 176 two-story multi-family residential units. Phase 1 will include 12 apartment buildings with 96 dwelling units, a community center with a leasing office, and a swimming pool. Phase 1 will be on the southeastern portion of the site shown in Figure 2-1. Phase 2 will include 10 apartment buildings with 80 dwelling units. Phase 2 will be on the southwestern portion of the site shown in Figure 2-1. Phase 3 has not been defined in its entirety, but it is currently planned to be commercial development. The types of uses have not yet been fully determined, but the commercial development could include various retail stores, drive-thru restaurants, and services located at the northern portion of the site area shown in Figure 2-1.

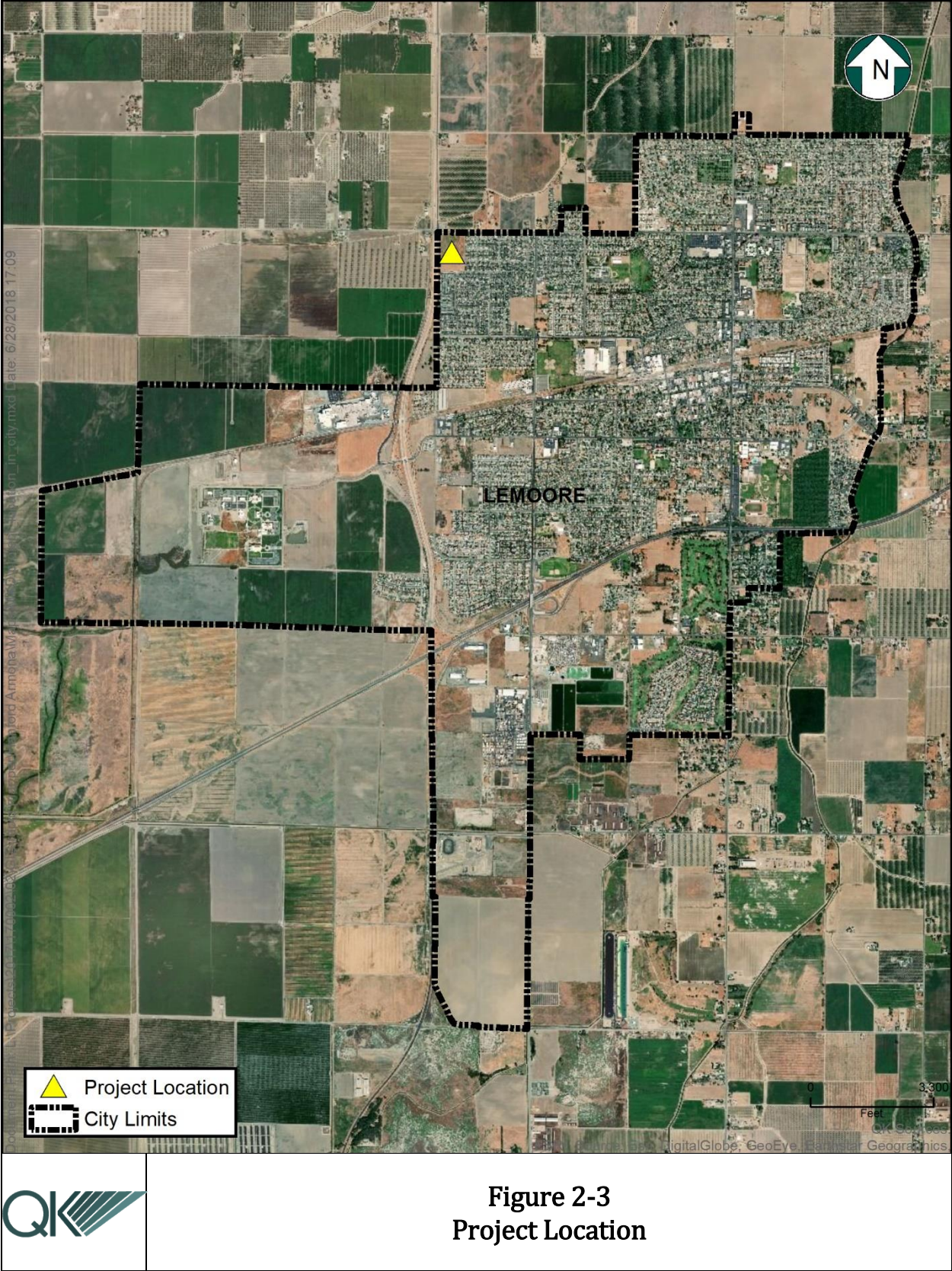
Both the current zoning of the Project site and the General Plan land use designations will need to be amended for this Project to take place. Currently, the zoning and land use designations of the Project site is Mixed Use (MU) in the southern portion and Neighborhood Commercial (NC) in the northern portion. The amendment will change the MU designation to Medium Density Residential (RMD).















## **SECTION 3 - EVALUATION OF ENVIRONMENTAL IMPACTS**

### **3.1 - Environmental Checklist and Discussion**

**1. Project Title:**

Hanford-Armona Mixed Development

**2. Lead Agency Name and Address:**

City of Lemoore  
119 Fox Street  
Lemoore, CA 93245

**3. Contact Person and Phone Number:**

Judy Holwell, Community Development Director  
(559) 924-6740

**4. Project Location:**

The proposed site is located at the southeast corner of Hanford Armona Road and Highway 41 in the City of Lemoore. The Project is within Assessor's Parcel Number (APN) 021-660-031.

**5. Project Sponsor's Name and Address:**

Bryan Sassano  
  
7594 N. Ingram Avenue, Suite 101  
Fresno, CA 93711  
(559) 448-8400

**6. General Plan Designation:**

Mixed Use and Neighborhood Commercial

**7. Zoning:**

MU & NC

**8. Description of Project:**

*See Section 2.4 – Proposed Project.*

**9. Surrounding Land Uses and Setting:**

*See Section 2.3 – Surrounding Land Uses and Figure 2-4.*

**10. Other Public Agencies Whose Approval May be Required:**

- San Joaquin Valley Air Pollution Control District (SVAPCD)
- Regional Water Quality Control Board-- Lahontan (RWQCB)
- State Water Resource Control Board (SWRCB)

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?**

The Santa Rosa Rancheria Tachi Tribe has requested consultation with the City of Lemoore. Letters were sent to the Tribe on July 3, 2018, informing them of the Project.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality.

### 3.2 - Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality              |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Geology/Soils            |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials    | <input type="checkbox"/> Hydrology/Water Quality  |
| <input type="checkbox"/> Land Use/Planning        | <input type="checkbox"/> Mineral Resources                | <input type="checkbox"/> Noise                    |
| <input type="checkbox"/> Population/Housing       | <input type="checkbox"/> Public Services                  | <input type="checkbox"/> Recreation               |
| <input type="checkbox"/> Transportation/Traffic   | <input type="checkbox"/> Utilities/Service Systems        | <input type="checkbox"/> Findings of Significance |

### 3.3 - Determination

On the basis of this initial evaluation:

- ☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable



standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

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Judy Holwell, Community Development Director

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Date

### **3.4 - Evaluation of Environmental Impacts**

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review;
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis; and
  - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a

previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.1 - AESTHETICS

Would the project:

a.	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

#### Impact #3.4.1a – Would the Project have a substantial adverse effect on a scenic vista?

As seen in Figure 2-4, the Project is located in undeveloped land and is surrounded by either undeveloped land or residential development. It is at the southeast corner of Hanford-Armona Road and SR 41 in the northern region of Lemoore.

The City of Lemoore 2030 General Plan states there are currently no buildings or structures listed in the National Register of Historic Places or as California Historic Landmarks. However, there are 37 sites listed as having local historic significance located within the downtown district (City of Lemoore, 2008). There are no local historic resources within the vicinity of the Project site. The Project is not located in an area that would result in substantial adverse effects on any scenic vistas, therefore causing no negative impacts.

#### MITIGATION MEASURE(S)

No mitigation is required.

#### LEVEL OF SIGNIFICANCE

There would be *no impact*.



**Impact #3.4.1b – Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

There are no listed State scenic highways within or near the City of Lemoore, nor are there scenic highways in Kings County; therefore, the site would not damage scenic resources within a state scenic highway (California Department of Transportation, 2017). The closest eligible scenic highway is SR 41, southwest of SR 33, which is approximately 35 miles southwest of the Project site.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.1c – Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?**

The proposed Project would be similar in nature to the existing residential development to the south and east of the site once the zone change has occurred. While the Project is not consistent with the current zoning and land use designations for the area, the Project is consistent with the surrounding urban uses. The visual character of the site would be changed, as vacant land would become developed, but the development would not degrade it. The impacts would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.1d – Would the Project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?**

The proposed development would comply with all lighting standards established in the City's Zoning Ordinance (Title 9, Chapter 5, Article B, Section 4), and therefore impacts would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.2 - AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

**Impact #3.4.2a – Would the Project Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?**

The proposed Project will not convert any prime or unique farmland. According to the Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), the

Project site is classified as ‘Grazing Land’ (see Figure 3.4.2-1) (CA Department of Conservation, 2016). According to the California Department of Conservation, grazing land is “land on which vegetation is suited to the grazing of livestock” (CA Department of Conservation, 2016). Grazing land is not considered to be protected under CEQA. The site also is not currently used for farming and is not zoned for agricultural use. Considering these factors, the proposed Project will have a less-than-significant impact on conversion of agricultural resources.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.2b – Would the Project conflict with existing zoning for agricultural use or a Williamson Act Contract?**

The Project site is currently zoned Mixed Use/Neighborhood Commercial within both the *City of Lemoore 2030 General Plan* and the City of Lemoore’s Zoning Ordinance. The Project site is not subject to a Williamson Act contract and would not conflict with any current Williamson Act contracted land in the vicinity (see Figure 3.4.2-2).

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.2c – Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?**

The Project site and the surrounding areas are not zoned for forest land or timberland by the City of Lemoore Zoning Map. The site will be used for a mix of residential and commercial development. The Project will have no impact on land designated for forest land use.

**MITIGATION MEASURE(S)**

No mitigation is required.



**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.2c – Would the Project result in the loss of forest land or conversion of forest land to non-forest use?**

The proposed Project site is not considered to be forest land or timberland. The Project is currently undeveloped and surrounded by either undeveloped land or residential development. Further development of the associated use would not result in the conversion of forest land to non-forest use. The proposed Project will have no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.2d – Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

The proposed Project will allow for the development of a 176-unit multi-family housing complex and approximately 4.57 acres of commercial development. The Project would not involve changes in the existing environment that could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

The Project site is zoned for a non-agricultural use and its impact on the surrounding agricultural lands to the north and west was previously analyzed in the Lemoore General Plan (City of Lemoore , 2008). Although the proposed Project may cause changes in the existing environment, there is no evidence that the proposed Project would affect adjacent agricultural land during construction or operational activities. Additionally, the Project is not anticipated to cause the removal of farmland from production by the development of a nonagricultural use. In addition, the proposed project would not place additional restrictions on noise, burning, or dust generation on surrounding operations. State Route 41 is in between the Project site and the agricultural land to the west of the site, so the agricultural land would not be affected. The impacts of said land would be deemed less than significant, as the Project will contain itself to the predetermined boundaries shown in Figure 2-1.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

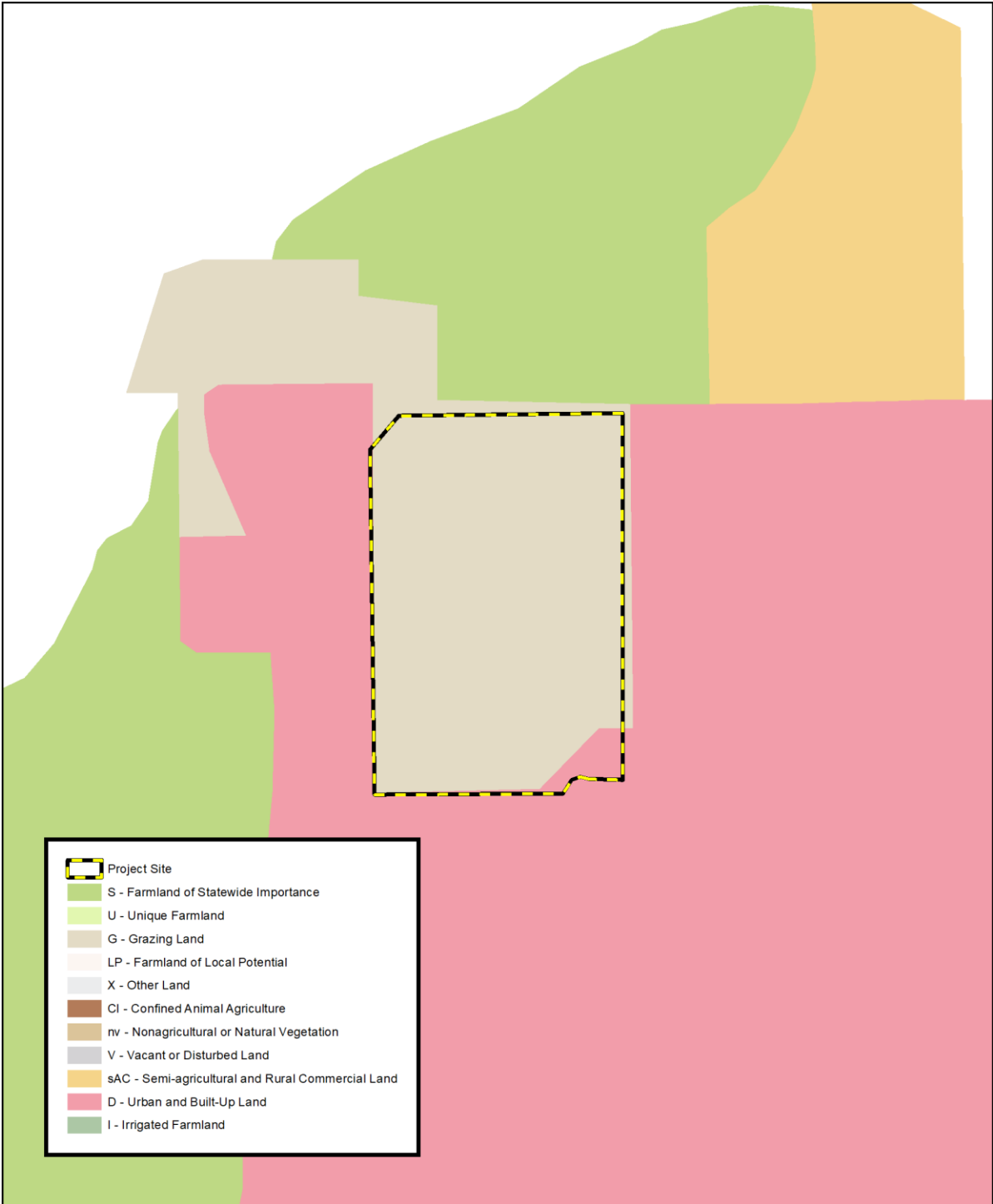
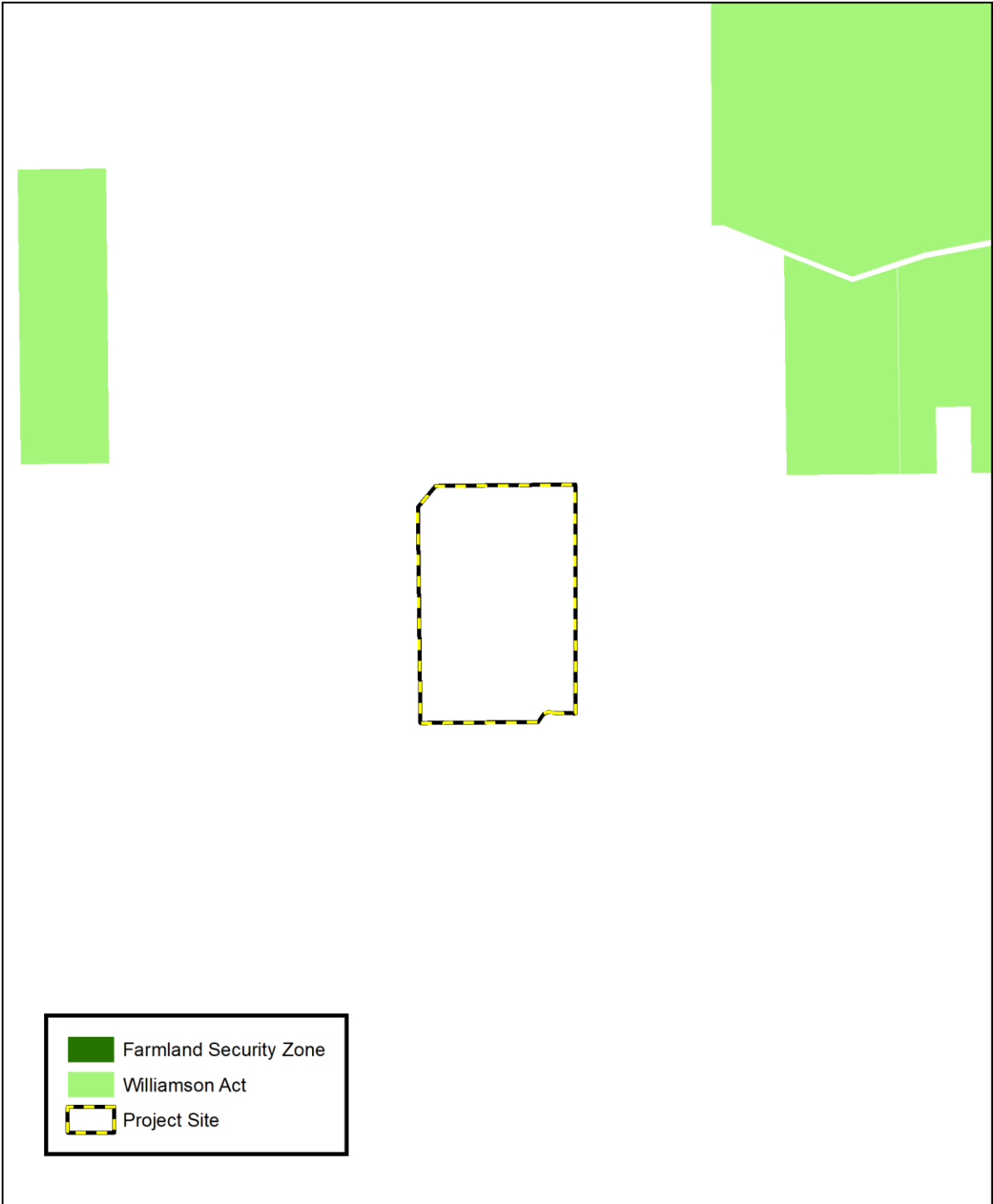



Figure 3.4.2-1  
Farmland Mapping and Monitoring Program (FMMP)



 **Figure 3.4.2-2**  
**Williamson Act Contracts**



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.3 - AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a.	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The analysis below is based on an Air Quality Analysis Report prepared to evaluate the air impacts of the proposed Project ( Mitchell Air Quality Consulting, 2018), Appendix A). The analysis assesses the impacts of the project construction and operational criteria pollutant using the CalEEMod 2016.3.2 emission model.

#### Impact #3.4.3a – Would the Project Conflict with or obstruct implementation of the applicable air quality plan?

The Project is located within the San Joaquin Valley Air Basin (SJVAB), which and under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAB is designated nonattainment of state and Federal health-based air quality standards for ozone and PM<sub>2.5</sub>. The SJVAB is designated nonattainment of state PM<sub>10</sub>. To meet Federal Clean Air Act (CAA) requirements, the SJVAPCD has multiple air quality attainment plan (AQAP documents, including:

- 2016 Ozone Plan;

- 2007 PM10 Maintenance Plan and Request for Redesignation; and
- 2016 PM2.5 Plan.

. Therefore,

Air quality impacts are controlled through policies and provisions of the SJVAPCD, the City of Lemoore General Plan, and the Code of Building Regulations. Each project should also demonstrate consistency with the SJVAPCD's adopted AQAP for ozone and PM10. The SJVAPCD is required to submit a "Rate of Progress" document to the CARB that demonstrates past and planned progress toward reaching attainment for all criteria pollutants. The CCAA requires air pollution control districts with severe or extreme air quality problems to provide for a 5% reduction in nonattainment emissions per year. The AQAP prepared for the San Joaquin Valley by SJVAPCD complies with this requirement. The CARB reviewers approve or amend the document and forward the plan to EPA for final review and approval within the SIP.

Air pollution sources associated with stationary sources are regulated through the permitting authority of the SJVAPCD under the "New and Modified Stationary Source" rule (SJVAPCD Rule 2201). Owners of any new or modified equipment that emits, reduces, or controls air contaminants, except those specifically exempted by the SJVAPCD, are required to apply for an Authority to Construct and Permit to Operate (SJVAPCD Rule 2010). Additionally, best available control technology is required on specific types of stationary equipment. Through this mechanism, the SJVAPCD ensures that all stationary sources within the proposed project area would be subject to the standards of the SJVAPCD and that new developments do not result in net increases in stationary sources of criteria air pollutants.

The SJVAPCD has established thresholds of significance for construction impacts, project operations, and cumulative impacts. The SJVAPCD's Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) (San Joaquin Valley Air Pollution Control District, 2015) contains significance criteria for evaluating operational-phase emissions from direct and indirect sources associated with a project. Indirect sources include motor vehicle traffic associated with the proposed Project and do not include stationary sources covered under permit with the SJVAPCD. For this evaluation, the proposed Project would be considered to have a significant effect on the environment if it would exceed the following thresholds listed in the "SJVAPCD Threshold of Significance" below. As seen in the "Construction Emissions" and "Operational Emissions" columns, the Project would not exceed any applicable thresholds of significance.

**Table 3.4.3-1  
SJVAPCD Pollutant Thresholds of Significance**

<b>Pollutant</b>	<b>SJVAPCD Threshold of Significance</b>	<b>Construction Emissions</b>	<b>Operational Emissions</b>
PM2.5	15 tons/year	0.42	0.88
PM10	15 tons/year	0.61	3.04
ROG	10 tons/year	1.68	3.18
NOX	10 tons/year	7.33	2.31

Source: SJVAPCD, GAMAQI 2015

Construction and operation of the proposed project would not exceed any established SJVAPCD thresholds; therefore, implementation of the proposed project would not obstruct implementation of an air quality plan during operation

***MITIGATION MEASURE(S)***

No mitigation is required.

***LEVEL OF SIGNIFICANCE***

Impacts would be *less than significant*.

**Impact #3.4.3b – Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

***Construction***

Construction would begin in 2019 and be completed in phases by 2021. Emissions were not estimated for building activity, as the Project building types are not well represented by the activity assumptions in the CalEEMod model, and construction of the facilities would involve minor use of internal combustion off-road equipment.

The primary source of ROG emissions during construction is architectural coatings. The primary source of NO<sub>x</sub> and PM<sub>2.5</sub> is off-road diesel construction equipment and on-road diesel emissions during hauling activities. The primary source of PM<sub>10</sub> is from site preparation and grading activities. The highest construction emissions would occur in 2020 when the construction activities for the commercial components of the project are assumed to begin Table 3.4.3-2 shows generated emissions from these activities.

Table 3.4.3-2 shows unmitigated emissions during construction do not exceed the SJVAPCD localized emission screening thresholds and would therefore have a less than significant impact from localized criteria pollutant emissions. The results include credit for compliance with fugitive dust controls required by SJVAPCD Regulation VIII.

**Table 3.4.3-2  
Unmitigated Construction Emissions**

Year	Emissions (tons per year)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction 2019	0.34	2.94	2.38	0.34	0.21
Construction 2020	1.68	7.33	6.57	0.61	0.42
Construction 2021	0.66	1.76	1.59	0.12	0.09
<i>Highest Construction Emissions in Any Year</i>	<b>1.68</b>	<b>7.33</b>	<b>6.57</b>	<b>0.61</b>	<b>0.42</b>
Screening threshold	10	10	100	15	15
Exceed SJVAPCD threshold?	No	No	No	No	No
Notes: ROG = reactive organic gases NO <sub>x</sub> = nitrogen oxides PM <sub>10</sub> and PM <sub>2.5</sub> = particulate matter Area source emissions include emissions from natural gas, landscape, and painting. Source: Appendix A					

As seen in Table 3.4.3-2, emissions from the Project are well below the SJVAPCD's thresholds.

### **Operation**

Operational emissions occur over the lifetime of the project and are from two main sources: area sources such as natural gas combustion for space and water heating and motor vehicles, or mobile sources. Operational emissions are presented in Table 3.4.3-3. The results of the analysis show that emissions are below the annual emission thresholds for each pollutant.

An analysis of maximum daily emissions during operation was conducted to determine if emissions would exceed the 100 pounds per day threshold for any pollutant of concern. The maximum daily operational emissions were assessed assuming full operations in the year 2021. Operational emissions include those generated on-site by area sources such as natural gas combustion and landscape maintenance, and off-site by motor vehicles accessing the project. Most motor vehicle emissions would occur distant from the site and would not contribute to a violation of ambient air quality standards at the project site; therefore, operational emissions only reflect the emissions within one half mile of the project site. The results of the analysis are presented in Table 3.4.3-3. The Project would not exceed SJVAPCD daily operational screening thresholds and would result in less than significant localized impacts.



**Table 3.4.3-4  
Unmitigated Operational Emissions**

Source	Emissions (tons per year)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Residential- Apartments (176 units)	1.18	0.75	5.90	1.18	0.33
Gas Station and Convenience Market (8 fueling position)	0.41	0.35	2.34	0.34	0.09
Fast Food Restaurants (2@3,000 sf ea.)	0.73	0.69	5.35	1.00	0.28
Hotel (90 Room)	0.76	0.42	1.99	0.48	0.14
Retail Shopping (7,040 sf)	0.10	0.10	0.66	0.04	0.04
<b>Total Project Emissions</b>	<b>3.18</b>	<b>2.31</b>	<b>16.23</b>	<b>3.04</b>	<b>0.88</b>
Significance threshold	10	10	100	15	15
Exceed threshold—significant impact?	No	No	No	No	No
Notes: ROG = reactive organic gases NO <sub>x</sub> = nitrogen oxides PM <sub>10</sub> and PM <sub>2.5</sub> = particulate matter Area source emissions include emissions from natural gas, landscape, and painting. Source: Appendix A					

However, implementation of Mitigation Measures AQ-1 through AQ-3 would ensure that all readily available and feasible air quality control measures would be implemented to reduce emissions associated with construction.

#### **MITIGATION MEASURE(S)**

**MM AQ-1:** Construction and operation of the proposed Project shall be conducted in compliance with applicable rules and regulations set forth by the San Joaquin Valley Air Pollution Control District. Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged.

- a. Land Preparation, Excavation, and/or Demolition. The following dust control measures shall be implemented:
  - i. All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall take place a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
  - ii. All clearing, grading, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over one hour), if disturbed material is easily windblown, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property.

- iii. All fine material transported on-site a freeboard limit of at least six inches shall be maintained and fine material shall be either sufficiently watered or securely covered to prevent excessive dust.
  - iv. Areas disturbed by clearing, earth moving, or excavation activities shall be minimized at all times.
  - v. Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.
  - vi. Where acceptable to the Fire Department, weed control shall be accomplished by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering.
- b. Site Construction. After clearing, grading, earth moving, and/or excavating, the following dust control practices shall be implemented:
- i. Once initial leveling has ceased, all inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.
  - ii. All active disturbed soil areas shall be sufficiently watered at least twice daily to prevent excessive dust.
  - iii. The project proponent and/or its contractor(s) shall comply with the provisions of SJVAPCD Rule 4601 - Architectural Coatings, during the construction of all buildings and facilities. Application of architectural coatings shall be completed in a manner that poses the least emissions impacts whenever such application is deemed proficient.
  - iv. The project proponent and/or its contractor(s) shall comply with the provisions of SJVAPCD Rule 4641 during the construction and pavement of all roads and parking areas within the project area. Specifically, the applicant shall not allow the use of rapid cure cutback asphalt, medium cure cutback, or slow cure cutback or emulsified asphalt.
- c. Vehicular Activities. During all phases of construction, the following vehicular control measures shall be implemented:
- i. On-site vehicle speed shall be limited to 15 miles per hour.
  - ii. All areas with vehicle traffic shall be paved, treated with dust palliatives, or watered a minimum of twice daily.
  - iii. Streets adjacent to the project site shall be kept clean, and project-related accumulated silt shall be removed.
  - iv. Access to the site shall be by means of an apron into the project site from adjoining surfaced roadways. The apron shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly or other such device shall be used on the road exiting the project site, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires.

**MM AQ-2:** The project proponent and/or its contractor(s) shall implement the following measures during construction of the proposed Project:

- a. All equipment shall be maintained as recommended by manufacturer manuals.
- b. Equipment shall be shut down when not in use for extended periods of time.
- c. Construction equipment shall operate no longer than eight cumulative hours per day.
- d. Electric equipment shall be used whenever possible in lieu of diesel- or gasoline-powered equipment.
- e. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO<sub>x</sub> emissions.
- f. On- and off-road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines.
- g. On- and off-road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines.
- h. All construction workers shall be encouraged to shuttle (car-pool) to retail establishments or to remain on-site during lunch breaks.
- i. All construction activities within the project area shall be discontinued during the first stage smog alerts.
- j. Construction and grading activities shall not be allowed during first stage ozone alerts. First stage ozone alerts are declared when the ozone level exceeds 0.20 ppm (one-hour average).

**MM AQ-3:** Prior to the issuance of building and grading permits, the Project proponent shall provide the City of Lemoore Community Development Department with proof that an Indirect Source Review application has been approved by the San Joaquin Valley Air Pollution Control District, if applicable.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.3c – Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

The nonattainment pollutants for the SJVAPCD are ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. Therefore, the pollutants of concern for this impact are ozone precursors, regional PM<sub>10</sub>, and PM<sub>2.5</sub>. As discussed above, the thresholds of significance used for determination of emission significance are shown in Table 3.4.3-1 above. The proposed Project would create ozone, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions during construction, which would contribute to the current nonattainment status of these pollutants within the SJVAB. As noted in Impact 4.2-2, the Project's emissions during temporary construction activities would not exceed thresholds. Operation of the project would also create additional criteria pollutants, particularly as a result of increased mobile emissions in the project area. However, these impacts also would not exceed thresholds. Although the emissions from the proposed

project may be under the SJVAPCD CEQA thresholds of 10 tons per year for ROG and NOX and 15 tons per year for PM10, CEQA and SJVAPCD's Rule 9510 require that all feasible and reasonable mitigation be applied to the proposed project to reduce air quality impacts from construction and operations.

The General Plan analyzed activities that disturb the soil, such as grading and excavation, infrastructure construction, building demolition, and a variety of construction activities. The General Plan also analyzed operational air quality impacts that would likely occur based on the various land use designations and possible resultant land uses that could occur during buildout of the City.

The General Plan EIR requires that all new development, such as the proposed Project, be subject to Best Management Practices to reduce dust and other air pollutant emissions, as well as mandatory compliance with all applicable SJVAPCDs rules and regulations. These rules and regulations include, but are not limited to, Rule 2201 (New and Modified Station Source Review), Rule 4002 (National Emission Standards for Hazardous Air Pollutants), Regulation VIII (Fugitive PM10 Prohibitions), and Rule 9510 (Indirect Source Review (ISR)). The construction and operation of the proposed Project would also be subject to SJVAPCD's Regulation VIII (Fugitive PM10 Prohibitions). Implementation of Mitigation Measures MM AQ-1 through MM AQ-3 requires that the proposed Project comply with applicable SJVAPCD rules and regulations to reduce construction and operational impacts as described in the mitigation. Because Project construction at the project site would not result in significant emissions for which the SJVAPCD and surrounding air districts are in nonattainment, construction emissions would not result in a cumulatively considerable net increase. Further, as the proposed project would not result in significant operational emissions of criteria pollutants, the proposed project would not contribute to a long-term cumulative increase in criteria pollutants.

With implementation of this mitigation, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts would be less than significant.

#### ***MITIGATION MEASURE(S)***

Implement MM AQ-1 through MM AQ-3.

#### ***LEVEL OF SIGNIFICANCE***

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.3d – Would the Project expose sensitive receptors to substantial pollutant concentration?**



The CARB *Air Quality and Land Use Handbook* provides guidance for siting sensitive receptors near sources of Toxic Air Contaminants (TAC) emissions (California Air Resources Board, 2005). The Handbook contains recommendations that will “help keep California’s children and other vulnerable populations out of harm’s way with respect to nearby sources of air pollution,” including recommendations for distances between sensitive receptors and certain land uses.

The Project includes apartments that would be considered sensitive receptor locations. The Handbook recommends locating gasoline fueling stations at least 50 feet from the nearest residence and 300 feet for high volume gasoline stations exceeding 3.6 million gallons per year. The Project proposes only 8 fueling positions, which does not meet the threshold as a high-volume stations having 16 or more fueling positions. The nearest residences would be located approximately 238 feet from the fueling canopy. Therefore, the fueling station would not result in significant TAC impacts.

As noted in Impact #3.4.3b, the proposed Project i would not create or expose sensitive receptors to substantial pollutant concentrations or emissions. With implementation of Mitigation Measures MM AQ-1 through MM AQ-3, impacts would be considered less than significant.

#### **MITIGATION MEASURE(S)**

Implement MM AQ-1 through MM AQ-3.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

#### **Impact #3.4.3e – Would the Project create objectionable odors affecting a substantial number of people?**

Sensitive receptors are defined as locations where young children, chronically ill individuals, the elderly, or people who are more sensitive than the general population reside, such as schools, hospitals, nursing homes, and daycare centers. The Liberty Middle School is approximately 0.6 miles to the east, the Lemoore Elementary School is approximately 1.3 miles southeast and Cinnamon Elementary School is approximately 1.6 miles east. Although emissions from construction-related vehicles are anticipated during temporary construction activities, the proposed project is not expected to affect sensitive receptors.

According to the 2015 SJVAPCD’s GAMAQI, analysis of potential odor impacts should be conducted for the following two situations:

- Generators – projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate; and

- Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

As proposed, the Project would not generate odors that would impact sensitive receptors. With implementation of Mitigation Measures MM AQ-1 through MM AQ-3, odor impacts that may be generated during temporary construction activities would be reduced to less-than-significant levels.

***MITIGATION MEASURE(S)***

Implement MM AQ-1 through MM AQ-3.

***LEVEL OF SIGNIFICANCE***

Impacts would be *less than significant with mitigation incorporated*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.4 - BIOLOGICAL RESOURCES

Would the project:

- |    |  |                          |                                     |                                     |                                     |
|----|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a. | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| b. | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| c. | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. | Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e. | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f. | Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Methodology

Database searches were conducted to determine which sensitive biological resources historically occurred on and within 10 miles of the Project site. The California Natural Diversity Database (CNDDB) (CNDDB 2017), California Native Plants Society (CNPS

database (CNPS 2017), U.S. Fish and Wildlife Service (USFWS Threatened and Endangered Species List (USFWS 2017a), and USFWS Critical Habitat database (USFWS 2017b) were reviewed to identify State and federal special-status species were searched. The CNDDDB provides element-specific spatial information on individual documented occurrences of special-status species and sensitive natural vegetation communities. The CNPS database provides similar information specific to plant species, but at a much lower spatial resolution. The USFWS query generates a list of federally-protected species known to potentially occur within individual U.S. Geological Survey (USGS) quadrangles. Wildlife species designated as “Fully Protected” by California Fish and Game Code Sections 5050 (Fully Protected reptiles and amphibians), 3511 (Fully Protected birds), 5515 (Fully Protected Fish), and 4700 (Fully Protected mammals) are added to the list.

Additional databases that were accessed included the USFWS National Wetlands Inventory (NWI Map (NWI 2017)), the USGS topographical maps, National Hydrography Dataset (NHD (NHD 2017)), Federal Emergency Management Agency (FEMA 100-year floodplain database (FEMA 2017)), and the Recovery Plan for Upland Species of the San Joaquin Valley and Essential Connectivity Habitat Areas for wildlife corridors (Spencer 2010).

### **Discussion**

**Impacts #3.4.4a and #3.4.4b – Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; or have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

The CNDDDB searches listed historical occurrences of five special-status bird species, three special-status plant species, nine special-status wildlife species and one sensitive natural community within a 10-mile buffer around the Project site (Figures 3.4.4-1 through 3.4.4-4). However, none of these records were on or within the immediate vicinity of the Project site.

No USFWS-designated Critical Habitat units occur on the Project site. Critical Habitat for the Buena Vista Lake ornate Shrew (*Sorex ornatus relictus*) is approximately five miles southwest of the site (Figure 3.4.4-5). Riparian habitats are defined as vegetative communities that are influenced by a river or stream, specifically the land area that encompasses the water channel and its current or potential floodplain. No riparian habitat occurs on or near the Project site. No sensitive natural communities or critical habitats occur on or near the Project site.

The proposed Project site is highly disturbed and surrounded by similar commercial uses to the north, west and south. There are several trees on the east portion of the site that would be removed prior to construction of the Project. The potential for special-status species to occur on the site is low; however, a pre-construction survey would need to be completed to ensure there is no evidence of occupation by special-status species on the Project site.



General mitigation measures are included to prevent any potential impacts during construction. Therefore, there would be a less-than-significant impact with mitigation incorporated.

***MITIGATION MEASURE(S)***

**MM BIO-1:** A qualified biologist shall conduct a pre-construction survey on the Project site and within 500 feet of its perimeter within 14 days and no more than 30 days prior to the start of construction activities. If no special status or listed species are observed on the site, or buffer area, no further action is required.

If any evidence of occupation of the Project site by listed or other special-status species is subsequently observed, a buffer shall be established by a qualified biologist that results in sufficient avoidance to comply with applicable regulations. If sufficient avoidance cannot be established, the United States Fish and Wildlife Service and California Department of Fish and Game shall be contacted for further guidance and consultation on additional measures. The Project proponent shall obtain any required permits from the appropriate wildlife agency. Copies of all permits and evidence of compliance with applicable regulations shall be submitted to the lead agency.

The following buffer distances shall be established prior to construction activities:

- San Joaquin kit fox or American badger potential den: 50 feet;
- San Joaquin kit fox known den: 100 feet;
- San Joaquin kit fox or American badger pupping den: contact the California Department of Fish and Game and United States Fish and Wildlife Service;
- Burrowing owl burrow outside of breeding season: 160 feet;
- Burrowing owl burrow during breeding season: 250 feet;
- Swainson's hawk nest during breeding season: 0.5 mile;
- Other protected raptor nests during the breeding season: 300 feet;
- Other protected nesting migratory bird nests during the breeding season: 50 feet; and
- Other special-status wildlife species: as recommended by qualified biologist.

**MM BIO-2:** A qualified biologist shall be obtained to assist in the removal of the on-site trees. The removal of trees shall be done between February 15 to August 15 to avoid potential impacts with nesting birds.

**MM BIO-3:** If initial grading activities are planned during the potential nesting season for migratory birds/raptors that may nest on or near the Project site, the preconstruction survey shall evaluate the sites and accessible lands within an adequate buffer for active nests of migratory birds/raptors. If any nesting birds/raptors are observed, a qualified biologist shall determine buffer distances and/or the timing of Project activities so that the proposed Project does not cause nest abandonment or destruction of eggs or young. This measure shall be implemented so that the proposed Project remains in compliance with the Migratory Bird Treaty Act and applicable state regulations.

If nesting raptors are identified during the surveys, active raptor nests should be avoided by 500 feet and all other migratory bird nests should be avoided by 250 feet. Avoidance buffers may be reduced if a qualified and approved on-site monitor determines that encroachment into the buffer area is not affecting nest building, the rearing of young, or otherwise affect the breeding behaviors of the resident birds. Avoidance buffers can also be reduced through consultation with the CDFW and USFWS. If Swainson's hawks are found to nest within the survey area, active Swainson's hawk nests shall be avoided by 0.5 mile unless this avoidance buffer is reduced through consultation with the CDFW and/or USFWS.

No construction or earth-moving activity shall occur within a non-disturbance buffer until it is determined by a qualified biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid Project construction areas. This typically occurs by early July, but September 1 is considered the end of the nesting period unless otherwise determined by a qualified biologist. Once raptors have completed nesting and young have fledged, disturbance buffers will no longer be needed and can be removed, and monitoring can be terminated.

**MM BIO-4:** If any burrowing owl burrows are observed during the preconstruction survey, avoidance measures shall be consistent and in accordance with protocols outlined in the Burrowing Owl Survey Protocol and Mitigation Guidelines (Burrowing Owl Consortium 1993) and the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Active burrows shall be avoided, but if avoidance is not possible then compensation shall be provided for the active or passive displacement of western burrowing owls, and habitat acquisition and the creation of artificial dens for any western burrowing owls shall be provided for any owls relocated from construction areas. These measures are outlined as follows:

1. A pre-construction survey of construction area, including a 150-meter buffer (500 feet), shall be conducted no less than 14 days and no more than 30 days prior to ground disturbing activities. If more than 30 days lapse between the time of the pre-construction survey and the start of ground-disturbing activities, another pre-construction survey shall be completed. The second survey (or other subsequent surveys if necessary) shall be conducted and timed to occur sometime between 30 days and 24 hours prior to ground disturbance.
2. If western burrowing owls are present on the construction site (or within 500 feet of the construction site), exclusion fencing shall be installed between the nest site or active burrow and any earth-moving activity or other disturbance. Exclusion areas shall extend 160 feet around occupied burrows during the non-breeding season (September 1 through January 31) and extend 250 feet around occupied burrows during the breeding season (February 1 through August 31) as described in The California Burrowing Owl Consortium's Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium 1993).
3. If western burrowing owls are present in the non-breeding season and must be passively relocated from the Project site, passive relocation shall not commence until October 1 and must be completed by February 1. Passive relocation must only be conducted by a qualified biologist or ornithologist and with approval by CDFW. After passive relocation, the area where owls occurred and its immediate vicinity shall be

monitored by a qualified biologist daily for one week and once per week for an additional two weeks to document that owls are not reoccupying the site.

4. If permanent impacts to nesting, occupied and satellite burrows, or burrowing owl habitat occur, compensation shall be based upon the number of owls or pairs of owls relocated from the construction area. Compensation acreage shall be determined as described in the CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012).

**MM BIO-5:** The measures listed below shall be implemented during construction:

1. Pre-construction surveys shall be conducted no fewer than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities. If any San Joaquin kit fox dens are found during preconstruction surveys, exclusion zones shall be placed in accordance with USFWS Recommendations using the following:

**San Joaquin kit fox USFWS Exclusion Zone Recommendations**

Den Type	Recommendation
Potential Den	50-foot radius
Known Den	100-foot radius
Natal/Pupping Den (Occupied and Unoccupied)	Contact U.S. Fish and Wildlife Service for guidance
Atypical Den	50-foot radius

2. If any den must be removed, it must be appropriately monitored and excavated by a trained wildlife biologist. Destruction of natal dens and other "known" kit fox dens must not occur until authorized by USFWS. Replacement dens will be required if such dens are removed. Potential dens that are removed do not need to be replaced if they are determined to be inactive by using standard monitoring techniques (e.g., applying tracking medium around the den opening and monitoring for San Joaquin kit fox tracks for three consecutive nights).
3. Project-related vehicles shall observe a daytime speed limit of 15-mph throughout the site in all Project areas, except on County roads and State and federal highways; this is particularly important at night when kit foxes and badgers are most active. Night-time construction shall be minimized to the extent possible. However, if construction at night does occur, then the speed limit shall be reduced to 10-mph. Off-road traffic outside of designated Project areas shall be prohibited.
4. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than two-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the USFWS and the CDFW shall be contacted at the addresses provided below.

5. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of four inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.
6. All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from a construction or Project sites.
7. No pets, such as dogs or cats, shall be permitted on the Project sites to prevent harassment, mortality of kit foxes, or destruction of dens.
8. Use of rodenticides and herbicides in Project areas shall be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional Project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide shall be used because of a proven lower risk to kit fox.
9. A representative shall be appointed by the Project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the USFWS.
10. An employee education program shall be conducted. The program shall consist of a brief presentation by persons knowledgeable in San Joaquin kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the Project. The program shall include: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the Project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during Project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the previously referenced people and anyone else who may enter the Project sites.
11. Upon completion of the Project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. shall be re-contoured if necessary, and revegetated to promote restoration of the area to pre-Project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the Project, but after Project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods



- and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the USFWS, CDFW, and revegetation experts.
12. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the USFWS shall be contacted for guidance.
  13. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFW immediately in the case of a dead, injured or entrapped kit fox. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or CDFW representative, the wildlife biologist, at (530) 934-9309. The USFWS shall be contacted at the numbers below.
  14. The Sacramento Fish and Wildlife Office of USFWS and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during Project-related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The USFWS contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFW contact can be reached at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.
  15. All sightings of the San Joaquin kit fox shall be reported to the California Natural Diversity Database (CNDDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed shall also be provided to the Service at the address below.

Any Project-related information required by the USFWS or questions concerning the above conditions or their implementation may be directed in writing to the U.S. Fish and Wildlife Service at: Endangered Species Division, 2800 Cottage Way, Suite W 2605, Sacramento, California 95825-1846, phone (916) 414-6620 or (916) 414-6600.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.4c – Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No National Wetlands Inventory (NWI) features or blue-line drainages (as found on USGS topographic maps and in the National Hydrography Dataset) occurred on the Project site (Figure 3.4.4-6).

#### **MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.4d – Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

The proposed Project site does not occur within a known migration route, significant wildlife corridor, or linkage area as identified in the Recovery Plan for Upland Species in the San Joaquin Valley (USFWS 1998). The site is located within areas of highway commercial development. Wildlife movement corridors are routes that provide shelter and sufficient food supplies to support regular movements of wildlife species. A movement corridor is a continuous geographic extent of habitat that either spatially or functionally links ecosystems across fragmented, or otherwise inhospitable, landscapes. Faunal movement may include seasonal or migration movement, life cycle links, species dispersal, re-colonization of an area, and movement in response to external pressures. Movement corridors typically include riparian habitats, ridgelines, and ravines, as well as other contiguous expanses of natural habitats. Movement corridors may be functional on regional, sub-regional, or local scales.

No significant wildlife movement corridors, core areas, or Essential Habitat Connectivity areas occur on or near the Project site. The Project would not substantially affect migrating birds or other wildlife. The Project will not restrict, eliminate, or significantly alter wildlife movement corridors, core areas, or Essential Habitat Connectivity areas either during construction or after the Project has been constructed. Project construction will not substantially interfere with wildlife movements or reduce breeding opportunities.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be less than significant.

**Impacts #3.4.4e and #3.4.4f – Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?**

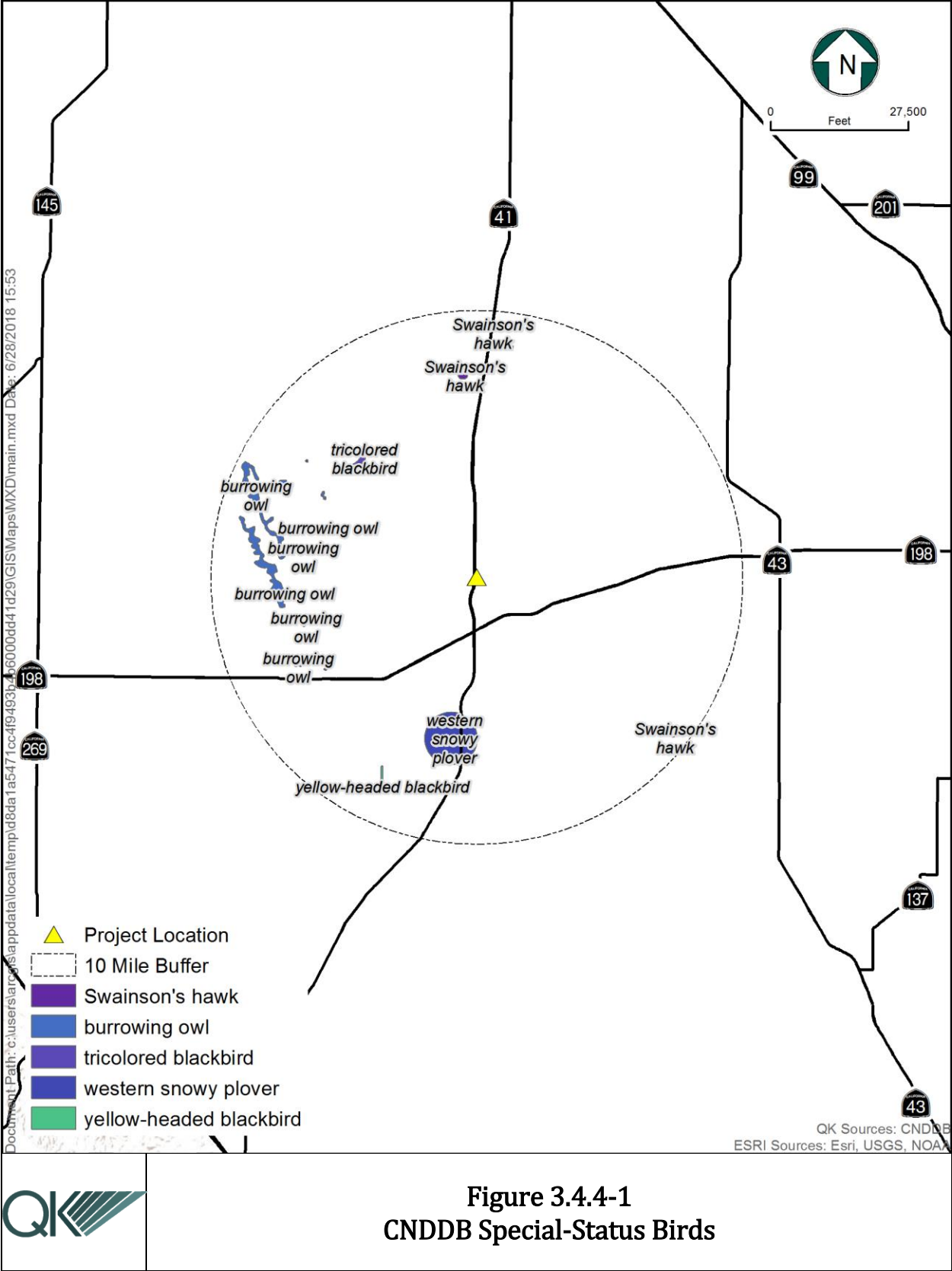
The City of Lemoore does not have any local policies or ordinances protecting biological resources nor an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, there would be no impact.

**MITIGATION MEASURE(S)**

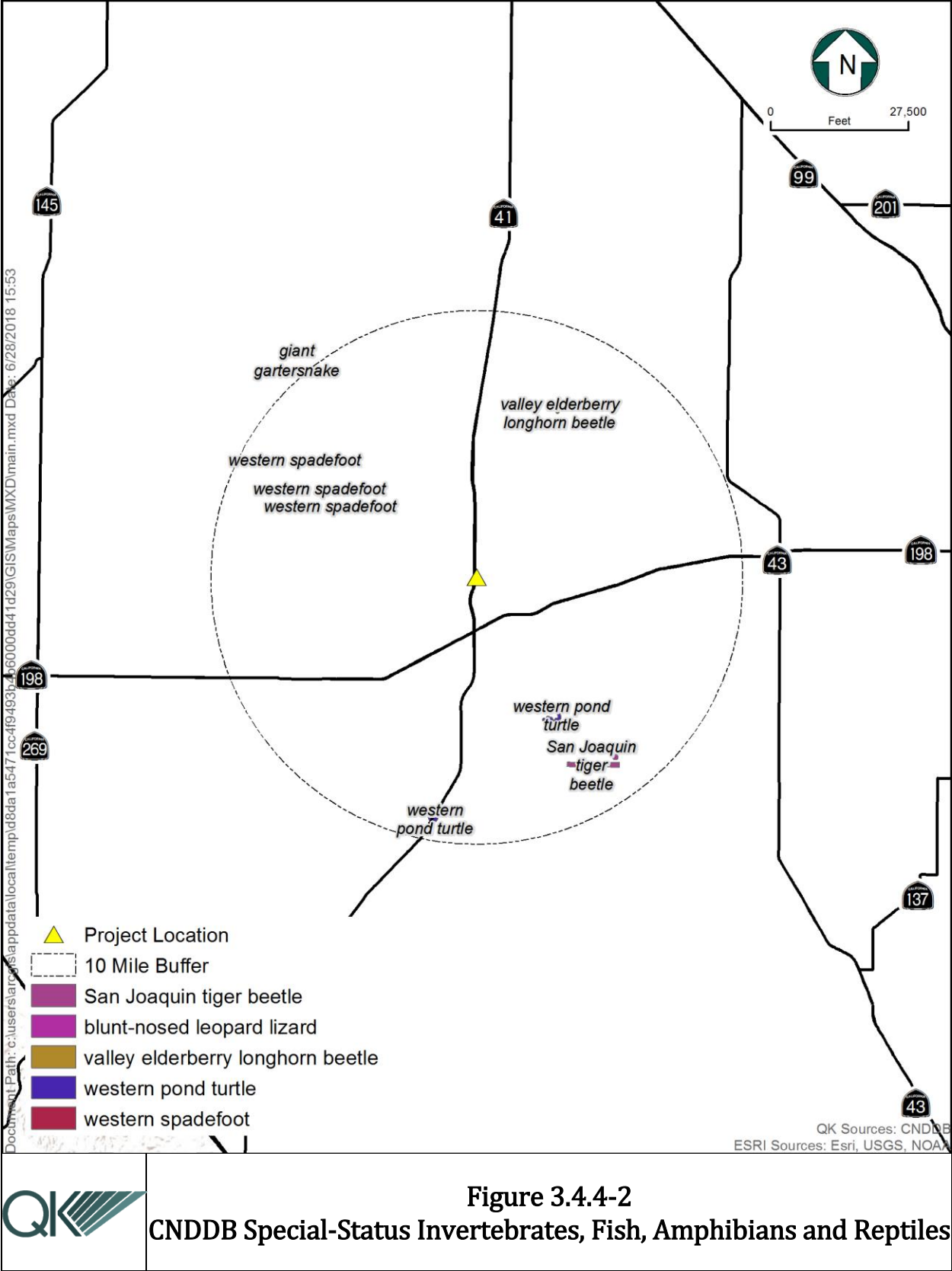
No mitigation is required.

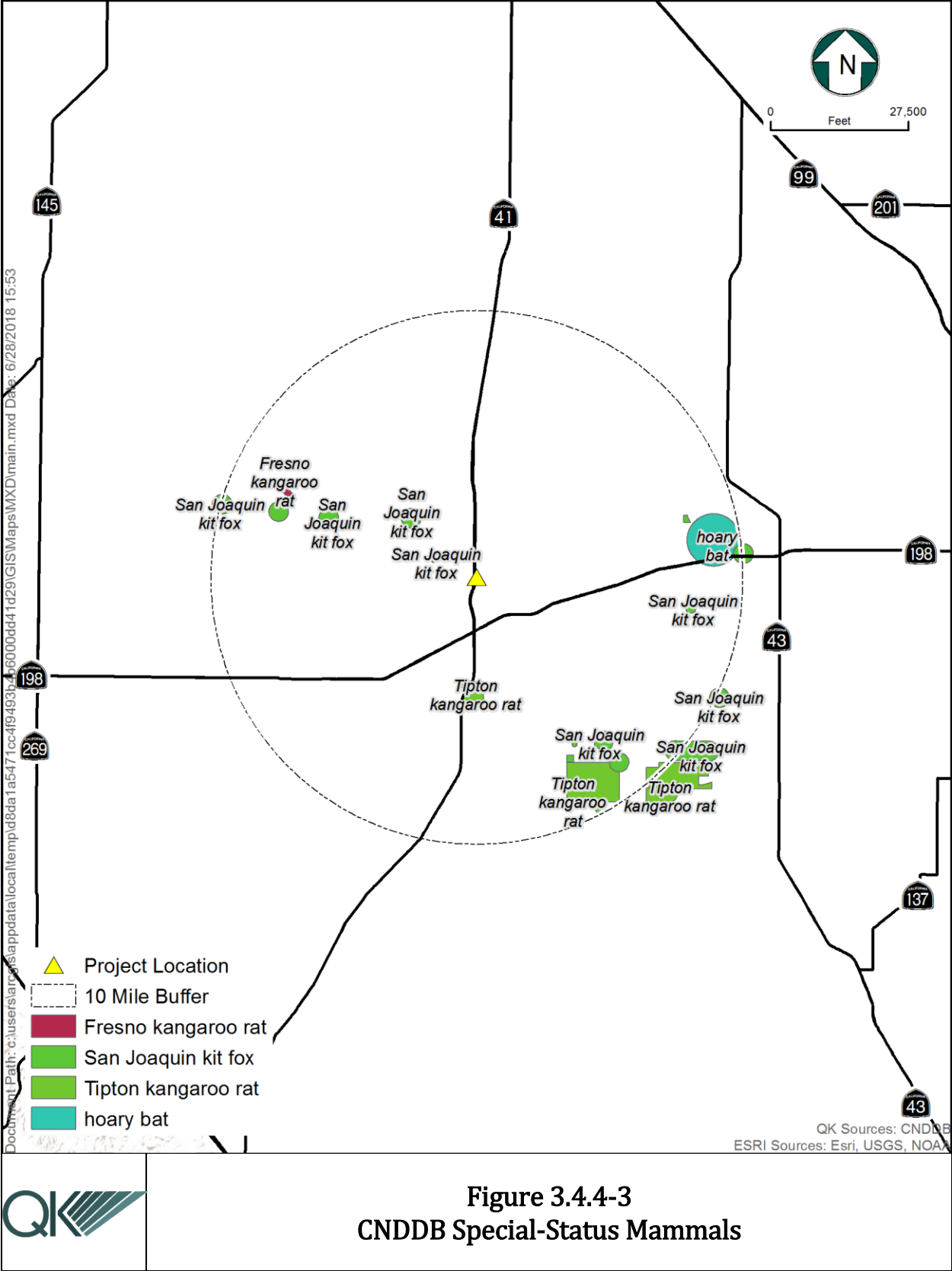
**LEVEL OF SIGNIFICANCE**

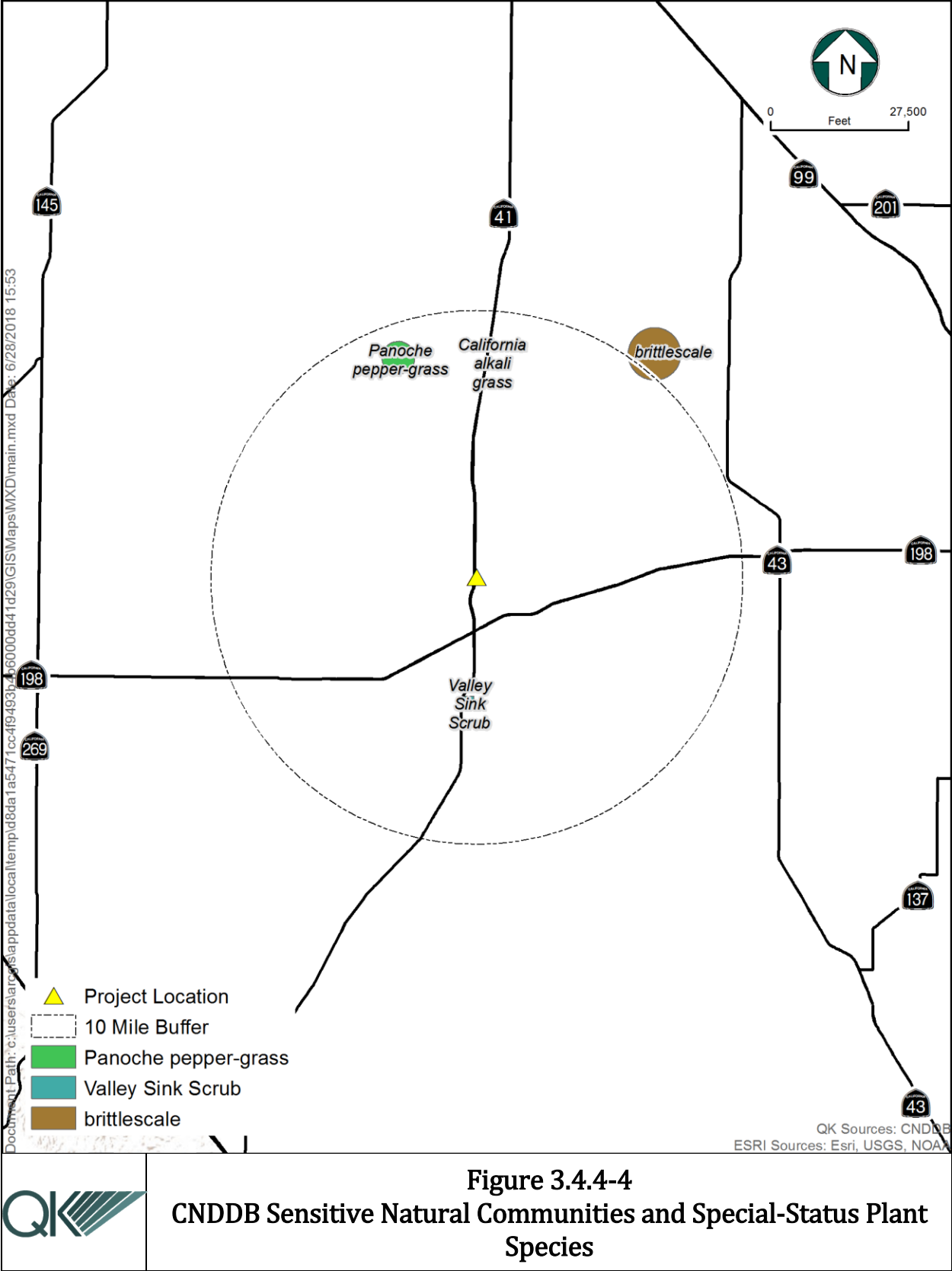
There would be *no impact*.

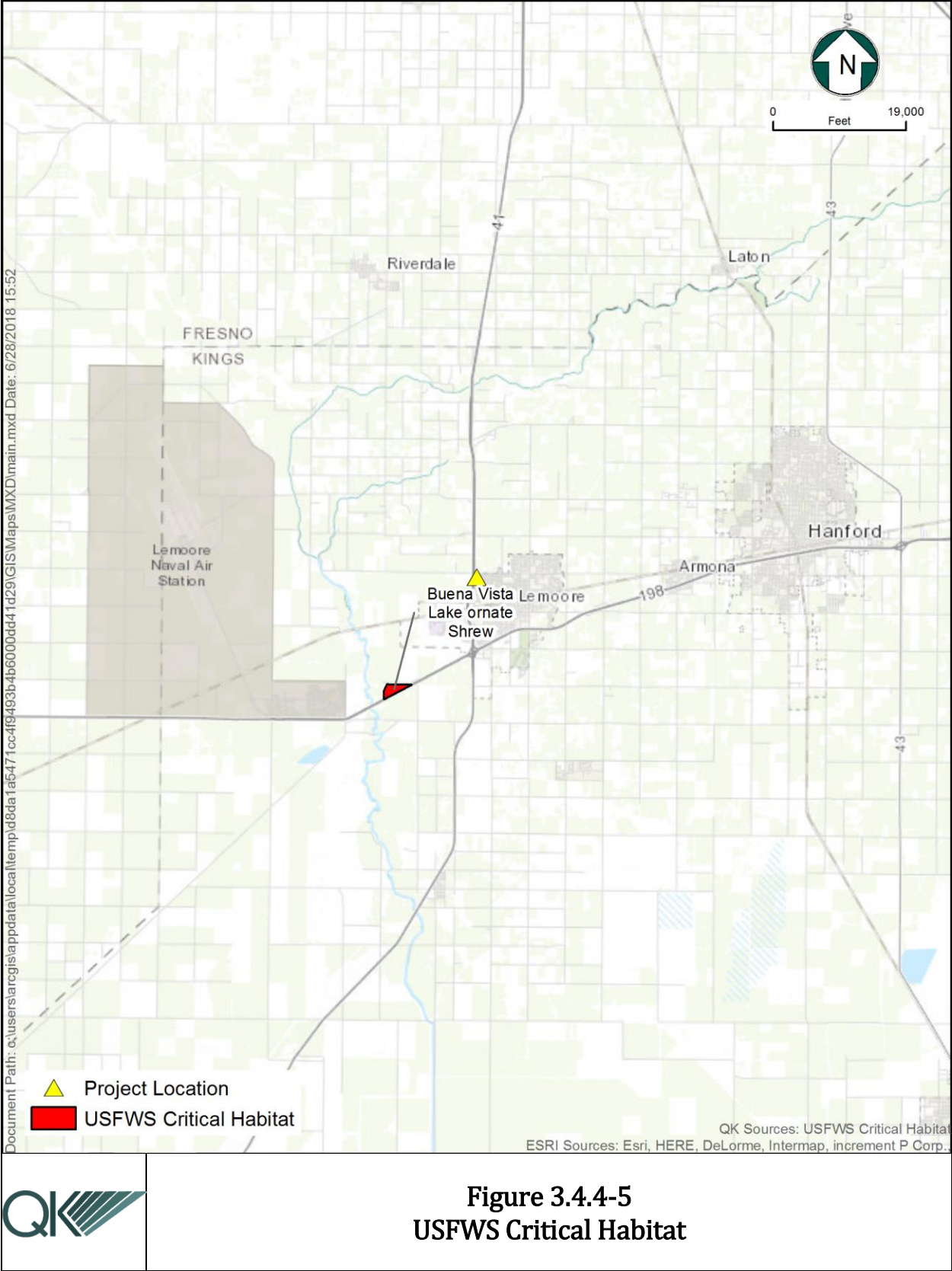
















	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.5 - CULTURAL RESOURCES

Would the project:

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

#### Impact #3.4.5a – Would the Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

The City of Lemoore 2030 General Plan states there are currently no buildings or structures listed in the National Register of Historic Places or as California Historic Landmarks. However, there are 37 sites listed as having local historic significance located within the downtown district (City of Lemoore , 2008). The proposed Project does not contain and listed historic resources, nor is it located within an identified historic district. The Project would have no impact on registered historic resources.

The City identified the Santa Rosa Rancheria Tachi-Yokut Tribe (Tribe) as being the only Tribe that requested consultation regarding proposed projects within the City. The City initiates consultation with tribes through a Project Review – Consultation Notice once the General Plan Amendment and Zone Change applications were submitted. The Tribe has been notified of their right to request consultation pursuant to Public Resources Code Section 21080.3.

The Project site is an undeveloped area that does not contain any structures that could be potentially historic and there are no tribal lands within the vicinity of the Project. Although no historic resources have been discovered on the Project site, there would be a potentially significant impact if historical resources were uncovered during Project construction.

Implementation of Mitigation Measures MM CUL-1 through MM CUL-3 would reduce potential impacts to a less-than-significant level.

**MITIGATION MEASURE(S)**

**MM CUL-1:** If prehistoric or historic-era cultural materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified archaeologist can evaluate the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants. If the qualified archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation.

The qualified archaeologist shall determine the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the CEQA Guidelines. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing, and data recovery, among other options. Any previously undiscovered resources found during construction within the Project area shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance. No further ground disturbance shall occur in the immediate vicinity of the discovery until approved by the qualified archaeologist.

**MM CUL-2:** Prior to any ground disturbance, the applicant shall offer interested Tribes the opportunity to provide a Native American Monitor during ground disturbing activities during construction. Tribal participation would be dependent upon the availability and interest of the Tribe.

**MM-CUL 3:** Upon coordination with the City of Lemoore Community Development Department, any historical or archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.5b – Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?**

See discussion for Impact #3.4.5a above.

Although considered unlikely, since there is no recorded evidence or surface evidence of historical or archaeological resources within the project area or temporary staging area, there is the potential for project-related excavation and construction to potentially damage

or destroy previously undiscovered cultural resources. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants. This is considered a potentially significant impact. Mitigation is proposed requiring implementation of standard inadvertent discovery procedures to reduce potential impacts to previously undiscovered subsurface historic and archaeological resources.

**MITIGATION MEASURE(S)**

Implement MM CUL-1 through MM CUL-3.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.5c – Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

There are no unique geological features or known fossil-bearing sediments in the vicinity of the Project site. It is unlikely that any ground disturbance activities would be of a depth to uncover paleontological resources. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction activities. Therefore, this would be a potentially significant impact. Mitigation is proposed requiring standard inadvertent discovery procedures to be implemented to reduce this impact to a level of less than significant.

**MITIGATION MEASURE(S)**

**MM CUL-4:** During any ground disturbance activities, if paleontological resources are encountered, all work within 25 feet of the find shall halt until a qualified paleontologist as defined by the Society of Vertebrate Paleontology Standard Procedures can evaluate the find and make recommendations regarding treatment. Paleontological resource materials may include resources such as fossils, plant impressions, or animal tracks preserved in rock. The qualified paleontologist shall contact the Natural History Museum of Los Angeles County or other appropriate facility regarding any discoveries of paleontological resources. If the qualified paleontologist determines that the discovery represents a potentially significant paleontological resource, additional investigations and fossil recovery may be required to mitigate adverse impacts from Project implementation.

If avoidance is not feasible, the paleontological resources shall be evaluated for their significance. If the resources are not significant, avoidance is not necessary. If the resources are significant, they shall be avoided to ensure no adverse effects, or such effects must be mitigated as outlined in PRC Section 21083.2. Construction in that area shall not resume until the resource appropriate measures are recommended or the materials are determined to be less than significant. If the resource is significant and fossil recovery is the identified form of



treatment, then the fossil shall be deposited in an accredited and permanent scientific institution. Copies of all correspondence and reports shall be submitted to the Lead Agency.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.5d – Would the Project disturb any human remains, including those interred outside of formal cemeteries?**

Human remains are not known to exist within the Project area. However, construction would involve earth-disturbing activities, and it is still possible that human remains may be discovered, possibly in association with archaeological sites. MM CUL-5 has been included in the unlikely event that human remains are found during ground-disturbing activities. Impacts would be less than significant with implementation of mitigation.

**MITIGATION MEASURE(S)**

**MM CUL-6:** If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the county coroner.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>3.4.6 - GEOLOGY AND SOILS</b>				
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

**Impact #3.4.6a(i) – Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone. Per the Department of Conservation, California Geologic Survey Regulatory Maps (California Department of Conservation, 2018), the nearest fault line is the Nunez fault, which lies in the Alcade Hills 7.5-minute quadrangle, northwest of Coalinga in Fresno County approximately 35 miles west of the Project site. According to the *City of Lemoore 2030 General Plan*, there are no known major fault systems within Lemoore. The greatest potential for geologic disaster in the City is posed by the San Andres Fault, which is located approximately four miles west of the Kings County boundary line with Monterey County (County of Kings, 2010). The distance from the nearest active faults precludes the possibility of fault rupture on the Project site. Although the Project area could potentially experience ground shaking, the magnitude of the hazard would not be severe as indicated by the General Plan. Therefore, a less than significant impact would occur.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.6a(ii) – Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?**

According to the Seismic Safety Map contained within the Health and Safety Element of the 2035 Kings County General Plan (Figure HS-2, page HS-10), the Project site is located within an area designated as Zone V1 or Valley Zone 1, which is identified as the area of least expected seismic shaking by the Kings County Seismic Zone Description in the 2035 General Plan (Kings County, 2010). The potential for ground shaking is discussed in terms of the percent probability of exceeding peak ground acceleration (% g) in the next 50 years (Kings County, 2010). The Project site's exceedance probability in the next 50 years is between 20-30 percent, which is the lowest within the county. Although the Project area could potentially experience ground shaking, the magnitude of the hazard would not be severe as indicated by the Health and Safety Element of the 2035 Kings County General Plan. Therefore, a less-than-significant impact would occur.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*

**Impact #3.4.6a(iii) - Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?**

According to the *City of Lemoore Community Profile – Hazard Profiles*, the potential magnitude/geographic extent of expansive liquefaction erosion was deemed ‘negligible’ and its significance ‘low’ throughout the City (City of Lemoore, 2012). (City of Lemoore, 2012). Liquefaction is possible in local areas during a strong earthquake or other seismic ground shaking, where unconsolidated sediments coincide with a high-water table.

Structures constructed as part of the Project would be required by State law to be constructed in accordance with all applicable International Building Code (IBC) and California Building Code (CBC) earthquake construction standards, including those relating to soil characteristics. Adherence to all applicable regulations would avoid any potential impacts to structures resulting from liquefaction at the Project site.

Since the Project includes the construction of structures and residences the potential for liquefaction is considered significant. Implementation of Mitigation Measure MM GEO-1 would require the preparation of a geotechnical study that would include recommendations to engineer the site’s soils to prevent potential liquefaction in the future. With implementation of this mitigation measure, the Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure including liquefaction. Therefore, the impact would be less than significant with mitigation incorporated.

**MITIGATION MEASURE(S)**

**MM GEO-1:** Prior to final design, a geotechnical study shall be prepared for the Project site and recommendations of the study shall be incorporated into final design of the Project. A copy of the report shall be submitted to the City of Lemoore Community Development Department for review.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.6a(iv) – Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?**

The Project site currently consists of undeveloped land and the surrounding area is essentially flat. The site’s topography would not change substantially as a result of Project



development. T Since the site is essentially flat in nature from previous activities with no surrounding slopes and it is not considered to be prone to landslides. The Project would not expose people or structures to potential substantial adverse effects from landslides. Therefore, there would be no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.6b – Would the Project result in substantial soil erosion or the loss of topsoil?**

There is one type of soil found within the Project site (Figure 3.4.6-1), which is the Grangeville Sandy Loam. The development of the proposed facilities is not expected to subject the site to any extreme erosion problems. As is noted in Impact #3.4.9a, the State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit (No. 2012-0006-DWQ) for stormwater discharges associated with construction and land disturbance activities, the project proponent must develop and implement a Stormwater Pollution Prevision Plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants, including erosion of soils (such as topsoil), from moving offsite. MM HYD-1 below requires the preparation and implementation of a SWPPP to comply with the Construction General Permit requirements. Therefore, with implementation of MM HYD-1, the project would have a less-than-significant impact on soil erosion and loss of topsoil

**MITIGATION MEASURE(S)**

Implement MM HYD-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.6c – Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?**

As previously discussed, the site soils are considered stable in that there is not a potential of on- or offsite landslides, lateral spreading, subsidence or collapse. However, as discussed in Impact #3.4.6a(iii), the Project site soils are subject to potential liquefaction as identified in the 2035 General Plan. The Project is potentially located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in liquefaction. Furthermore, the structures would be subject to all applicable ordinances of the City of Lemoore Building Ordinance, as well as all applicable IBC and CBC earthquake

construction standards, including those relating to soil characteristics. In addition, the implementation of Mitigation Measure MM GEO-1, which requires the preparation of a geotechnical study, would reduce Project impacts to a less-than-significant impact.

**MITIGATION MEASURES**

Implement MM GEO-1

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.6d – Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Expansive clay soils are subject to shrinking and swelling due to changes in moisture content over the seasons. These changes can cause damage or failure of foundations, utilities, and pavements. During periods of high moisture content, expansive soils under foundations can heave and result in structures lifting. In dry periods, the same soils can collapse and result in settlement of structures. According to Table 15 – Physical and Chemical Properties of the Soils in the USDA Kings County Soil Survey, the upper five feet of the onsite soil (Sandy Loam) is considered to have low shrink-swell or expansion potential. In addition, the site is not located in an area of expansive soils as shown in Figure HS-4 of the Health and Safety Element of the 2035 Kings County General Plan (Kings County, 2010). Compliance with the policies of the City of Lemoore Development Code, the CBC, as well as implementation of Mitigation Measure MM GEO-1, would reduce potential site-specific impacts to less-than-significant levels.

**MITIGATION MEASURES**

Implement MM GEO-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.6e – Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?**

The proposed Project does not include the development or use of septic tanks or alternative wastewater disposal systems as the Project would hook up to the City's existing sewer system.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

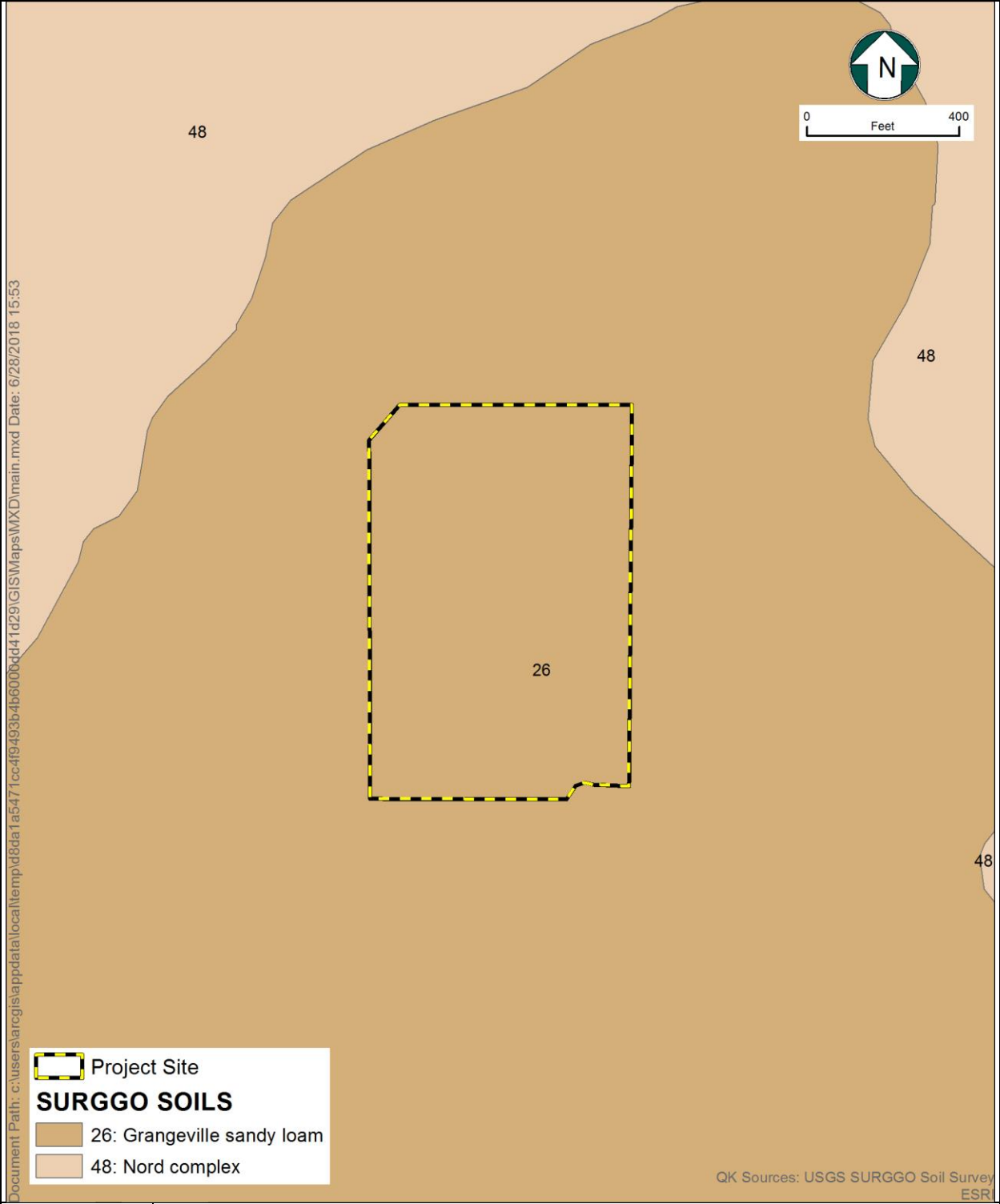


Figure 3.4.6-1  
Project Site Soil Map

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.7 - GREENHOUSE GAS EMISSIONS

Would the project:

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?        | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Discussion

There have been significant legislative and regulatory activities that directly and indirectly affect climate change and GHGs in California. The primary climate change legislation in California is AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and Nitrogen trifluoride. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The California Air Resources Board (ARB) is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming in order to reduce emissions of GHGs. SB 32 was signed by the Governor in 2016, which would require the state board to ensure that statewide greenhouse gas emissions are reduced to 40 percent below the 1990 level by 2030.

**Impact #3.4.7a – Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

The SJVAPCD has adopted the Final Draft Staff Report, addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act (November 5, 2009), that included a recommended methodology for determining significance for stationary source projects and traditional development projects (such as residential, commercial, or industrial projects).

The proposed Project would emit greenhouse gases such as carbon dioxide (CO<sub>2</sub>), methane, and nitrous oxide from the exhaust of equipment and the exhaust of vehicles for residents, customers, and delivery trips. The increased rate of greenhouse gas emissions would not be considered cumulatively significant per the California Global Warming Solutions Act of 2006. As stated in the *San Joaquin Valley Unified Air Pollution Control District Guidance for Assessing and Mitigating Air Quality Impacts*, projects whose emissions have been reduced



or mitigated consistent with Assembly Bill 32- California *Global Warming Solutions Act of 2006* should be considered to have a less-than-significant impact on global climate change.

The *City of Lemoore 2030 General Plan* has analyzed greenhouse gas emissions for the City based on land use designations, including emissions for areas designated as Medium Density Residential and Neighborhood Commercial. Construction and operational greenhouse gas emissions as a result have already been analyzed in the General Plan EIR. With implementation of these and other applicable City policies, as well as mandatory compliance with the applicable San Joaquin Valley Unified Air Pollution Control District rules and regulations, Project GHG emissions will be reduced to less-than-significant levels.

#### **MITIGATION MEASURES**

No mitigation is required.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*

**Impact #3.4.7b – Would the Project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

As previously mentioned, the proposed Project falls within the jurisdiction of the San Joaquin Valley Unified Air Pollution Control District and the *City of Lemoore 2030 General Plan*. Both of these entities take into account baseline emissions inventory for light industrial uses for the City of Lemoore. Since the proposed Project is consistent with the applicable General Plan designation of Light Industrial, it can be concluded that the proposed Project would also be in conformance with the approved General Plan.

Because the proposed Project is consistent with the *City of Lemoore 2030 General Plan*, construction and operational GHG emissions as a result have already been analyzed in the General Plan EIR. With implementation of these and other applicable City policies, as well as mandatory compliance with all applicable San Joaquin Valley Unified Air Pollution Control District rules and regulations Project GHG emissions will be reduced to less-than-significant levels.

#### **MITIGATION MEASURES**

No mitigation required.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*

### 3.4.8 - HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

**Impacts #3.4.8a, #3.4.8b, and #3.4.8c – Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment or emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

The proposed Project includes the construction of multi-family housing and commercial development. The proposed Project could include the transport and use of small amounts of liquid waste, including cleaning fluids, dust palliative, herbicides, and solvents. Some solid hazardous waste, such as welding materials and dried paint, may also be generated during construction. These materials would be transported to the project site during construction, and any hazardous materials that are produced as a result of the construction of the Project would be collected and transported away from the site. During construction of the project, material safety data sheets for all applicable materials present at the site would be made readily available to onsite personnel. During construction activities, non-hazardous construction debris would be generated and disposed of in local landfills. Sanitary waste would be managed using portable toilets located at a reasonably accessible onsite location

Once the Project is fully constructed, there may be businesses that dispense gasoline and other auto-related chemicals that, if handled improperly, may result in spills. The transport use and storage of hazardous materials would be required to comply with all applicable State and federal regulations, such as requirements that spills would be cleaned up immediately and all wastes and spills control materials would be properly disposed of at approved disposal facilities. Compliance with CCR Title 23, Chapter 16 would also be required for maintenance and monitoring of the USTs for potential leaks. Mitigation Measure MM HYD-1 requires the preparation of a SWPPP includes a list of Best Management Practices (BMPs) to be implemented on the site both during and after construction to minimize potential impacts from accidental spills. With compliance of the SWPPP as well as all local, State, and federal regulations regarding hazardous materials, impacts associated with the use or accidental spill of hazardous materials would be less than significant.

The Liberty Middle School is approximately 0.6 miles to the east, the Lemoore Elementary School is approximately 1.3 miles southeast and Cinnamon Elementary School is approximately 1.6 miles east. Given the proximity and the intervening uses there is a very limited potential for the Project to affect any of the schools in the vicinity. The proposed Project would not emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing school.

**MITIGATION MEASURE(S)**

Implement MM HYD-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.8d – Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Per the Cortese List, there are no hazardous waste and substances sites in the vicinity of the Project site (Cal EPA, 2017). Additionally, the State Water Resources Control Board GeoTracker compiles a list of Leaking Underground Storage Tank (LUST) Sites. There are two LUST Cleanup Sites within the vicinity of the Project site (California Water Resources Board, 2017). Both LUST Cleanup Sites were for gasoline spills; however, have been cleaned up and are closed. The proposed Project site is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would therefore not create a significant hazard to the public or the environment.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impacts #3.4.8e and #3.4.8f – For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area; or for a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?**

There are one private airstrip and no public airports within two miles of the Project. The Stone airstrip (private) is approximately 1.5 miles northwest of the Project. The closest public airport is the Visalia Municipal Airport, located approximately 22.5 miles east of the Project. Naval Air Station Lemoore is approximately 6.5 miles to the southwest. There is no adopted airport land use plan for the City of Lemoore. These airports would not be impacted by proposed Project.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.8g –Would the Project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?**

The City of Lemoore has Emergency Operations Plan that provides guidance to City staff in the event of extraordinary emergency situation associated with natural disaster and technological incidents (City of Lemoore , 2008). The proposed Project would not interfere with the City's adopted emergency response plan; therefore, there would be no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.8h – Would the Project Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

The Lemoore City Volunteer Fire Department, located approximately 1.25 miles southeast, would provide fire protection services to the Project. The proposed Project site is in an unzoned area of the Kings County Fire Hazard Severity Zone Map Local Responsibility Area (LRA). However, Cal Fire has determined that portions of the City of Lemoore are categorized as a Moderate Fire Hazard Severity Zone in LRA. The Project site is not within a wildland area nor is there within the vicinity of the Project site. The Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, there would be no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.9 - HYDROLOGY AND WATER QUALITY

Would the project:

a.	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	Place housing within a 100-year flood hazard area as mapped on a federal flood hazard boundary or flood insurance rate map or other flood hazard delineation map?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h.	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- |    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| i. | Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| j. | Contribute to inundation by seiche, tsunami, or mudflow?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

## Discussion

### Impact #3.4.9a – Would the Project violate any water quality standards or waste discharge requirements?

Project construction would cause ground disturbance that could result in soil erosion or siltation and subsequent water quality degradation offsite, which is a potentially significant impact. Construction-related activities would also involve the use of materials such as vehicle fuels, lubricating fluids, solvents, and other materials that could result in polluted runoff, which is also a potentially significant impact. However, the potential consequences of any spill or release of these types of materials are generally small due to the localized, short-term nature of such releases because of construction. The volume of any spills would likely be relatively small because the volume in any single vehicle or container would generally be anticipated to be less than 50 gallons.

As required by the State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit (No. 2012-0006-DWQ) for storm water discharges associated with construction and land disturbance activities, the City must develop and implement a SWPPP that specifies BMPs to prevent construction pollutants from contacting storm water, with the intent of keeping all products of erosion from moving offsite. The City is required to comply with the Construction General Permit because Project-related construction activities result in soil disturbances of least one acre of total land area. Mitigation Measure MM HYD-1 below requires the preparation and implementation of a SWPPP to comply with the Construction General Permit requirements.

With implementation of Mitigation Measure MM HYD-1, the Project would not violate any water quality standards or waste discharge requirements (WDRs) during the construction period, and impacts would be less than significant.

### MITIGATION MEASURE(S)

**MM HYD-1:** Prior to ground-disturbing activities, the City shall prepare and implement a Storm water Pollution Prevention Plan (SWPPP) that specifies best management practices (BMP), with the intent of keeping all products of erosion from moving offsite. The SWPPP shall include contain a site map that shows the construction site perimeter, existing and proposed man-made facilities, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the Project site. Additionally, the SWPPP shall contain a visual monitoring program and a chemical

monitoring program for non-visible pollutants to be implemented (if there is a failure of best management practices). The requirements of the SWPPP and BMPs shall be incorporated into design specifications and construction contracts. Recommended best management practices for the construction phase may include the following:

- Stockpiling and disposing of demolition debris, concrete, and soil properly;
- Protecting any existing storm drain inlets and stabilizing disturbed areas;
- Implementing erosion controls;
- Properly managing construction materials; and
- Managing waste, aggressively controlling litter, and implementing sediment controls.

Evidence of the approved SWPPP shall be submitted to the Lemoore Community Development Department.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.9b – Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?**

The City of Lemoore currently utilizes local groundwater as its sole source of supply from underground aquifers via ten active groundwater wells. The groundwater basin underlying the City is the Tulare Lake Basin and the City of Lemoore is immediately adjacent to the south boundary of the Kings subbasin. Water for construction and operation would come from the City of Lemoore's existing water system. Per the City's Urban Water Management Plan, the City's existing system has a total supply capacity of 21,674,000 gallons per day with an average day demand of 8,769,000 gallons (City of Lemoore, 2013). The proposed Project would make a minor contribution to the City's current demand and would comply with the City's water conservation measures and regulations. Since the proposed Project would have minimal impacts on the City's water supply, impacts would be less than significant.

#### **MITIGATION MEASURE(S)**

No mitigation is required.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.9c – Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?**

The Project site is relatively flat, and the Project grading would be minimal and consist of mostly grubbing the site to remove vegetation. The topography of the site would not appreciably change because of grading activities. The site does not contain any blue-line water features, including streams or rivers. With implementation of Mitigation Measure MM HYD-1, impacts would be less than significant.

**MITIGATION MEASURE(S)**

Implement MM HYD-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.9d – Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?**

Please see Impact #3.4.9c, above. Therefore, the Project would not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or offsite. With implementation of Mitigation Measure MM HYD-1, impacts would be less than significant

**MITIGATION MEASURE(S)**

Implement MM HYD-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.9e – Would the Project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Please see Impact #3.4.9a, above. Therefore, the Project would not otherwise substantially degrade water quality. With implementation of Mitigation Measure MM HYD-1, impacts would be less than significant.

**MITIGATION MEASURE(S)**

Implement MM HYD-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.9f - Otherwise substantially degrade water quality?**

Please see Impact #3.4.9a, above. Therefore, the Project would not otherwise substantially degrade water quality. With implementation of Mitigation Measure MM HYD-1, impacts would be less than significant.

**MITIGATION MEASURE(S)**

Implement MM HYD-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.9g – Would the Project place housing within a 100-year flood hazard area as mapped on a federal flood hazard boundary or flood insurance rate map or other flood hazard delineation map?**

As shown in Figure 3.4.9-1, the Project is not located within a FEMA 100-year floodplain. According to FEMA, the site is located in an area of minimal flood hazard and is located in a zone with a 0.2 percent chance of an annual flood. As the Project would not place housing within a 100-year flood hazard area as mapped on a federal flood hazard boundary or flood insurance rate map or other flood hazard delineation map.

The placement of impervious surfaces with the proposed residences and commercial buildings could alter or redirect flood flows away from the Project. This could in turn result in flood flows being redirected onto other sites, such that additional flooding could occur or existing flooding could be exacerbated. However, the risk of exposure to flooding is low, since there is no significant risk of flood. The structures will be built to meet City of Lemoore building standards. This impact is considered potentially significant; however, implementation of Mitigation Measure MM HYD-1 would reduce impacts to a less-than-significant level.

**MITIGATION MEASURE(S)**

Implement MM HYD-1



**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*. Impact #3.4.9h – Would the Project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

See Impact #3.4.9g, above.

**MITIGATION MEASURE(S)**

Implement MM HYD-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.9i – Would the Project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?**

According the Flood Hazards Area map (Figure HS-7, page HS-16) included in the Health and Safety Element of the *2035 Kings County General Plan*, the Project site is located within the Pine Flat Dam inundation zone (Kings County, 2010). If Pine Flat Dam failed while at full capacity, its floodwaters would arrive in Kings County within approximately five hours (Kings County 2010). Dam failure has been adequately planned for through the Kings County Multi-Hazard Mitigation Plan, which identifies a dam failure hazard to be of medium significance and unlikely to occur in the City of Lemoore (Kings County, 2007). With the implementation of the Kings County Multi-Hazard Mitigation Plan, impacts related to dam failure would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.9j – Would the Project contribute to inundation by seiche, tsunami, or mudflow?**

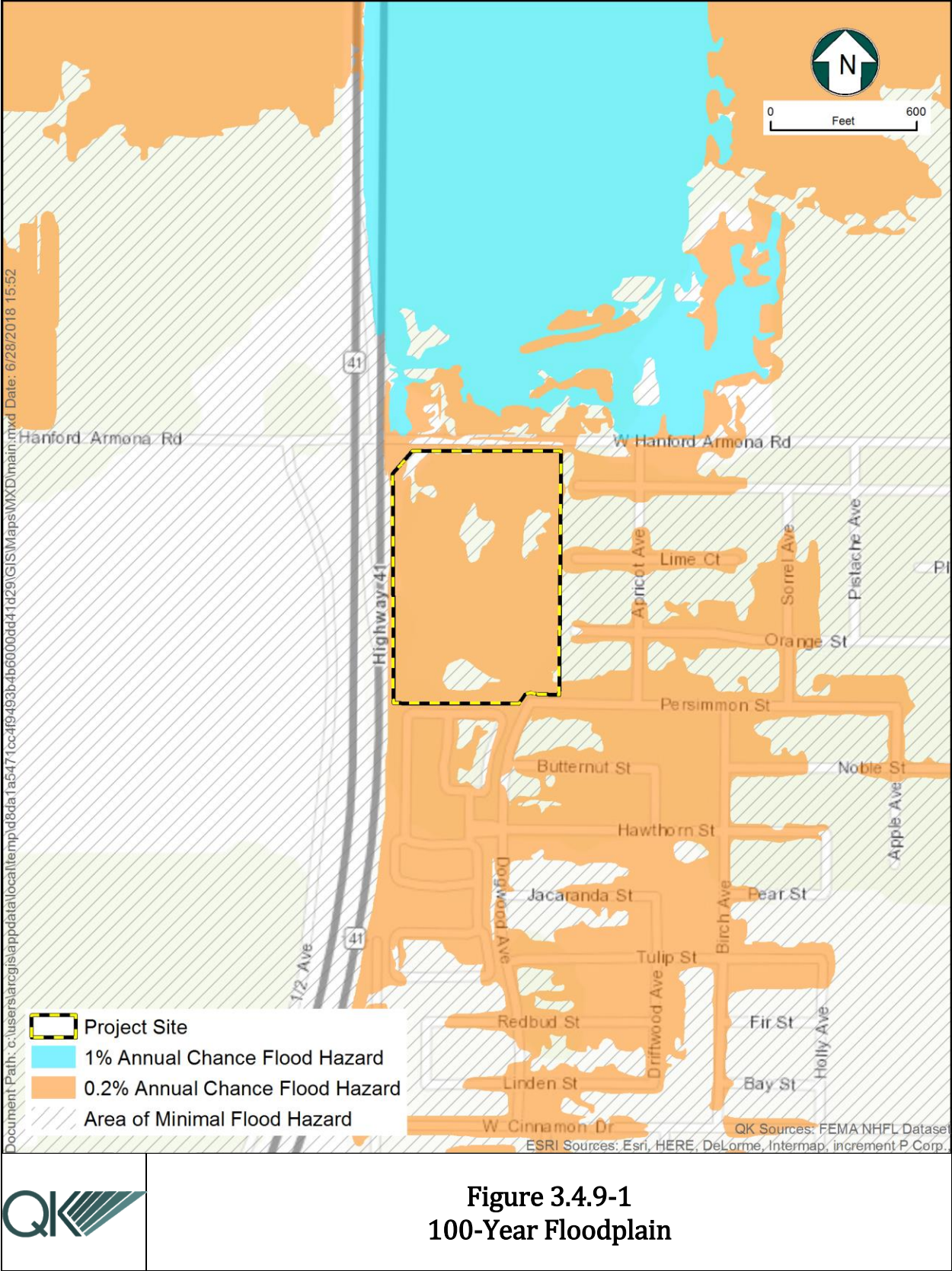
The Project site is not located near the ocean or a steep topographic feature (i.e., mountain, hill, bluff, etc.). Additionally, there is no body of water within the vicinity of the Project site. Therefore, there is no potential for the site to be inundated by seiche, tsunami or mudflow. There would be no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.10 - LAND USE AND PLANNING

Would the project:

- |    |   |                          |                          |                          |                                     |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Physically divide an established community?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal Program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. | Conflict with any applicable habitat conservation plan or natural community conservation plan?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Discussion

#### Impact #3.4.10a – Would the Project physically divide an established community?

The Project is in a rural undeveloped area. The Project does not include the construction of roads or any other physical barrier that would divide a community. The Project itself adds to the community to the east and south of the site because more housing will be built. There would be no impact.

#### MITIGATION MEASURE(S)

No mitigation is required.

#### LEVEL OF SIGNIFICANCE

There would be *no impact*.

**Impact #3.4.10b – Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

The Project site has both a zoning and General Plan land use designation of Mixed Use (MU) and Neighborhood Commercial (NC). The Project involves re-zoning and a General Plan amendment, with the change being from Mixed Use to Medium Density Residential. The change is not significant because Medium Density Residential housing is a permitted in the Mixed-Use Zone. However, the rezoning is requested because the proposed Project only have residential, and will not include a mix of residential, commercial, or office development in that portion of the site. With approval of the zone change and General Plan Amendment, the Project will be consistent with the goals and policies of the *City of Lemoore 2030 General Plan*, Therefore, the impact is less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.10c – Would the Project Conflict with any applicable habitat conservation plan or natural community conservation plan?**

The Project site is not within the boundaries of an adopted habitat or natural community conservation plan. Therefore, there would be no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.11 - MINERAL RESOURCES

Would the project:

- |    |   |                          |                          |                          |                                     |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

#### Discussion

**Impact #3.4.11a – Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?**

The City of Lemoore and the surrounding area are designated as Mineral Resources Zone 1 (MRZ-1) by the State Mining and Geology Board (SMGB). MRZ-1 areas are described as those for which adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. The Project site is currently not being used for mineral extraction. Additionally, per the California Division of Oil, Gas, and Geothermal Resources (DOGGR), there are no active, inactive, or capped oil wells located within the Project site, and it is not within a DOGGR-recognized oilfield. Therefore, there would be no impact.

#### MITIGATION MEASURE(S)

No mitigation is required.

#### LEVEL OF SIGNIFICANCE

There would be *no impact*.

**Impact #3.4.11b – Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

There are few commercial mining and mineral extraction activities occur in the county and currently, only limited excavation of soil, sand, and some gravel is used for commercial purposes (Kings County, 2010). Additionally, the site is not designated for mineral and petroleum resources activities by the City of Lemoore General Plan. The Project site and

surrounding lands are zoned for light industrial uses. No mining occurs in the Project area or in the nearby vicinity, and there are no anticipated mineral extraction activities to be conducted in the future as a result of the Project. The Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan and would therefore have no impact.

***MITIGATION MEASURE(S)***

No mitigation is required.

***LEVEL OF SIGNIFICANCE***

There would be *no impact*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>3.4.12 - NOISE</b>				
Would the project result in:				
a. Exposure of persons to, or generate, noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generate excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

**Impact #3.4.12a – Would the Project result in exposure of persons to, or generate, noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?**

Project construction would generate temporary increases in noise levels. Title 5, Chapter 6 of the City's Municipal Code establishes regulations and enforcement procedures for noise generated in the City. The regulations do not apply to the operation on days other than Sunday of construction equipment or of a construction vehicle, or the performance on days other than Sunday of construction work, between the hours of 7:00 A.M. and 8:00 P.M., provided that all required permits for the operation of such construction equipment or

construction vehicle or the performance of such construction work have been obtained from the appropriate City department (Lemoore Municipal Code 5-6-1-C.4). The City of Lemoore 2030 General Plan (City of Lemoore , 2008) has objectives to minimize residential development noise levels. The proposed Project would comply with all regulations, standards and policies within the City's General Plan and Municipal Code. Therefore, the Project would not result in the exposure of persons to, or generate, noise levels more than standards established in a local general plan or noise ordinance or applicable standards of other agencies. Impacts would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.12b – Would the Project result in exposure of persons to or generate excessive groundborne vibration or groundborne noise levels?**

The proposed project is expected to create temporary ground-borne vibration as a result of the construction activities (during site preparation and grading). According to the U.S. Department of Transportation, Federal Railroad Administration, vibration is sound radiated through the ground. The rumbling sound caused by the vibration is called ground-borne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB). The background vibration velocity level in residential areas is usually around 50 VdB. A list of typical vibration-generating equipment is shown in Table 3.4.12-1.

**Table 3.4.12-5  
Different Levels of Ground-borne Vibration**

Vibration Velocity Level	Equipment Type
104 VdB	Pile Driver (impact), typical
93 VdB	Pile Driver (sonic), typical
94 VdB	Vibratory roller
87 VdB	Large bulldozer
87 VdB	Caisson drilling
86 VdB	Loaded trucks
79 VdB	Jackhammer
58 VdB	Small bulldozer

Source: (Federal Transit Administration , 2006)

Note: 25 feet from the corresponding equipment

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximately dividing line between barely perceptible and distinctly perceptible levels for many people.

Typical outdoor sources of perceptible ground-borne vibration are construction equipment and traffic on rough roads. For example, if a roadway is smooth, the ground-borne vibration from traffic is rarely perceptible.

Typically, ground-borne vibration generated by construction activity attenuates rapidly with distance from the source of the vibration. Therefore, vibration issues are generally confined to distances of less than 500 feet (U.S. Department of Transportation, 2005). There are residences located within the surrounding area of the proposed Project site. Potential sources of temporary vibration during construction of the proposed Project would be minimal and would include transportation and use of equipment to the site.

Construction activity would include various site preparation, grading, in fabrication, and site cleanup work. Construction would not involve the use of equipment that would cause high ground-borne vibration levels such as pile-driving or blasting. Once constructed, the proposed project would not have any components that would generate high vibration levels. Thus, construction and operation of the proposed project would not result in any vibration and impacts would be less than significant.

***MITIGATION MEASURE(S)***

No mitigation is required.

***LEVEL OF SIGNIFICANCE***

Impacts would be *less than significant*.

**Impact #3.4.12c – Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?**

As shown in Figure 2-4, once constructed, the Project would be consistent with the surrounding land uses and would not cause out of the ordinary noise levels than what is currently established in the area. As noted in Impact 3.4.12-a, above, the construction noise would be temporary, and would be attenuated over a distance to the point where it would not be bothersome to the nearest receptors. The noise levels would not result in a substantial permanent increase in ambient noise levels above the existing environment. The impacts would be less than significant.

***MITIGATION MEASURE(S)***

No mitigation is required.



**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.12d – Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?**

As noted in Impact 3.4.12-a, above, construction of the Project would generate temporary noise levels. However, construction would be done during the daylight hours and would be temporary so that the surrounding land uses would not be affected by construction of the new development. The Project is consistent with the surrounding land uses and would not cause out of the ordinary noise levels than what is currently established in the area. The impacts would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.12e – For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?**

The Project is not within an adopted Airport Land Use plan. There are no public airports within two miles of the Project site. The closest public airport is the Visalia Municipal Airport, located approximately 22.5 miles east of the Project. The Lemoore Naval Air Station is approximately 6.5 miles to the southwest. The Project would not expose people residing or working in the Project area to excessive noise levels. There would be no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.12f – For a project located within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?**

The Project is not within proximity of a private airstrip. The Stone airstrip (private) is approximately 1.5 miles northwest of the Project. This private airstrip has few daily flights. The Project would not expose people residing or working in the Project area to excessive noise levels. There would be no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less- than Significant Impact	No Impact
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### 3.4.13 - POPULATION AND HOUSING

Would the project:

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

**Impact #3.4.13a – Would the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The Project in question could induce a slight population growth in the area because it includes the construction of 176 apartments and new businesses. However, the population is not substantial relative to the total population of the City of Lemoore. The roads to be built for the site would serve the residential and commercial development that induced the roads in the first place, so the roads would not induce more development thereafter. The Lemoore General Plan includes policies to limit development only to areas inside an urban boundary around the city. Any growth inducement could only occur on lands that are designated and have been evaluated for urban development. Therefore, the impact would be less than significant.

### MITIGATION MEASURE(S)

No mitigation is required.

### LEVEL OF SIGNIFICANCE

Impacts would be *less than significant*.

**Impact #3.4.13b – Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

The proposed Project would not require demolition of any housing, as the Project site is currently undeveloped. Therefore, there would be no need to construct replacement housing elsewhere. There would be no impact.

***MITIGATION MEASURE(S)***

No mitigation is required.

***LEVEL OF SIGNIFICANCE***

There would be *no impact*.

**Impact #3.4.13c – Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

The Project would not require the displacement of substantial numbers of people due to the fact that the Project site is undeveloped. As no housing currently exists, there would be no need to construct replacement housing elsewhere. There would be no impact.

***MITIGATION MEASURE(S)***

No mitigation is required.

***LEVEL OF SIGNIFICANCE***

There would be *no impact*.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.14 - PUBLIC SERVICES

Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services:

i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

**Impact #3.4.14a(i) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – fire protection?**

Construction and operation of the proposed Project would not be expected to result in an increase in demand of fire protection services leading to the construction of new or physically altered facilities. Fire suppression support is provided by the City of Lemoore Volunteer Fire Department (LVFD). The LVFD has two stations and the closest station to the Project site is located at 210 Fox Street, approximately 1.25 miles southeast of the Project site. The proposed Project would result in the construction of 176 apartments and various retail stores, drive-thru restaurants, and other neighborhood commercial services in Lemoore. The City of Lemoore will ensure that construction activities would be in accordance with local and State fire codes. Services are adequately planned for within the City's General Plan through policies to ensure the City maintains Fire Department



performance and response standards by allocating the appropriate resources. As stated, the Project applicant is responsible for constructing any infrastructure needed to serve the Project and pay the appropriate impact fees, which would reduce impacts to less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.14a(ii) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – police protection?**

Law enforcement and public protection are provided by the City of Lemoore Police Department. The City's police station is located at 657 Fox Street, approximately 1 mile southeast of the Project site. As discussed, the proposed Project would not increase demands for public safety protection. As stated, the Project applicant is responsible for constructing any infrastructure needed to serve the Project and pay the appropriate impact fees. Impacts on police protection services related to population growth would therefore be considered less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.14a(iii) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – schools?**

The legislature has deemed under Government Code Section 65996, that all school facilities impacts are mitigated as a consequence of SB 50 Levels 1, 2, and 3 develop fee legislative provisions. The developer will pay appropriate impact fees at time for building permits. Therefore, the impact would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.14a(iv) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – parks?**

The proposed Project would not result in enough population growth for the City that would increase demand for public parks. The City is currently maintaining a five acre to 1,000 residents park ratio, which exceeds current City Park Standards and Quimby Act requirements (City of Lemoore, 2008). The proposed project would comply with the goals, policies, and implementation measures of the General Plan. The proposed Project is providing 0.82 acres of open space for recreation on the site for use by the residents. This acreage meets the City standard of providing 5% of a multi-family site for open space. The Project would have a less than significant impact to the City park system.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.14a(v) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – other public facilities?**

The proposed Project does not include any impacts to other public facilities such as libraries, hospitals or emergency medical facilities. The proposed project would comply with the goals, policies, and implementation measures of the General Plan.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>3.4.15 - RECREATION</b>				
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

**Impact #3.4.15a – Would the Project Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

As stated in Impact #3.4.14a(iv) the proposed Project would not induce a significant population growth or affect the City's park system. The City's General Plan indicates that the City is continuing to maintain its parkland dedication standard of five acres of park land per 1,000 residents. There would be no increase to the use of existing parks or the need to construct or expand existing recreational facilities.

### MITIGATION MEASURE(S)

No mitigation is required.

### LEVEL OF SIGNIFICANCE

Impacts would be *less than significant*.

**Impact #3.4.15b – Would the Project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

The Project does not require the construction of any new recreational facilities. The proposed project would comply with the goals, policies, and implementation measures of the General Plan. Therefore, it would not generate an adverse physical effect on the environment.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.16 - TRANSPORTATION AND TRAFFIC

Would the project:

- |    |  |                          |                                     |                                     |                          |
|----|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a. | Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| b. | Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| c. | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. | Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. | Result in inadequate emergency access?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. | Conflict with adopted policies, plans, or Programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

## ***Discussion***

Potential transportation and circulation impacts that may result from the proposed Project primarily involves determining whether a net change would occur in traffic generated by daily vehicle trips related to construction and operation of the Project site.

A Traffic Study was prepared for this Project (JLB Traffic Engineering, Inc, 2018, Appendix C). The Traffic Study was prepared using trip generation and design hour volumes calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition as well as data provided in the Project description.

The following traffic scenarios were analyzed in the Traffic Study:

- Existing Conditions (2018);
- Existing plus Project Phase 1
- Existing plus Project Buildout;
- Cumulative Year 2040 plus Project (2040); and
- Cumulative 2040 plus Project plus Partial L-9 Interchange (2040).

Hanford-Armona Road is an existing east-west two-lane arterial adjacent to the proposed Project. In this area, Hanford-Armona Road extends through the City of Lemoore's Sphere of Influence (SOI). It's a two-to three-lane arterial divided by a two-way left turn lane between Apricot Avenue and Lemoore Avenue, a four-lane undivided arterial between Lemoore Avenue and Cinnamon Drive, and a two-lane undivided arterial east of Cinnamon Drive. The City of Lemoore 2030 General Plan designates Hanford-Armona Road as a four-lane arterial between College Drive and Cinnamon Drive.

State Route (SR) 41 is an existing north-south two-to four-lane conventional highway adjacent to the proposed Project. State Route 41 serves as the principal connection to various metropolitan areas within the Central San Joaquin Valley and the California Central Coast. In this area, State Route 41 connects to Hanford-Armona Road.

19<sup>th</sup> Avenue is an existing north-south two-lane arterial divided by a two-way left-turn lane in the vicinity of the proposed Project. In this area, 19<sup>th</sup> Avenue extends south of Hanford-Armona road through the City of Lemoore's SOI. 19<sup>th</sup> Avenue is a two-lane divided arterial between Hanford-Armona Road and Silverado Drive, a four-lane arterial between Silverado Drive and Iona Avenue, and a two-land undivided arterial south of Iona Avenue through the City of Lemoore's SOI. The City of Lemoore 2030 General Plan plans to extend 19<sup>th</sup> Avenue north of Hanford-Armona Road as a two-lane collector and designates 19<sup>th</sup> Avenue as a four-lane arterial between Hanford-Armona Road and Idaho Avenue.

Cinnamon Drive is an existing east-west two-lane divided collector in the vicinity of the proposed Project. In this area, Cinnamon Drive extends east of its connection to 19<sup>th</sup> ½ Avenue and changes orientation to intersect Hanford-Armona Road. Cinnamon Drive is a two-lane collector divided by a two-way left-turn lane between 19 ½ Avenue and Lemoore Avenue and a two-lane undivided collector east of Lemoore Avenue and south of Hanford-

Armona Road. The City of Lemoore 2030 General Plan designates Cinnamon Drive as a four-lane collector between 19 ½ and Lemoore Avenue.

**Impact #3.4.16a – Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The City's transportation policies and requirements are incorporated in its General Plan. The only such policy which is affected by this Project is one requiring that no Level of Service violations be engendered by a project. Per the City's Circulation Element of the City of Lemoore 2030 General Plan Update (City of Lemoore, 2008), the "City of Lemoore does not currently have any adopted level of service (LOS) standard. However, recent traffic studies have used level of service D as the standard for evaluating project impacts at intersections." A LOS of D is characterized by congestion with average vehicle speeds decreasing below the user's desired level for two and four lane roads.

Caltrans has a target LOS threshold of C, which is what the traffic study used as the basis of its analysis. Phase 1 of the proposed Project (residential development only) is estimated to generate a maximum of 1,288 daily trips, 81 AM peak hour trips and 99 PM peak hour trips. Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to continue operating below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing measures of effectiveness (MOEs) that would need to be maintained. Phase 1 of the Project is projected to add a maximum of 3.3 and 1.1 seconds of average delay during the AM and PM peaks respectively. Also, the addition of an average delay of less than five (5) seconds is often not considered significant impact. Therefore, since the Phase 1 of the Project maintains the existing measures of effectiveness and it adds less than five (5) seconds of delay to existing operations, this impact would not be considered significant.

At project buildout (both residential and commercial), the proposed Project is estimated to generate a maximum of 6,775 daily trips, 471 AM peak hour trips and 488 PM peak hour trips. Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to operate below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained.

Kings Area Rural Transit (KART) operates intercity and intracity bus service in Lemoore. Currently Route 30 operates westbound on Hanford-Armona Road and then turns south on 19<sup>th</sup> Avenue prior to reaching the site. The City General Plan envisions bus service to future neighborhood shopping centers such as the proposed future development at the Project site.

**MITIGATION MEASURE(S)**

**MM TRA-1:** Prior to the first development of the commercially zoned site, the Project shall coordinate with Kings Area Rural Transit (KART) to determine the best location for the placement of a bus turnout along the Project's frontage to Hanford-Armona Road.

**MM TRA-2:** Prior to the first development of the commercially zoned site, the full build-out of the south side of Hanford-Armona Road shall be completed. At the corner of State Route 41 and Hanford-Armona Road, a westbound left-turn lane shall be added, the westbound left-through-right lane shall be modified to a through lane, a westbound right-turn lane shall be added, and the traffic signal shall be modified to accommodate the added lanes while maintaining the east-west split phasing.

**LEVEL OF SIGNIFICANCE**

Impact would be *less than significant with mitigation incorporated*.

**Impact #3.4.16b – Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

Please see Impact #3.4.16a above. With the mitigation measures listed in Impact #3.4.16a, the impacts to the level of service standards would be mitigated.

**MITIGATION MEASURE(S)**

Implement MM TRA-1 and MM TRA-2.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.16c – Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

The Project would not result in a change in air traffic patterns, levels, or changes in location. The Project does not propose to construct tall structures or buildings that could impact air traffic patterns. The airports in the general vicinity of the Project will not be affected. The Project is located within the Military Influence Area (MIA) of the Naval Air Station (NAS) Lemoore. Therefore, according to the NAS Lemoore Master Plan 2030, "development within the MIA should receive special consideration by the overseeing planning agency and an extra level of coordination with NAS Lemoore to ensure compatibility with the mission and operations". According to the NAS Lemoore Joint Land Use Study, the Project site is outside all of the zones that limit land use due to the proximity.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.16d – Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

The Project would not introduce new curves and/or hazardous intersections into the Project vicinity. All roads surrounding the Project sites are straight and set in a grid pattern. No new design or features would be introduced that would result in transportation-related hazards or safety concerns. During construction at the proposed Project site, construction-related delivery trucks would be present. However, these trucks would be traveling along the existing and proposed local roadways and would not interfere with access surrounding the site. Coupled with this, once construction is completed, trucks would cease to access the site with the exception of periodic deliveries and operational maintenance. The proposed Project would not result in an increase in hazards due to a design feature or incompatible use.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.16e – Would the Project result in inadequate emergency access?**

The California Fire Code establishes standards by which emergency access may be determined. The proposed Project would have to provide adequate unobstructed space for fire trucks to turn around. The proposed Project site would have adequate internal circulation capacity including entrance and exit routes to provide adequate unobstructed space for fire trucks and other emergency vehicles to gain access and to turn around.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.



**Impact #3.4.16f – Would the Project conflict with adopted policies, plans, or Programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

Mitigation Measures MM TRA-1 and TRA-2 would prevent any conflicts with the *City of Lemoore Bicycle Plan* or the Circulation Chapter (Chapter 4) of the *City of Lemoore 2030 General Plan*. Implementation of these mitigation measures would require both a Class II bike lane along the Project frontage to Hanford-Armona Road and coordination with Kings Area Rural Transit (KART) to determine the best location for the placement of a bus turnout along the Project's frontage to Hanford-Armona Road.

**MITIGATION MEASURE(S)**

Implement MM TRA-1 and MM TRA-2.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.17 - TRIBAL CULTURAL RESOURCES

Would the project:

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

☐ ☐ ☒ ☐

- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

☐ ☐ ☒ ☐

### Discussion

**Impact #3.4.17a(i) – Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?**

Please see Impacts #3.4.5a and #3.4.5b, above. With implementation of Mitigation Measures MM CUL-2 through MM CUL-3, and MM CUL-5 the Project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources.

**MITIGATION MEASURE(S)**

Implement MM CUL-2 and MM CUL-3, and MM CUL-5.

**LEVEL OF SIGNIFICANCE**

Impact would be *less than significant with mitigation incorporated*.

**Impact #3.14.17a(ii) - Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

Please see Impacts #3.4.5a #3.4.5b, above. With implementation of Mitigation Measures MM CUL-2 and MM CUL-3, and MM CUL-6, the Project would not cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1.

**MITIGATION MEASURE(S)**

Implement MM CUL-2 and MM CUL-3, and MM CUL-5.

**LEVEL OF SIGNIFICANCE**

Impact would be *less than significant with mitigation incorporated*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>3.4.18 - UTILITIES AND SERVICE SYSTEMS</b>				
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

**Impact #3.4.18a – Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

The Project would not necessitate the Regional Water Quality Control Board (RWQCB) to expand their facilities because of the Project. The Project would not exceed wastewater treatment requirements of the applicable RWQCB.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.18b – Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects:**

The Project will connect to the existing sewer system. The generation of wastewater and water would be consistent with the City requirements. The proposed increase in water and wastewater usage at the Project site is not anticipated to require the construction of new water or wastewater treatment facilities or the expansion of existing facilities. Impacts would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.18c – Would the Project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The Project will connect to the existing storm drain line on Hanford-Armona Avenue, north of the site. The site engineering and design plans for the proposed Project would be required to implement BMPs, comply with requirements of the City Building and Development Standards and compliance with the NPDES General Permit. Implementation of MM HYD-1 and MM HAZ-1 would reduce impacts on to less than significant

Therefore, Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities.

**MITIGATION MEASURE(S)**

Implement MM HYD-1



**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant* Impact #3.4.18d – Would the Project have sufficient water supplies available to serve the Project from existing entitlements and resources, or would new or expanded entitlements be needed?

The Project will obtain water from the City of Lemoore. The existing groundwater resources are available and adequate to serve the site. The impact would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

Impact #3.4.18e – Would the Project result in a determination by the wastewater treatment provider that serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

The Project will connect to the existing City sewer system. The generation of wastewater and water would be consistent with the City requirements. The proposed increase in water and wastewater usage at the Project site is not anticipated to require the construction of new water or wastewater treatment facilities or the expansion of existing facilities. Impacts would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

Impact #3.4.18f – Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

The City's solid waste disposal program has capacity for, or are planned to maintain capacity for, community growth in accord with the adopted General Plan. As this Project is in accordance with the General Plan, the impacts would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.18g – Would the Project comply with federal, state, and local statutes and regulations related to solid waste?**

The Project is subject to the solid disposal ordinance of the City of Lemoore as well as the rules of the contracted waste franchise. The Project is also subject to Title 4- Chapter 1 of the Lemoore Municipal Code that regulates all solid waste activities from disposal, sorting, and recycling of materials. The Lemoore Refuse Department would provide refuse, recycling and green waste collection services. Refuse service fees have been established and would be charged by the City when services are requested.

According to CalRecycle, the implementation of the local requirements has led to Kings County meeting their required diversion and disposal targets. Therefore, the implementation and compliance with the local regulations would lead to a less-than-significant impact for the Project (Cal Recycle, 2017)

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>3.4.19 - MANDATORY FINDINGS OF SIGNIFICANCE</b>				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

**Impact #3.4.19a – Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

As evaluated in this IS/MND, the proposed Project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory. Mitigation measures have been included to lessen the significance of

potential impacts. Similar mitigation measures would be expected of other projects in the surrounding area, most of which share a similar cultural paleontological and biological resources. Consequently, the incremental effects of the proposed Project, after mitigation, would not contribute to an adverse cumulative impact on these resources. Therefore, the Project would have a less-than-significant impact with mitigation incorporated.

**MITIGATION MEASURE(S)**

Implement MM BIO-1 through MM BIO-5 MM CUL-1 thru MM CUL-5,

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.19b - Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

As described in the impact analyses in Sections 3.4.1 through 3.4.18 of this IS/MND, any potentially significant impacts of the proposed Project would be reduced to a less-than-significant level following incorporation of the mitigation measures listed in *Appendix A – Mitigation Monitoring and Reporting Program*. All planned projects in the vicinity of the proposed Project would be subject to review in separate environmental documents and required to conform to the City of Lemoore General Plan, zoning, mitigate for project-specific impacts, and provide appropriate engineering to ensure the development meets are applicable federal, State and local regulations and codes. As currently designed, and with compliance of the recommended mitigation measures, the proposed Project would not contribute to a cumulative impact. Thus, the cumulative impacts of past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

**MITIGATION MEASURE(S)**

Implement MM AQ-1 through AQ-3. MM BIO-1 through MM BIO-5 MM CUL-1 thru MM CUL-5, MM HYD-1, MM HYD-2 and MM TRA-1 and MM TRA-2. Level of Significance

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.19c - Does the Project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?**

All of the Project's impacts, both direct and indirect, that are attributable to the Project were identified and mitigated to a less-than-significant level. As shown in *Appendix A - Mitigation Monitoring and Reporting Program*, the Project proponent has agreed to implement mitigation substantially reducing or eliminating impacts of the Project. All planned projects in the vicinity of the proposed Project would be subject to review in separate environmental documents and required to conform to the City of Lemoore General Plan, zoning, mitigate for

project-specific impacts, and provide appropriate engineering to ensure the development meets applicable federal, State and local regulations and codes. Thus, the cumulative impacts of past, present, and reasonably foreseeable future projects would be less than cumulatively considerable. Therefore, the proposed Project would not either directly or indirectly cause substantial adverse effects on human beings because all potentially adverse direct impacts of the proposed Project are identified as having no impact, less than significant impact, or less-than-significant impact with mitigation incorporated.

***MITIGATION MEASURE(S)***

Implement MM AQ-1 through AQ-3. MM BIO-1 through MM BIO-5 MM CUL-1 thru MM CUL-5, MM HYD-1, MM HYD-2 and MM TRA-1 and MM TRA-2.

***LEVEL OF SIGNIFICANCE***

Impacts would be *less than significant with mitigation incorporated*.



## SECTION 4 - REFERENCES

- CA Department of Conservation. (2016). *FMMP*. Retrieved from [http://www.conservation.ca.gov/dlrp/Pages/qh\\_maps.aspx](http://www.conservation.ca.gov/dlrp/Pages/qh_maps.aspx)
- Cal EPA. (2017, May 8). *Superfund Cleanup Site List*. Retrieved from Cortese List: <https://www.envirostor.dtsc.ca.gov/public/>
- Cal Fire. (2006). *California Wildland Hazard Severity Zone Map Update*. Retrieved from Local Responsibility Area (LRA) Map: [http://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland\\_statewide](http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_statewide)
- California Air Resources Board. (2005). *AIR QUALITY AND LAND USE HANDBOOK*.
- California Department of Conservation . (2018). Retrieved from CA Geologic Survey Regulatory Maps: <https://maps.conservation.ca.gov/cgs/DataViewer/index.html>
- California Department of Transportation. (2017). *California Scenic Highway Mapping System*.
- California Water Resources Board. (2017, May 8). *GeoTracker*. Retrieved from <https://geotracker.waterboards.ca.gov/>
- Caltrans. (2017). California Scenic Highway Mapping System . California, United States of America.
- City of Lemoore . (2008). *2030 General Plan*.
- City of Lemoore. (2007). *2030 General Plan*.
- City of Lemoore. (2012). *Community Profile Information- Hazards*. Retrieved from [http://www.cityofhanfordca.com/document\\_center/Government/Local%20Hazard%20Mitigation%20Plan/Local%20Hazard%20Mitigation%20Plan%20-%20Lemoore%20Community%20Profile.pdf](http://www.cityofhanfordca.com/document_center/Government/Local%20Hazard%20Mitigation%20Plan/Local%20Hazard%20Mitigation%20Plan%20-%20Lemoore%20Community%20Profile.pdf)
- City of Lemoore. (2013). *Urban Water Management Plan*.
- County of Kings. (2010). *General Plan 2035*.
- Department of Conservation. (2014). *California Important Farmland Finder*. Retrieved from California Department of Conservation: <http://maps.conservation.ca.gov/ciff/ciff.html>
- Department of Conservation. (2017, May 9). CGS Information Warehouse. California, United States of America.
- Federal Transit Administration . (2006). *Transit Noise and Vibration Impact Assessment*.

- Kings County. (2007). *Kings County Multi-Hazard Mitigation Plan*.
- Kings County. (2010). *2035 General Plan*. Hanford: Kings County Community Development Agency.
- Kings County. (2016). *2016-2024 Housing Element of Kings County and the Cities of Avenal, Corcoran, Hanford and Lemoore*.
- Mitchell Air Quality Consulting. (2018). *Air Quality Analysis Report- Hanford Armona Road Mixed Use Development*.
- U.S. Department of Transportation, F. R. (2005). *High-Speed Ground Transportation Noise and Vibration Impact Assessment*.
- United States Department of Agriculture. (1986). *Soil Survey of Kings County California*.

**APPENDIX A**

**AIR QUALITY IMPACT ANALYSIS**

**Air Quality Analysis Report  
Hanford-Armona Road Mixed Use Development  
Lemoore, California**

Prepared for:	Prepared by:
<b>CV Housing, LLC</b>	<b>Mitchell Air Quality Consulting</b>
680 W. Shaw Avenue, Suite 200	1164 E. Decatur Avenue
Fresno, CA 93704	Fresno, CA 93720
559.490.2500	559.246.3732
Contact: Brett Fugman	Contact: Dave Mitchell
Principal Planner	Senior Air Quality Scientist

August 21, 2018









## SECTION 1: AIR QUALITY ANALYSIS

### 1.1: Project Description

The project consists the proposed Mixed-Use Development (Project) located on the southeast corner of State Route 41 and Hanford-Armona Road in the City of Lemoore. The Project proposes to develop a 16.19-acre site with 176 multi-family residential units (apartments), a gasoline/service station (8 fueling positions) with convenience market, a 90-room hotel, 6,000 square feet of fast-food restaurants with drive-through window, and 7,040 square feet of general shopping center uses. The project is required to undergo a General Plan Amendment and Zoning Map Amendment through the City of Lemoore.

### 1.2: Project Analysis

The City of Lemoore has required the preparation of an air quality analysis to determine if the project would exceed San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds of significance for criteria pollutant emissions. This analysis is based on the Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI).

The District's annual emission significance thresholds used for the project define the substantial contribution for both operational and construction emissions as follows:

- 100 tons per year CO
- 10 tons per year NO<sub>x</sub>
- 10 tons per year ROG
- 27 tons per year SO<sub>x</sub>
- 15 tons per year PM<sub>10</sub>
- 15 tons per year PM<sub>2.5</sub>

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after compliance with Rule 9510 and implementation of all enforceable mitigation measures would require preparation of an ambient air quality analysis. The criteria pollutants of concern for localized impact in the San Joaquin Valley Air Basin are PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, and CO. There is no localized emission standard for ROG and most types of ROG are not toxic and have no health-based standard; however, ROG was included for informational purposes only (SJVAPCD 2015).

The SJVAPCD GAMAQI includes screening criteria for potential localized CO impacts that are related to traffic congestion. The SJVAPCD has established that if neither of the following criteria are met at all intersections affected by the project, there is no potential to create a violation of the CO standard:

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

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### 1.3: Modeling Assumptions and Methodology

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Project modeling quantifies emissions that will occur during construction and operation of the project. The modeling is based on the size of the project, the timing of construction and operation, the type of land use, trip generation, energy consumption, and other factors.

The project consists of areas devoted to apartments and commercial uses. The apartment phase includes the following:

Project Lot Size – 10.4 acres

Apartment Units: 176

Average Density: 17 DU/Acre

Construction Schedule: May 2019 to March 2020

First Occupancy: 2020

The commercial portion of the project includes the following:

Parcel A: 1.63 Acres

Parcel B: 1.73 Acres

Parcel C 1.21 Acres

**Total: 4.57 Acres**

Parcel A Uses:

Shop A: 3,500 sf Convenience Store

Fuel Canopy: 4 Pump/8 Position

Pad A: 3,000 sf Fast Food

Parcel B Uses:

Hotel: 90 Room

Building Footprint: 14,000 sf (43,500 sf in 3 floors)

Parcel C Uses:

Shop B: 7,040 sf Retail Shopping Center

Pad B: 3,000 sf Fast Food

Construction Schedule: April 2020 – March 2021

Project Operation Year: 2021

The actual construction start dates and operational dates will vary depending on market demand.

The analysis addresses criteria pollutant emissions. The analysis assesses the impacts of project construction and operational criteria pollutant using the CalEEMod 2016.3.2 emission model.

The following air pollutants are assessed in this analysis:

- Reactive organic gases (ROG)
- Nitrogen oxides (NO<sub>x</sub>)
- Carbon monoxide (CO)
- Sulfur dioxide (SO<sub>2</sub>)
- Particulate matter less than 10 microns in diameter (PM<sub>10</sub>)
- Particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>)

The project does not include sources that will emit substantial quantities of sulfur dioxide; therefore, no further analysis of this pollutant is required. However, the modeling results in Appendix A include all the pollutants listed above for full disclosure.

### **Construction Modeling Assumptions**

The analysis uses default modeling assumptions in CalEEMod 2016.3.2 for diesel construction equipment. The schedule and days per phase and equipment use assumptions are based on CalEEMod defaults. Detailed assumptions are provided in Appendix A modeling results.

### **Operational Modeling Assumptions**

The operational CalEEMod analysis uses default assumptions for Kings County except for truck trip generation rates. CalEEMod default fleet mix modeling assumptions overstate the percentage of truck trips for residential and retail uses. The analysis uses survey data collected for San Joaquin Valley apartment and shopping center projects and the National Cooperative Highway Research Program Synthesis 298 Truck Trip Generation Data to provide project specific truck fleet mixes to more accurately estimate truck related emissions (NCHRP 2001).

### **Mobile Sources**

The analysis uses default trip generation rates from CalEEMod 2016.3.2 which use ITE 9<sup>th</sup> Edition rates. CalEEMod provides rates for weekday, Saturday, and Sunday which were not available in the traffic study.

### **Architectural Coatings**

The CalEEMod default value for architectural coatings for flat and non-flat paints is 150 grams per liter (g/l). SJVAPCD Rule 4601 – Architectural Coatings has lower limits in place for these paints. Effective January 1, 2012, flat coatings have a limit of 50 g/l. Non-flat coatings currently have a limit of 100 g/l. Approximately 70 percent of interior and exterior coatings used for residential and non-residential purposes are flat so an average of 65 g/l was used in the analysis.

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## **1.4: Regional Air Quality Impact Analysis**

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If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable increase of that pollutant and result in a significant cumulative impact.



The San Joaquin Valley Air Basin is in nonattainment for PM<sub>10</sub>, PM<sub>2.5</sub>, and ozone. Therefore, if the project exceeds the regional thresholds for PM<sub>10</sub>, or PM<sub>2.5</sub>, then it contributes to a cumulatively considerable impact for those pollutants. If the project exceeds the regional threshold for the ozone precursors NO<sub>x</sub> or ROG, then it follows that the project would contribute to a cumulatively considerable impact for ozone.

Regional emissions include those generated from all on-site and off-site activities. Regional significance thresholds have been established by the SJVAPCD because emissions from projects in the Air Basin can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards. Projects within the Air Basin region with regional emissions in excess of any of the thresholds presented previously are considered to have a significant regional air quality impact.

#### 1.4.1 - Construction Emission Analysis

Construction of the multi-family residential component is expected to begin in May 2019 with occupancy expected as early as March 2020. The commercial portion of the project is expected to start construction after completion of the multi-family residential apartments and would not overlap with the commercial phase. The assumed start date for the commercial component is April 2020. All commercial buildings were assumed to start construction at the same time as a conservative assumption; however, actual start dates are likely to vary. The entire project is assumed to be operational by 2021. The SJVAPCD considers construction and operational emissions separately when making significance determinations.

Construction emissions associated with the project are shown for the years 2019, 2020, and 2021 in Table 1. The emissions from each calendar year were compared with the significance thresholds for each pollutant. For assumptions in estimating the emissions, please refer to Section 1.3, Modeling Assumptions and Methodologies and Appendix A.

The primary source of ROG emissions during construction is architectural coatings. The primary source of NO<sub>x</sub> and PM<sub>2.5</sub> is off-road diesel construction equipment and on-road diesel emissions during hauling activities. The primary source of PM<sub>10</sub> is from site preparation and grading activities. The highest construction emissions would occur in 2020 when the construction activities for the commercial components of the project are assumed to begin.

As shown in Table 1, the emissions are below the significance thresholds in each construction year. Therefore, the emissions would be less than significant on a project basis.

**Table 1: Construction Air Pollutant Emissions (Annual)**

Year	Emissions (tons per year)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction 2019	0.34	2.94	2.38	0.34	0.21
Construction 2020	1.68	7.33	6.57	0.61	0.42
Construction 2021	0.66	1.76	1.59	0.12	0.09
<i>Highest Construction Emissions in Any Year</i>	<b>1.68</b>	<b>7.33</b>	<b>6.57</b>	<b>0.61</b>	<b>0.42</b>

**Table 1 (cont.): Construction Air Pollutant Emissions (Annual)**

Year	Emissions (pounds per day)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Screening threshold	10	10	100	15	15
Exceed SJVAPCD threshold?	No	No	No	No	No
Notes: NO <sub>x</sub> = nitrogen oxides      CO = carbon monoxide      PM <sub>10</sub> and PM <sub>2.5</sub> = particulate matter ROG = reactive organic gases Source: CalEEMod output (Appendix A).					

### 1.4.2 - Operational Emissions Analysis

Operational emissions occur over the lifetime of the project and are from two main sources: area sources such as natural gas combustion for space and water heating and motor vehicles, or mobile sources. Operational emissions were modeled using CalEEMod 2016.3.2 and are presented in Table 2. The results of the analysis show that emissions are below the annual emission thresholds for each pollutant. Therefore, the project's operational emissions would be less than significant.

**Table 2: Operational Air Pollutant Emissions at Buildout**

Source	Emissions (tons per year)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Residential- Apartments (176 units)	1.18	0.75	5.90	1.18	0.33
Gas Station and Convenience Market (8 fueling position)	0.41	0.35	2.34	0.34	0.09
Fast Food Restaurants (2@3,000 sf ea.)	0.73	0.69	5.35	1.00	0.28
Hotel (90 Room)	0.76	0.42	1.99	0.48	0.14
Retail Shopping (7,040 sf)	0.10	0.10	0.66	0.04	0.04
<b>Total Project Emissions</b>	<b>3.18</b>	<b>2.31</b>	<b>16.23</b>	<b>3.04</b>	<b>0.88</b>
Significance threshold	10	10	100	15	15
Exceed threshold—significant impact?	No	No	No	No	No
Notes: ROG = reactive organic gases      NO <sub>x</sub> = nitrogen oxides      PM <sub>10</sub> and PM <sub>2.5</sub> = particulate matter Area source emissions include emissions from natural gas, landscape, and painting. Source: CalEEMod output (Appendix A).					

### 1.4.3 - Impact Summary

The project would not exceed SJVAPCD significance thresholds for regional criteria pollutant emissions during construction and operation and therefore would have a less than significant impact with regard to this criterion.

## 1.5: Localized Emission Analysis

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that would need detailed analysis for localized impacts. Projects with emissions below these thresholds are considered to have less than significant impacts for localized criteria pollutant emissions. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after compliance with Rule 9510 and implementation of all enforceable mitigation measures would require preparation of an ambient air quality analysis to determine if the emissions would cause or contribute to a violation of any ambient air quality standards. The criteria pollutants of concern for localized impact in the San Joaquin Valley Air Basin are PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, and CO. There is no localized emission standard for ROG and most types of ROG are not toxic and have no health-based standard; however, ROG was included for informational purposes only.

### 1.5.1 - Maximum Daily Construction Emissions

The highest daily emissions during construction for ROG would occur during application of architectural coatings. Highest NO<sub>x</sub> and CO emissions occur during site grading activities, while highest PM<sub>10</sub>, and PM<sub>2.5</sub> occur during site preparation activities.

The results of the analysis are summarized in Table 3. As shown in Table 3, unmitigated emissions during construction do not exceed the SJVAPCD localized emission screening thresholds and would therefore have a less than significant impact from localized criteria pollutant emissions. The results include credit for compliance with fugitive dust controls required by SJVAPCD Regulation VIII.

**Table 3: Maximum Daily Air Pollutant Emissions during Construction**

Maximum Daily Emissions	Maximum On-site Emissions (pounds per day)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
2019	4.85	54.59	34.23	20.61	12.17
2020	16.34	67.31	39.48	73.33	12.18
2021	89.07	49.57	16.57	2.82	2.62
<i>Highest Emissions in Any Year</i>	<b>89.07</b>	<b>67.31</b>	<b>39.48</b>	<b>73.33</b>	<b>12.18</b>
Screening Thresholds (pounds/day)	100	100	100	100	100
Exceeds Threshold (Yes or No)	No	No	No	No	No
Notes: NO <sub>x</sub> = nitrogen oxides      CO = carbon monoxide      PM <sub>10</sub> and PM <sub>2.5</sub> = particulate matter Summer emissions were used for all pollutants since they differ minimally from winter emissions. Source: Modeling Results (Appendix A).					

### 1.5.2 - Maximum Daily Operational Emissions

An analysis of maximum daily emissions during operation was conducted to determine if emissions would exceed the 100 pounds per day threshold for any pollutant of concern. The maximum daily operational emissions were assessed assuming full operations in the year 2021. Operational emissions include those generated on-site by area sources such as natural gas combustion and

landscape maintenance, and off-site by motor vehicles accessing the project. Most motor vehicle emissions would occur distant from the site and would not contribute to a violation of ambient air quality standards at the project site; therefore, operational emissions only reflect the emissions within one half mile of the project site. The results of the analysis are presented in Table 4. The project would not exceed SJVAPCD daily operational screening thresholds and would result in less than significant localized impacts.

**Table 4: Maximum Daily Air Pollutant Emissions during Operations**

Maximum Daily Emissions per Source Category and Phase	Emissions (pounds per day)				
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Residential	4.87	1.03	16.91	0.62	0.26
Gas Station/Convenience Market	0.36	0.16	1.07	0.16	0.04
Fast Food	0.49	0.34	2.88	0.57	0.17
Hotel	3.22	0.98	1.55	0.26	0.12
Retail Shopping Center	0.47	7.37	1.09	0.18	0.06
<b>Total</b>	<b>9.40</b>	<b>9.89</b>	<b>23.50</b>	<b>1.78</b>	<b>0.66</b>
Screening threshold	100	100	100	100	100
Exceed screening threshold?	No	No	No	No	No
Notes: NO <sub>x</sub> = nitrogen oxides      CO = carbon monoxide      PM <sub>10</sub> and PM <sub>2.5</sub> = particulate matter N/A = Not applicable Analysis used summer emissions for all pollutants since they differ minimally from winter emissions. There is no ambient air quality standard for ROG. Mobile emissions reduced to count only localized emissions at the site using a 0.5-mile trip length Source: CalEEMod output (Appendix A).					

### 1.5.3 - Carbon Monoxide Hot Spots

Projects that cause or contribute to an exceedance of the 1-hour federal emission standard for CO of 35 ppm or the State 1-hour 20 ppm standard would result in a significant impact from CO emissions. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The project would result in an increase in vehicles trips during construction and operational activities and an increase in congestion at intersections impacted by the project. The SJVAPCD CO hotspot screening criteria state that a project where the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F would require detailed modeling to determine significance.

The project traffic impact analysis indicates that under the existing plus project buildout scenario the State Route 41 and Hanford/Armona Road intersection would fall to LOS E, but would improve to LOS C with mitigation applied. The cumulative year 2040 cumulative plus project scenario indicated that the State Route 41 and Hanford/Armona Road intersection would fall to LOS F, but would improve to LOS C with mitigation (JLB 2018). Therefore, the project would not exceed the SJVAPCD screening criteria for CO hotspots. It should be noted that CO concentrations have declined to the point where

the entire state has attained the CO standards and it is no longer monitored in this area. Therefore, the project would not significantly contribute to an exceedance of state or federal CO standards.

#### **1.5.4 - Toxic Air Contaminant Emissions**

The ARB Air Quality and Land Use Handbook provides guidance for siting sensitive receptors near sources of TAC emissions. The Handbook contains recommendations that will “help keep California’s children and other vulnerable populations out of harm’s way with respect to nearby sources of air pollution” (ARB 2005), including recommendations for distances between sensitive receptors and certain land uses. The project includes residences that would be considered sensitive receptor locations. The Handbook recommends locating gasoline fueling stations at least 50 feet from the nearest residence and 300 feet for high volume gasoline stations exceeding 3.6 million gallons per year. The project only has 8 fueling positions compared to high volume stations that often have 16 or more fueling positions. The nearest residences are approximately 238 feet from the fueling canopy. Therefore, the fueling station would not result in significant TAC impacts.

#### **1.5.5 - Impact Summary**

The project would not exceed SJVAPCD localized significance thresholds for criteria pollutants and does not include sources that would produce substantial TAC emissions based on ARB siting criteria and is therefore, less than significant for this criterion.



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## References

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CalEEMod. 2016. California Emissions Estimator Model. Version 2016.3.2 Website: <http://caleemod.com/>. Accessed April 20, 2018.

JLB Traffic Engineering. 2018. Final Traffic Impact Analysis, Mixed Use Development, City of Lemoore. July 19.

National Cooperative Highway Research Program (NCHRP). 2001. Synthesis 298 Truck Trip Generation Data a Synthesis of Highway Practice. Website: [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_syn\\_298.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_298.pdf). Accessed August 21, 2018.

San Joaquin Valley Air Pollution Control District. 2015a. Guidance for Assessing and Mitigating Air Quality Impacts. Revised March 19, 2015. Website: [http://www.valleyair.org/transportation/GAMAQI\\_3-19-15.pdf](http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf). Accessed June 28, 2018.

## Attachments

### Appendix A – Modeling Results

- Modeling Assumptions
- Emission Summary
- CalEEMod Modeling Output

# **Appendix A**

## **Modeling Assumptions and Results**

# Modeling Assumptions

# Lemoore Mixed Use Project

## Apartment Phase Information

Project Lot Size – 10.4 acres

Apartment Units: 176

Average Density: 17 DU/Acre

Construction Schedule: May 2019 to March 2020

First Occupancy: 2020

## Lot Sizes

Parcel A: 1.63 Acres

Parcel B: 1.73 Acres

Parcel C 1.21 Acres

**Total: 4.57 Acres**

## Parcel A Uses:

Shop A: Gas/Conv 3,500 sf

Fuel Canopy: 8 Position

Pad A: 3,000 sf

## Parcel B Uses:

Hotel: 90 Room 1.73

Hotel SF Total all Floors 14,000 sf 0.321396

43500 1.408604

## Parcel C Uses:

		<b>Acreage</b>	<b>Acreage Parking</b>
Shop B:	7,040 sf	0.162	1.048
Pad B:	3,000 sf	0.069	0.818
Construction Schedule:	April 2020 – 2021		
Project Operation Year:	2021		



# Truck Trip Generation Rates

## Truck Trip Generation and Fleet Mix Allocation

### Fleet Mix Allocation - Multifamily Residential

#### Survey Data for Truck Trip Generation Rate for Apartments

	LHD-1	LHD-2	MHD	HHD
Avg Trips/Day/Unit	0.0167	0.0083	0.0016	0.0028
Units	176			
Project Trips/Day	<b>2.9364</b>	<b>1.4609</b>	<b>0.2807</b>	<b>0.4984</b>

#### Land Use Assumptions

LandUseType	LandUseSubTy	LandUseUnitA	LandUseSizeMetric
Residential	Low rise apartr	176	Units

ITE 9th Edition/CalEEMod

#### Project Trip Generation

VehicleTrips	LandUseSubTy	VehicleTripsL	WD_TR	ST_TR	SU_TR	Daily Avg	LU SF	Trip Gen	LHD1 Frac	LHD1 Trips	LHD2 Frac	LHD2 Trips	MHD Frac	MHD Trips	HHD Frac	HHD Trips
Residential	Apartments		6.59	7.16	6.07	6.60	176	1161.097143	0.02186	25.4	0.0048	0.8425	0.012229	14.2	0.159772	185.5
Total Trips			1159.84					1161.097143		25.4				14.2		185.5

					LHD1 Frac	LHD2 Frac	MHD Frac	HHD Frac	Diff to Allocate	
Adjusted Fleet Mix for No HDT Trucks	LDA	LDT1	LDT2	Total	Project Est	0.002529	0.00125819	0.000242	0.000429	0.004458
Default Fleet Mix	0.487262	0.029057	0.146825	0.663144	Default Frac	0.02186	0.004787	0.012229	0.159772	0.198648
Adjusted Fleet Mix	0.629948	0.037566	0.189820	0.857334	Allocation Fraction					0.194190
				0.194190						

#### 2020 CalEEMod Default Fleet Mix for Kings County

	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
Default Fleet Mix	FleetMix	0.487262	0.029057	0.146825	0.126841	0.02186	0.004787	0.012229	0.159772	0.001758	0.001914	0.005918	0.000991	0.000785	0.999999
Revised Fleet Mix		0.629948	0.037566	0.189820	0.126841	0.002529	0.001258185	0.000242	0.000429	0.001758	0.001914	0.005918	0.000991	0.000785	0.999999

### Fleet Mix Allocation - Hotel

#### Land Use Assumptions

LandUseType	LandUseSubTy	LandUseUnitA	LandUseSizeMetric
Recreation	Hotel	90	Rooms

ITE 9th Edition/CalEEMod

#### Project Trip Generation

VehicleTrips	LandUseSubTy	VehicleTripsL	WD_TR	ST_TR	SU_TR	Daily Avg	LU SF	Trip Gen	LHD1 Frac	LHD1 Trips	LHD2 Frac	LHD2 Trips	MHD Frac	MHD Trips	HHD Frac	HHD Trips
Commercial	Hotel		8.17	8.19	5.95	7.86	90	707.0142857	0.020115	14.2	0.0046	0.4118	0.012018	8.5	0.162105	114.6
Total Trips			735.3					707.0142857		14.2				8.5		114.6

					LHD1 Frac	LHD2 Frac	MHD Frac	HHD Frac	Diff to Allocate	
Adjusted Fleet Mix for No HDT Trucks	LDA	LDT1	LDT2	Total	Project Est	0.0024247	0.00161646	0.000404	0.001212	0.005658
Default Fleet Mix	0.493375	0.028385	0.147799	0.669559	Default Frac	0.020115	0.004575	0.012018	0.162105	0.198813
Adjusted Fleet Mix	0.635705	0.036574	0.190436	0.862714	Allocation Fraction					0.193155
				0.193155						

#### 2021 CalEEMod Default Fleet Mix for SJVAPCD

	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH		
Default Fleet Mix	FleetMix	0.493375	0.028385	0.147799	0.120572	0.020115		0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735	1
Revised Fleet Mix		0.635705	0.036574	0.190436	0.120572	0.002425		0.001616456	0.000404	0.001212	0.001742	0.001833	0.005782	0.000964	0.000735	1

# Hotel Truck Trip Estimate

	LHD1	LHD2	MHD	HHD	Total All Comm Trucks
Truck Trips/Room	0.0190	0.0127	0.0032	0.0095	
Truck Trips/Week	12	8	2	6	
Truck Trips/Day	1.7143	1.1429	0.2857	0.8571	4.0000
Trip Fraction	0.002425	0.001616	0.000404	0.001212	

## Truck Deliveries by Purpose

Linen/Laundry Truck	3				
Service Trucks	1	1			
Food Deliveries		1	1		
Beverage/Vending		1			
Refuse				2	
Other	2	1		1	
<b>Total Trucks per Week</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>3</b>	

## Alternative Truck Trip Rate form NCHRP 287 Quick Response Freight Manual Final Report September 1996 Appendix D.

		4 Tire Comm	6+ tire	All Comm
Boston MA Study	Hotel	Veh	vehicles	Veh
	Trips/KSF	0.012	0.022	0.034
	Trips/KSF		0.04	
	Hotel Square F	43500		
	Truck Trips/Da	0.522	0.957	1.479
			1.74	

### Fleet Mix Allocation - Retail

## Shopping Center Truck Trips

Shopping Center	Sq. Ft. 7,040
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## Riverpark Truck Trip Survey Results

		# of	LHD		
		Deliveries per	Van/Car	MHD	Semi
	sq Ft	Week	(small)	(Medium)	(large)
<b>Totals</b>	468,460	386.50	97.00	212.00	78.50
Deliveries per day		55.21	13.86	30.29	11.21
RT Trips/Day		110.43	27.71	60.57	22.43
Trips/1,000 sf	468.46	0.236	<b>0.059</b>	<b>0.129</b>	<b>0.048</b>

	Week Day	Saturday	Sunday	Daily
	Trips/KSF	Trip/KSF	Trips/KSF	Average
Strip Mall	44.32	42.04	20.43	40.58

## Land Use Assumptions

LandUseType	LandUseSubTy	LandUseUnitA	LandUseSizeMetric	LHD1 Trips	LHD2 Trips	MHD Trips	HHD Trips	
Retail	Strip Mall	7.04	KSF	Trips	0.21	0.21	0.91	0.34
				Trips/KSF	0.02958	0.02958	0.129299041	0.047877
ITE 9th Edition/CalEEMod				Divided LHD by 2 for LHD1 and LHD2				

## Project Trip Generation

VehicleTripsLandUseSubType	VehicleTripsL	WD_TR	ST_TR	SU_TR	Daily Avg	LU SF	Trip Gen	LHD1 Frac	LHD1	Trip LHD2 Frac	LHD2 Trips	MHD Frac	MHD Trips	HHD Frac	HHD Trips
Retail	Strip Mall	44.32	42.04	20.43	40.58	7.04	285.6932571	0.020115	5.7	0.0046	0.0322	0.012018	3.4	0.162105	46.3
Total Trips							285.6932571		5.7				3.4		46.3

					LHD1 Frac	LHD2 Frac	MHD Frac	HHD Frac	Diff to Allocate	
Adjusted Fleet Mix for No HDT Trucks	LDA	LDT1	LDT2	Total	Project Est	0.00073	0.00073	0.00319	0.00118	0.00582
Default Fleet Mix	0.493375	0.028385	0.147799	0.669559	Default Frac	0.020115	0.004575	0.012018	0.162105	0.198813
Adjusted Fleet Mix	0.635582	0.036567	0.190400	0.862548	Allocation Fraction					0.192989

### 2021 CalEEMod Default Fleet Mix for Kings County

	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH		
Default Fleet Mix	FleetMix	0.493375	0.028385	0.147799	0.120572	0.020115		0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735	1
Revised Fleet Mix		0.635582	0.036567	0.190400	0.120572	0.000729		0.00072891	0.003186	0.001180	0.001742	0.001833	0.005782	0.000964	0.000735	1.000000

## Fleet Mix Allocation - Fast Food Restaurants

### Fast Food with Drive Through

Project Size in KSF	3					
Two Pads 3,000 SF each						
<b>Deliveries by Trip Purpose</b>	<b>LHD1</b>	<b>LHD2</b>	<b>MHD</b>	<b>HHD</b>	<b>Totals</b>	
Food Deliveries per Week	4	2	1	1	8	
Beverage Provider			1		1	
Service Trucks	1	1			2	
Refuse Haulers				2	2	
Total Deliveries Per Week	5	3	2	3	13	
Total Trips per Week	10	6	4	6	26	
Trips per Day	<b>1.4286</b>	<b>0.8571</b>	<b>0.5714</b>	<b>0.8571</b>	<b>3.7143</b>	
Trips per KSF	<b>0.4762</b>	<b>0.2857</b>	<b>0.1905</b>	<b>0.2857</b>	<b>1.2381</b>	

### Alternative Using Fast Food Restaurant Truck Deliveries Riverpark Survey Data

Store	sq Ft	# of Delive	LHD Van/Ca	MHD (Mediur	Semi (large)
Five Guys Burgers	2400	7		5	2
Jamba Juice	1130	2		1	1
Panera Bread	4205	5	1	4	1
Rubio's Fresh Mex	2310	7	1	2	4
Starbucks I	1500	7.0		7.0000	
Starbucks II	2025	9.0	2	7.0	
Subway	1175	3	1	2	
<b>Total Deliveries/M</b>	<b>14745</b>	<b>40</b>	<b>5</b>	<b>28</b>	<b>8</b>
Deliveries/Day		5.7143	0.7143	4.0000	1.1429
RT Trips/Day		11.4286	1.4286	8.0000	2.2857
Trips/1,000 sf	14.7450	<b>0.7751</b>	<b>0.0969</b>	<b>0.5426</b>	<b>0.1550</b>

### Alternative Rate from NCHRP

NCHRP Synthesis 298

	4-Tire Comm	6-tire Comm	Total
Restaurants (trips/ksf)	0.714	0.494	1.209

Used delivery by trip purpose as the most conservative assumption for trucks

### Land Use Assumptions

LandUseType	LandUseSubTy	LandUseUnitA	LandUseSizeMetric	LHD1 Trips	LHD2 Trips	MHD Trips	HHD Trips
Recreation	Fast Food	6	KSF	0.48	0.29	0.19	0.29
			Trips	2.86	1.71	1.14	1.71

ITE 9th Edition/CalEEMod

### Project Trip Generation

VehicleTripsLandUseSubTy	VehicleTripsL	WD_TR	ST_TR	SU_TR	Daily Avg	LU SF	Trip Gen	LHD1 Frac	LHD1 Trips	LHD2 Frac	LHD2 Trips	MHD Frac	MHD Trips	HHD Frac	HHD Trips
Recreation	Fast Food	496.12	722.03	542.72	535.05	6	3210.3	0.020115	64.6	0.0046	0.0275	0.012018	38.6	0.162105	520.4
Total Trips							3210.3		64.6				38.6		520.4

Adjusted Fleet Mix for No HDT Trucks	LDA	LDT1	LDT2	Total	Project Est	LHD1 Frac	LHD2 Frac	MHD Frac	HHD Frac	Diff to Allocate
Default Fleet Mix	0.493375	0.028385	0.147799	0.669559	Default Frac	0.020115	0.004575	0.012018	0.162105	0.198813
Adjusted Fleet Mix	0.638715	0.036747	0.191338	0.866800	Allocation Fraction					<b>0.197241</b>
				0.197241						

### 2021 CalEEMod Default Fleet Mix for Kings County

	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH		
Default Fleet Mix	FleetMix	0.493375	0.028385	0.147799	0.120572	0.020115		0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735	1
Revised Fleet Mix		<b>0.638715</b>	<b>0.036747</b>	<b>0.191338</b>	0.120572	<b>0.00089</b>		<b>0.00053</b>	<b>0.000059</b>	<b>0.000089</b>	0.001742	0.001833	0.005782	0.000964	0.000735	1.000000



## Fleet Mix Allocation - Gas Station Convenience Market

### Fueling Station and Convenience Store

Fuel Tanker Deliveries		<b>Customers in Trucks</b>	
Gallons/Month	300000	<b>LHD1 Trips/day</b>	<b>LHD2 Trips/Day</b>
Gallons/Year	3,600,000	64.58	14.69
Tanker Truck Capacity	9,000		
Tanker Truck Deliveries/Year	400		
Tanker Truck Deliveries/Day	1.10		
Tanker Trips/Day	2.19		

### Convenience Store

Project Size in KSF/pump	3.5	4
Convenience market 3,500 sf		

Deliveries by Trip Purpose	LHD1	LHD2	MHD	HHD	Totals
Snacks/Dry Good	2	2	1	1	6
Soft Drinks			2		2
Alcoholic Beverages		2	2		4
Milk Products		1			1
Fuel Tanker Trucks				7.7	8
Service Trucks	1	1			2
Refuse Haulers				2	2
Total Deliveries Per Week	3	6	5	10.6712	25
Total Trips per Week	6	12	10	21.3425	49
Trips per Day	0.8571	1.7143	1.4286	3.0489	7.0489
Trips per Pump	0.2143	0.4286	0.3571	0.7622	1.7622

Assuming that LHD1 and LHD2 trucks could also be customers of the gas station/convenience market  
No truck parking is provided so MHD and HHD would not be customers.

# Alternative Rate from NCHRP

NCHRP Synthesis 298

	4-Tire Comm	6-tire Comm	Total
Retail Convenience (trips/ksf)		0.44	0.44

## Land Use Assumptions

LandUseType	LandUseSubTy	LandUseUnitA	LandUseSizeMetric	LHD1 Trips	LHD2 Trips	MHD Trips	HHD Trips
Retail	Gas Station	4	Pump	0.21	0.43	0.36	0.76
			Trips	1.29	2.57	2.14	4.57

ITE 9th Edition/CalEEMod

## Project Trip Generation

VehicleTrips	LandUseSubTy	VehicleTripsL	WD_TR	ST_TR	SU_TR	Daily Avg ' LU Pump	Trip Gen	LHD1 Frac	LHD1 Trips	LHD2 Frac	LHD2 Trips	MHD Frac	MHD Trips	HHD Frac	HHD Trips
Retail	Gas Station	542.6	204.47	166.88	440.62	4	1762.485714	0.020115	35.5	0.0046	0.0183	0.012018	21.2	0.162105	285.7
Total Trips							1762.485714		35.5				21.2		285.7

## Adjusted Fleet Mix for No HDT Trucks

	LDA	LDT1	LDT2	Total	LHD1 Frac	LHD2 Frac	MHD Frac	HHD Frac	Diff to Allocate
Default Fleet Mix	0.493375	0.028385	0.147799	0.669559			0.00020	0.00043	0.00064
Adjusted Fleet Mix	0.621212	0.035740	0.186095	0.843047			0.012018	0.162105	0.174123
				0.173488					0.173488

## 2021 CalEEMod Default Fleet Mix for Kings County

	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH		
Default Fleet Mix	FleetMix	0.493375	0.028385	0.147799	0.120572	0.020115		0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735	1
Revised Fleet Mix		0.621212	0.035740	0.186095	0.120572	0.020115		0.004575	0.000203	0.000432	0.001742	0.001833	0.005782	0.000964	0.000735	1.000000

4 pumps provide 8 fueling positions.

# Emission Summary

## Emission Summary - Hanford Armona Rd Lemoore Mixed Use Project

### Operations (Mitigated)

	ROG	NOX	CO	Tons/Year		PM10	PM2.5
				SO2			
Residential 2020		1.18	0.75	5.90	0.01	1.18	0.33
Gas Station and Convenience Market 2021		0.41	0.35	2.34	0.00	0.34	0.09
Fast Food Restaurants 2021		0.73	0.69	5.35	0.01	1.00	0.28
Hotel		0.76	0.42	1.99	0.01	0.48	0.14
Retail Shopping Center 2021		0.10	0.10	0.66	0.00	0.04	0.04
<b>Total Operational Emissions</b>		<b>3.18</b>	<b>2.31</b>	<b>16.23</b>	<b>0.03</b>	<b>3.04</b>	<b>0.88</b>

### Construction Max Daily Summer

Construction Max Daily Summer				Pounds/Day			
Residential	ROG	NOX	CO	SO2	PM10	PM2.5	
	2019	4.85	54.59	34.23	0.06	20.61	12.17
	2020	71.95	21.86	0.22	0.043	2.3077	1.3816
Gas Station and Conv Mkt							
	2020	2.84	20.78	0.16	0.03	58.65	3.85
	2021	3.63	17.65	0.15	0.03	0.32	0.98
Fast Food Restuarants							
	2020	8.78	9.42	8.19	0.01	1.30	0.88
Hotel							
	2020	2.56	18.74	16.95	0.04	6.69	3.73
	2021	80.14	17.25	16.28	0.04	1.57	0.91
Retail Shopping							
	2020	2.17	18.37	14.18	0.03	6.69	3.73
	2021	5.30	14.68	0.14	0.03	0.92	0.73
Maximum Daily Emissions Combined All Runs							
	2019	4.85	54.59	34.23	0.06	20.61	12.17
	2020	16.34	67.31	39.48	0.11	73.33	12.18
	2021	89.07	49.57	16.57	0.09	2.82	2.62

Daily runs assume that all commercial phases will be constructed at the same time as a conservative assumptions.  
Construction of residential and commercial would not overlap since the commercial starts after the residential is complete.

### Residential Construction Annual Emissions

	ROG	NOX	Tons/Year		PM10	PM2.5
			CO	SO2		
Construction 2019	0.34	2.94	2.38	0.00	0.34	0.21
Construction 2020	0.93	1.73	1.71	0.00	0.18	0.11

### Construction Commercial Component Annual Emissions

	ROG	NOX	Tons/Year		PM10	PM2.5
			CO	SO2		
Site Preparation and Grading 2020	0.02	0.21	0.12	0.00	0.04	0.03

### Gas Station and Convenience Mkt

Building Construction Offsite 2020	0.02	0.15	0.12	0.00	0.03	0.01
Building Construction Onsite 2020	0.19	1.41	1.26	0.00	0.08	0.07
<b>Total for 2020</b>	<b>0.21</b>	<b>1.56</b>	<b>1.38</b>	<b>0.00</b>	<b>0.11</b>	<b>0.08</b>

Building Construction Offsite 2021	0.00	0.01	0.00	0.00	0.00	0.00
Building Construction Onsite 2021	0.01	0.06	0.06	0.00	0.00	0.00
Paving Offsite 2021	0.00	0.00	0.00	0.00	0.00	0.00
Paving Onsite 2021	0.01	0.04	0.04	0.00	0.00	0.00
Architectural Coatings Offsite 2021	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coatings Onsite 2021	0.02	0.01	0.01	0.00	0.00	0.00
<b>Total for 2021</b>	<b>0.03</b>	<b>0.11</b>	<b>0.12</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>

	ROG	NOX	Tons/Year		PM10	PM2.5
			CO	SO2		
<b>Fast Food Restaurants</b>						
Building Construction Onsite 2020	0.04	0.44	0.37	0.00	0.03	0.02
Building Construction Offsite 2020	0.01	0.05	0.04	0.00	0.00	0.00
Paving Onsite 2020	0.00	0.02	0.02	0.00	0.00	0.00
Paving Offsite 2020	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coatings Onsite 2020	0.02	0.00	0.00	0.00	0.00	0.00
Architectural Coatings Offsite 2020	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total for 2020</b>	<b>0.07</b>	<b>0.51</b>	<b>0.43</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>

	ROG	NOX	Tons/Year		PM10	PM2.5
			CO	SO2		
<b>Hotel</b>						
Building Construction Offsite 2020	0.05	0.38	0.32	0.00	0.08	0.02
Building Construction Onsite 2020	0.19	1.41	1.26	0.00	0.08	0.07
<b>Total for 2020</b>	<b>0.24</b>	<b>1.80</b>	<b>1.58</b>	<b>0.00</b>	<b>0.16</b>	<b>0.10</b>

Building Construction Offsite 2021	0.00	0.02	0.01	0.00	0.00	0.00
Building Construction Onsite 2021	0.01	0.06	0.06	0.00	0.00	0.00
Paving Offsite	0.00	0.00	0.00	0.00	0.00	0.00
Paving Onsite	0.01	0.04	0.04	0.00	0.00	0.00
Architectural Coatings Offsite	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coatings Onsite	0.40	0.01	0.01	0.00	0.00	0.00
<b>Total for 2021</b>	<b>0.42</b>	<b>0.12</b>	<b>0.13</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>



Retail Shopping	Tons/Year					
	ROG	NOX	CO	SO2	PM10	PM2.5
Building Construction Offsite 2020	0.01	0.11	0.09	0.00	0.02	0.01
Building Construction Onsite 2020	0.19	1.41	1.26	0.00	0.08	0.07
<b>Total for 2020</b>	<b>0.21</b>	<b>1.52</b>	<b>1.35</b>	<b>0.00</b>	<b>0.10</b>	<b>0.08</b>
Building Construction Offsite 2021	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction Onsite 2021	0.01	0.06	0.06	0.00	0.00	0.00
Paving Offsite	0.00	0.00	0.00	0.00	0.00	0.00
Paving Onsite	0.01	0.04	0.04	0.00	0.00	0.00
Architectural Coatings Offsite	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coatings Onsite	0.03	0.01	0.01	0.00	0.00	0.00
<b>Total for 2021</b>	<b>0.04</b>	<b>0.11</b>	<b>0.12</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>

Run assumes that Parcel A, B, and C would be site prepped and graded at one time.

#### Total Emissions from Residential and Commercial Phases

	Tons/Year					
	ROG	NOX	CO	SO2	PM10	PM2.5
Total 2019	0.34	2.94	2.38	0.00	0.34	0.21
Total 2020	1.68	7.33	6.57	0.01	0.61	0.42
Total 2021	0.66	1.76	1.59	0.00	0.12	0.09
<b>Highest Emissions in Any Year</b>	<b>1.68</b>	<b>7.33</b>	<b>7.33</b>	<b>0.01</b>	<b>0.61</b>	<b>0.42</b>

#### Operational Daily Emissions with all Mobile

	Pounds/Day					
	ROG	NOX	CO	SO2	PM10	PM2.5
Residential	7.47	4.26	45.16	0.08	7.23	2.05
Gas Station/Convenience Market	3.54	2.25	15.52	0.03	2.31	0.63
Fast Food	7.12	4.96	41.99	0.09	8.00	2.19
Hotel	4.49	2.30	12.39	0.03	2.82	0.81
Retail Shopping Center	0.98	7.88	5.01	0.02	1.06	0.30
<b>Total</b>	<b>23.61</b>	<b>21.65</b>	<b>120.07</b>	<b>0.25</b>	<b>21.42</b>	<b>5.99</b>

#### Daily Mobile Source Emissions

	Pounds/Day					
	ROG	NOX	CO	SO2	PM10	PM2.5
Residential	2.79	3.46	30.33	0.08	7.10	1.92
Gas Station/Convenience Market	3.42	2.24	15.51	0.03	2.31	0.63
Fast Food	7.12	4.96	41.99	0.09	7.97	2.16
Hotel	1.36	1.41	11.64	0.03	2.76	0.75
Retail Shopping Center	0.55	0.54	4.22	0.01	0.95	0.26
<b>Total</b>	<b>15.25</b>	<b>12.62</b>	<b>103.68</b>	<b>0.23</b>	<b>21.08</b>	<b>5.72</b>

Localized Fraction 0.5 mi/7.3mi 0.06849315

#### Daily Mobile within One Half Mile of Project

	Pounds/Day					
	ROG	NOX	CO	SO2	PM10	PM2.5
Residential	0.19	0.24	2.08	0.01	0.49	0.13
Gas Station/Convenience Market	0.23	0.15	1.06	0.00	0.16	0.04
Fast Food	0.49	0.34	2.88	0.01	0.55	0.15
Hotel	0.09	0.10	0.80	0.00	0.19	0.05
Retail Shopping Center	0.04	0.04	0.29	0.00	0.06	0.02
<b>Total</b>	<b>1.04</b>	<b>0.86</b>	<b>7.10</b>	<b>0.02</b>	<b>1.44</b>	<b>0.39</b>
<b>Mobile Emissions Difference</b>	<b>14.21</b>	<b>11.75</b>	<b>96.58</b>	<b>0.21</b>	<b>19.63</b>	<b>5.33</b>

**Daily Operational Emissions with Local Mobile**

	<b>Pounds/Day</b>					
	<b>ROG</b>	<b>NOX</b>	<b>CO</b>	<b>SO2</b>	<b>PM10</b>	<b>PM2.5</b>
Residential	4.87	1.03	16.91	0.01	0.62	0.26
Gas Station/Convenience Market	0.36	0.16	1.07	0.00	0.16	0.04
Fast Food	0.49	0.34	2.88	0.01	0.57	0.17
Hotel	3.22	0.98	1.55	0.01	0.26	0.12
Retail Shopping Center	0.47	7.37	1.09	0.01	0.18	0.06
Total	<b>9.40</b>	<b>9.89</b>	<b>23.50</b>	<b>0.04</b>	<b>1.78</b>	<b>0.66</b>

# **CalEEMod Output Multi-Family Residential Annual**

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

## Hanford-Armona Mixed Use Apartment 176 Units

### Kings County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	176.00	Dwelling Unit	10.35	176,000.00	503

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	37
<b>Climate Zone</b>	3			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site Plan

Construction Phase -

Architectural Coating - Compliance with Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation - 2.2 miles to Downtown Lemoore

Area Mitigation - Comply with Rule 4601 Architectural Coatings

Fleet Mix - Apartment Fleet Mix based on survey of SJV apartments

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	65
tblFleetMix	HHD	0.16	4.2900e-004
tblFleetMix	LDA	0.49	0.63
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	LHD1	0.02	2.5900e-003
tblFleetMix	LHD2	4.7870e-003	1.2580e-003
tblFleetMix	MHD	0.01	2.4200e-004
tblLandUse	LotAcreage	11.00	10.35
tblWoodstoves	NumberCatalytic	10.35	0.00
tblWoodstoves	NumberNoncatalytic	10.35	0.00

## 2.0 Emissions Summary

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## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3361	2.9385	2.3809	4.4700e-003	0.3136	0.1509	0.4645	0.1286	0.1409	0.2695	0.0000	399.0609	399.0609	0.0846	0.0000	401.1753
2020	0.9309	1.7264	1.7109	3.2900e-003	0.0852	0.0899	0.1751	0.0229	0.0844	0.1073	0.0000	289.8056	289.8056	0.0536	0.0000	291.1451
<b>Maximum</b>	<b>0.9309</b>	<b>2.9385</b>	<b>2.3809</b>	<b>4.4700e-003</b>	<b>0.3136</b>	<b>0.1509</b>	<b>0.4645</b>	<b>0.1286</b>	<b>0.1409</b>	<b>0.2695</b>	<b>0.0000</b>	<b>399.0609</b>	<b>399.0609</b>	<b>0.0846</b>	<b>0.0000</b>	<b>401.1753</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3361	2.9385	2.3809	4.4700e-003	0.1924	0.1509	0.3433	0.0716	0.1409	0.2125	0.0000	399.0606	399.0606	0.0846	0.0000	401.1749
2020	0.9309	1.7264	1.7109	3.2900e-003	0.0852	0.0899	0.1751	0.0229	0.0844	0.1073	0.0000	289.8054	289.8054	0.0536	0.0000	291.1449
<b>Maximum</b>	<b>0.9309</b>	<b>2.9385</b>	<b>2.3809</b>	<b>4.4700e-003</b>	<b>0.1924</b>	<b>0.1509</b>	<b>0.3433</b>	<b>0.0716</b>	<b>0.1409</b>	<b>0.2125</b>	<b>0.0000</b>	<b>399.0606</b>	<b>399.0606</b>	<b>0.0846</b>	<b>0.0000</b>	<b>401.1749</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>30.40</b>	<b>0.00</b>	<b>18.96</b>	<b>37.63</b>	<b>0.00</b>	<b>15.12</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2019	6-30-2019	1.4653	1.4653
2	7-1-2019	9-30-2019	0.8928	0.8928
3	10-1-2019	12-31-2019	0.8957	0.8957
4	1-1-2020	3-31-2020	0.8047	0.8047
5	4-1-2020	6-30-2020	0.8024	0.8024
6	7-1-2020	9-30-2020	1.0425	1.0425
		Highest	1.4653	1.4653

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9002	0.0810	1.3392	4.9000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	78.3792	78.3792	3.5400e-003	1.4000e-003	78.8843
Energy	0.0134	0.1146	0.0488	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003	0.0000	372.2610	372.2610	0.0134	4.6700e-003	373.9884
Mobile	0.3816	0.6544	4.7935	0.0123	1.2412	8.9300e-003	1.2501	0.3307	8.2900e-003	0.3389	0.0000	1,115.5337	1,115.5337	0.0455	0.0000	1,116.6723
Waste						0.0000	0.0000		0.0000	0.0000	16.4342	0.0000	16.4342	0.9712	0.0000	40.7149
Water						0.0000	0.0000		0.0000	0.0000	3.6380	25.4114	29.0494	0.3748	9.0600e-003	41.1196
<b>Total</b>	<b>1.2952</b>	<b>0.8500</b>	<b>6.1815</b>	<b>0.0135</b>	<b>1.2412</b>	<b>0.0307</b>	<b>1.2719</b>	<b>0.3307</b>	<b>0.0301</b>	<b>0.3607</b>	<b>20.0721</b>	<b>1,591.5853</b>	<b>1,611.6575</b>	<b>1.4085</b>	<b>0.0151</b>	<b>1,651.3794</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7989	0.0152	1.3112	7.0000e-005		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	2.1347	2.1347	2.0800e-003	0.0000	2.1867
Energy	0.0134	0.1146	0.0488	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003	0.0000	372.2610	372.2610	0.0134	4.6700e-003	373.9884
Mobile	0.3725	0.6178	4.5351	0.0115	1.1556	8.4000e-003	1.1640	0.3078	7.7900e-003	0.3156	0.0000	1,040.8142	1,040.8142	0.0428	0.0000	1,041.8850
Waste						0.0000	0.0000		0.0000	0.0000	16.4342	0.0000	16.4342	0.9712	0.0000	40.7149
Water						0.0000	0.0000		0.0000	0.0000	3.6380	25.4114	29.0494	0.3748	9.0600e-003	41.1196
<b>Total</b>	<b>1.1848</b>	<b>0.7476</b>	<b>5.8950</b>	<b>0.0123</b>	<b>1.1556</b>	<b>0.0249</b>	<b>1.1804</b>	<b>0.3078</b>	<b>0.0243</b>	<b>0.3321</b>	<b>20.0721</b>	<b>1,440.6213</b>	<b>1,460.6935</b>	<b>1.4043</b>	<b>0.0137</b>	<b>1,499.8946</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>8.52</b>	<b>12.05</b>	<b>4.63</b>	<b>9.23</b>	<b>6.90</b>	<b>19.04</b>	<b>7.19</b>	<b>6.90</b>	<b>19.34</b>	<b>7.94</b>	<b>0.00</b>	<b>9.49</b>	<b>9.37</b>	<b>0.30</b>	<b>9.25</b>	<b>9.17</b>

**3.0 Construction Detail****Construction Phase**

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2019	4/12/2019	5	10	
2	Grading	Grading	4/13/2019	5/24/2019	5	30	
3	Building Construction	Building Construction	5/25/2019	7/17/2020	5	300	
4	Paving	Paving	7/18/2020	8/14/2020	5	20	
5	Architectural Coating	Architectural Coating	8/15/2020	9/11/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 75**

**Acres of Paving: 0**

**Residential Indoor: 356,400; Residential Outdoor: 118,800; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	127.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT



## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0120</b>	<b>0.1023</b>	<b>0.0497</b>	<b>0.0110</b>	<b>0.0607</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.2 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.5000e-004	3.3100e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6328	0.6328	3.0000e-005	0.0000	0.6335
<b>Total</b>	<b>4.4000e-004</b>	<b>3.5000e-004</b>	<b>3.3100e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6328</b>	<b>0.6328</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.6335</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0407</b>	<b>0.0120</b>	<b>0.0526</b>	<b>0.0223</b>	<b>0.0110</b>	<b>0.0333</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.2 Site Preparation - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.5000e-004	3.3100e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6328	0.6328	3.0000e-005	0.0000	0.6335
<b>Total</b>	<b>4.4000e-004</b>	<b>3.5000e-004</b>	<b>3.3100e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6328</b>	<b>0.6328</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.6335</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.1301</b>	<b>0.0357</b>	<b>0.1658</b>	<b>0.0540</b>	<b>0.0329</b>	<b>0.0868</b>	<b>0.0000</b>	<b>83.5520</b>	<b>83.5520</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2129</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.3 Grading - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4700e-003	1.1800e-003	0.0110	2.0000e-005	2.4100e-003	2.0000e-005	2.4300e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.1094	2.1094	9.0000e-005	0.0000	2.1116
<b>Total</b>	<b>1.4700e-003</b>	<b>1.1800e-003</b>	<b>0.0110</b>	<b>2.0000e-005</b>	<b>2.4100e-003</b>	<b>2.0000e-005</b>	<b>2.4300e-003</b>	<b>6.4000e-004</b>	<b>2.0000e-005</b>	<b>6.6000e-004</b>	<b>0.0000</b>	<b>2.1094</b>	<b>2.1094</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.1116</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0586	0.0000	0.0586	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.0586</b>	<b>0.0357</b>	<b>0.0943</b>	<b>0.0243</b>	<b>0.0329</b>	<b>0.0572</b>	<b>0.0000</b>	<b>83.5519</b>	<b>83.5519</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2128</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.3 Grading - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4700e-003	1.1800e-003	0.0110	2.0000e-005	2.4100e-003	2.0000e-005	2.4300e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.1094	2.1094	9.0000e-005	0.0000	2.1116
<b>Total</b>	<b>1.4700e-003</b>	<b>1.1800e-003</b>	<b>0.0110</b>	<b>2.0000e-005</b>	<b>2.4100e-003</b>	<b>2.0000e-005</b>	<b>2.4300e-003</b>	<b>6.4000e-004</b>	<b>2.0000e-005</b>	<b>6.6000e-004</b>	<b>0.0000</b>	<b>2.1094</b>	<b>2.1094</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.1116</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1854	1.6547	1.3474	2.1100e-003		0.1013	0.1013		0.0952	0.0952	0.0000	184.5568	184.5568	0.0450	0.0000	185.6808
<b>Total</b>	<b>0.1854</b>	<b>1.6547</b>	<b>1.3474</b>	<b>2.1100e-003</b>		<b>0.1013</b>	<b>0.1013</b>		<b>0.0952</b>	<b>0.0952</b>	<b>0.0000</b>	<b>184.5568</b>	<b>184.5568</b>	<b>0.0450</b>	<b>0.0000</b>	<b>185.6808</b>



## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.4 Building Construction - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.4000e-003	0.1973	0.0419	4.3000e-004	9.9300e-003	1.3700e-003	0.0113	2.8700e-003	1.3100e-003	4.1800e-003	0.0000	41.0281	41.0281	4.7400e-003	0.0000	41.1467
Worker	0.0487	0.0393	0.3664	7.8000e-004	0.0801	5.6000e-004	0.0807	0.0213	5.2000e-004	0.0218	0.0000	70.0975	70.0975	2.9200e-003	0.0000	70.1705
<b>Total</b>	<b>0.0561</b>	<b>0.2366</b>	<b>0.4083</b>	<b>1.2100e-003</b>	<b>0.0900</b>	<b>1.9300e-003</b>	<b>0.0920</b>	<b>0.0242</b>	<b>1.8300e-003</b>	<b>0.0260</b>	<b>0.0000</b>	<b>111.1256</b>	<b>111.1256</b>	<b>7.6600e-003</b>	<b>0.0000</b>	<b>111.3171</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1854	1.6547	1.3474	2.1100e-003		0.1013	0.1013		0.0952	0.0952	0.0000	184.5566	184.5566	0.0450	0.0000	185.6806
<b>Total</b>	<b>0.1854</b>	<b>1.6547</b>	<b>1.3474</b>	<b>2.1100e-003</b>		<b>0.1013</b>	<b>0.1013</b>		<b>0.0952</b>	<b>0.0952</b>	<b>0.0000</b>	<b>184.5566</b>	<b>184.5566</b>	<b>0.0450</b>	<b>0.0000</b>	<b>185.6806</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.4 Building Construction - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.4000e-003	0.1973	0.0419	4.3000e-004	9.9300e-003	1.3700e-003	0.0113	2.8700e-003	1.3100e-003	4.1800e-003	0.0000	41.0281	41.0281	4.7400e-003	0.0000	41.1467
Worker	0.0487	0.0393	0.3664	7.8000e-004	0.0801	5.6000e-004	0.0807	0.0213	5.2000e-004	0.0218	0.0000	70.0975	70.0975	2.9200e-003	0.0000	70.1705
<b>Total</b>	<b>0.0561</b>	<b>0.2366</b>	<b>0.4083</b>	<b>1.2100e-003</b>	<b>0.0900</b>	<b>1.9300e-003</b>	<b>0.0920</b>	<b>0.0242</b>	<b>1.8300e-003</b>	<b>0.0260</b>	<b>0.0000</b>	<b>111.1256</b>	<b>111.1256</b>	<b>7.6600e-003</b>	<b>0.0000</b>	<b>111.3171</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1516	1.3718	1.2047	1.9200e-003		0.0799	0.0799		0.0751	0.0751	0.0000	165.6011	165.6011	0.0404	0.0000	166.6112
<b>Total</b>	<b>0.1516</b>	<b>1.3718</b>	<b>1.2047</b>	<b>1.9200e-003</b>		<b>0.0799</b>	<b>0.0799</b>		<b>0.0751</b>	<b>0.0751</b>	<b>0.0000</b>	<b>165.6011</b>	<b>165.6011</b>	<b>0.0404</b>	<b>0.0000</b>	<b>166.6112</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.4 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5800e-003	0.1643	0.0334	3.9000e-004	9.0500e-003	8.4000e-004	9.8800e-003	2.6100e-003	8.0000e-004	3.4100e-003	0.0000	37.0374	37.0374	4.1100e-003	0.0000	37.1402
Worker	0.0402	0.0314	0.2950	6.9000e-004	0.0730	4.9000e-004	0.0735	0.0194	4.6000e-004	0.0198	0.0000	61.8606	61.8606	2.2900e-003	0.0000	61.9179
<b>Total</b>	<b>0.0458</b>	<b>0.1957</b>	<b>0.3284</b>	<b>1.0800e-003</b>	<b>0.0820</b>	<b>1.3300e-003</b>	<b>0.0833</b>	<b>0.0220</b>	<b>1.2600e-003</b>	<b>0.0233</b>	<b>0.0000</b>	<b>98.8980</b>	<b>98.8980</b>	<b>6.4000e-003</b>	<b>0.0000</b>	<b>99.0581</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1516	1.3718	1.2047	1.9200e-003		0.0799	0.0799		0.0751	0.0751	0.0000	165.6009	165.6009	0.0404	0.0000	166.6110
<b>Total</b>	<b>0.1516</b>	<b>1.3718</b>	<b>1.2047</b>	<b>1.9200e-003</b>		<b>0.0799</b>	<b>0.0799</b>		<b>0.0751</b>	<b>0.0751</b>	<b>0.0000</b>	<b>165.6009</b>	<b>165.6009</b>	<b>0.0404</b>	<b>0.0000</b>	<b>166.6110</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.4 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5800e-003	0.1643	0.0334	3.9000e-004	9.0500e-003	8.4000e-004	9.8800e-003	2.6100e-003	8.0000e-004	3.4100e-003	0.0000	37.0374	37.0374	4.1100e-003	0.0000	37.1402
Worker	0.0402	0.0314	0.2950	6.9000e-004	0.0730	4.9000e-004	0.0735	0.0194	4.6000e-004	0.0198	0.0000	61.8606	61.8606	2.2900e-003	0.0000	61.9179
<b>Total</b>	<b>0.0458</b>	<b>0.1957</b>	<b>0.3284</b>	<b>1.0800e-003</b>	<b>0.0820</b>	<b>1.3300e-003</b>	<b>0.0833</b>	<b>0.0220</b>	<b>1.2600e-003</b>	<b>0.0233</b>	<b>0.0000</b>	<b>98.8980</b>	<b>98.8980</b>	<b>6.4000e-003</b>	<b>0.0000</b>	<b>99.0581</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0136</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1902</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.5 Paving - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	5.2000e-004	4.8700e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0219	1.0219	4.0000e-005	0.0000	1.0228
<b>Total</b>	<b>6.6000e-004</b>	<b>5.2000e-004</b>	<b>4.8700e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.0219</b>	<b>1.0219</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.0228</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0136</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1901</b>



## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.5 Paving - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	5.2000e-004	4.8700e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0219	1.0219	4.0000e-005	0.0000	1.0228
<b>Total</b>	<b>6.6000e-004</b>	<b>5.2000e-004</b>	<b>4.8700e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.0219</b>	<b>1.0219</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.0228</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>0.7183</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.6 Architectural Coating - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1100e-003	8.6000e-004	8.1200e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.5000e-004	0.0000	1.7031	1.7031	6.0000e-005	0.0000	1.7047
<b>Total</b>	<b>1.1100e-003</b>	<b>8.6000e-004</b>	<b>8.1200e-003</b>	<b>2.0000e-005</b>	<b>2.0100e-003</b>	<b>1.0000e-005</b>	<b>2.0200e-003</b>	<b>5.3000e-004</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>1.7031</b>	<b>1.7031</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.7047</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
<b>Total</b>	<b>0.7183</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**3.6 Architectural Coating - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1100e-003	8.6000e-004	8.1200e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.5000e-004	0.0000	1.7031	1.7031	6.0000e-005	0.0000	1.7047
<b>Total</b>	<b>1.1100e-003</b>	<b>8.6000e-004</b>	<b>8.1200e-003</b>	<b>2.0000e-005</b>	<b>2.0100e-003</b>	<b>1.0000e-005</b>	<b>2.0200e-003</b>	<b>5.3000e-004</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>1.7031</b>	<b>1.7031</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.7047</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3725	0.6178	4.5351	0.0115	1.1556	8.4000e-003	1.1640	0.3078	7.7900e-003	0.3156	0.0000	1,040.8142	1,040.8142	0.0428	0.0000	1,041.8850
Unmitigated	0.3816	0.6544	4.7935	0.0123	1.2412	8.9300e-003	1.2501	0.3307	8.2900e-003	0.3389	0.0000	1,115.5337	1,115.5337	0.0455	0.0000	1,116.6723

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,159.84	1,260.16	1068.32	3,323,349	3,094,038
Total	1,159.84	1,260.16	1,068.32	3,323,349	3,094,038

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.629948	0.037566	0.189820	0.126841	0.002590	0.001258	0.000242	0.000429	0.001758	0.001914	0.005918	0.000991	0.000785

## 5.0 Energy Detail

Historical Energy Use: N

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	239.4910	239.4910	0.0108	2.2400e-003	240.4294
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	239.4910	239.4910	0.0108	2.2400e-003	240.4294
NaturalGas Mitigated	0.0134	0.1146	0.0488	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003	0.0000	132.7701	132.7701	2.5400e-003	2.4300e-003	133.5591
NaturalGas Unmitigated	0.0134	0.1146	0.0488	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003	0.0000	132.7701	132.7701	2.5400e-003	2.4300e-003	133.5591

## 5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	2.48802e+006	0.0134	0.1146	0.0488	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003	0.0000	132.7701	132.7701	2.5400e-003	2.4300e-003	133.5591
<b>Total</b>		<b>0.0134</b>	<b>0.1146</b>	<b>0.0488</b>	<b>7.3000e-004</b>		<b>9.2700e-003</b>	<b>9.2700e-003</b>		<b>9.2700e-003</b>	<b>9.2700e-003</b>	<b>0.0000</b>	<b>132.7701</b>	<b>132.7701</b>	<b>2.5400e-003</b>	<b>2.4300e-003</b>	<b>133.5591</b>



## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	2.48802e+006	0.0134	0.1146	0.0488	7.3000e-004		9.2700e-003	9.2700e-003		9.2700e-003	9.2700e-003	0.0000	132.7701	132.7701	2.5400e-003	2.4300e-003	133.5591
<b>Total</b>		<b>0.0134</b>	<b>0.1146</b>	<b>0.0488</b>	<b>7.3000e-004</b>		<b>9.2700e-003</b>	<b>9.2700e-003</b>		<b>9.2700e-003</b>	<b>9.2700e-003</b>	<b>0.0000</b>	<b>132.7701</b>	<b>132.7701</b>	<b>2.5400e-003</b>	<b>2.4300e-003</b>	<b>133.5591</b>

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	823244	239.4910	0.0108	2.2400e-003	240.4294
<b>Total</b>		<b>239.4910</b>	<b>0.0108</b>	<b>2.2400e-003</b>	<b>240.4294</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	823244	239.4910	0.0108	2.2400e-003	240.4294
<b>Total</b>		<b>239.4910</b>	<b>0.0108</b>	<b>2.2400e-003</b>	<b>240.4294</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

No Hearths Installed

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7989	0.0152	1.3112	7.0000e-005		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	2.1347	2.1347	2.0800e-003	0.0000	2.1867
Unmitigated	0.9002	0.0810	1.3392	4.9000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	78.3792	78.3792	3.5400e-003	1.4000e-003	78.8843

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1652					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6874					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7000e-003	0.0658	0.0280	4.2000e-004		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	76.2445	76.2445	1.4600e-003	1.4000e-003	76.6976
Landscaping	0.0399	0.0152	1.3112	7.0000e-005		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	2.1347	2.1347	2.0800e-003	0.0000	2.1867
<b>Total</b>	<b>0.9002</b>	<b>0.0810</b>	<b>1.3392</b>	<b>4.9000e-004</b>		<b>0.0125</b>	<b>0.0125</b>		<b>0.0125</b>	<b>0.0125</b>	<b>0.0000</b>	<b>78.3792</b>	<b>78.3792</b>	<b>3.5400e-003</b>	<b>1.4000e-003</b>	<b>78.8843</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0716					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6874					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0399	0.0152	1.3112	7.0000e-005		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	2.1347	2.1347	2.0800e-003	0.0000	2.1867
<b>Total</b>	<b>0.7989</b>	<b>0.0152</b>	<b>1.3112</b>	<b>7.0000e-005</b>		<b>7.2100e-003</b>	<b>7.2100e-003</b>		<b>7.2100e-003</b>	<b>7.2100e-003</b>	<b>0.0000</b>	<b>2.1347</b>	<b>2.1347</b>	<b>2.0800e-003</b>	<b>0.0000</b>	<b>2.1867</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	29.0494	0.3748	9.0600e-003	41.1196
Unmitigated	29.0494	0.3748	9.0600e-003	41.1196

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.4671 / 7.22926	29.0494	0.3748	9.0600e-003	41.1196
<b>Total</b>		<b>29.0494</b>	<b>0.3748</b>	<b>9.0600e-003</b>	<b>41.1196</b>



## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.4671 / 7.22926	29.0494	0.3748	9.0600e-003	41.1196
<b>Total</b>		<b>29.0494</b>	<b>0.3748</b>	<b>9.0600e-003</b>	<b>41.1196</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.4342	0.9712	0.0000	40.7149
Unmitigated	16.4342	0.9712	0.0000	40.7149

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	80.96	16.4342	0.9712	0.0000	40.7149
<b>Total</b>		<b>16.4342</b>	<b>0.9712</b>	<b>0.0000</b>	<b>40.7149</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	80.96	16.4342	0.9712	0.0000	40.7149
<b>Total</b>		<b>16.4342</b>	<b>0.9712</b>	<b>0.0000</b>	<b>40.7149</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Commercial Construction - Site Preparation and Grading Only Annual**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

## Hanford Armona Rd Mixed Use Project Site Prep and Grading Kings County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	7.04	1000sqft	0.16	7,040.00	0
Other Non-Asphalt Surfaces	4.41	Acre	4.41	192,099.60	0

#### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total acreage for Parcel A, B, and C 4.57 acres

Construction Phase -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
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### 2.0 Emissions Summary



## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0204	0.2120	0.1214	2.2000e-004	0.0722	0.0106	0.0828	0.0385	9.7500e-003	0.0483	0.0000	19.4965	19.4965	6.1000e-003	0.0000	19.6490
Maximum	0.0204	0.2120	0.1214	2.2000e-004	0.0722	0.0106	0.0828	0.0385	9.7500e-003	0.0483	0.0000	19.4965	19.4965	6.1000e-003	0.0000	19.6490

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0204	0.2120	0.1214	2.2000e-004	0.0330	0.0106	0.0436	0.0175	9.7500e-003	0.0272	0.0000	19.4965	19.4965	6.1000e-003	0.0000	19.6490
Maximum	0.0204	0.2120	0.1214	2.2000e-004	0.0330	0.0106	0.0436	0.0175	9.7500e-003	0.0272	0.0000	19.4965	19.4965	6.1000e-003	0.0000	19.6490

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.36	0.00	47.40	54.67	0.00	43.65	0.00	0.00	0.00	0.00	0.00	0.00

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2020	6-30-2020	0.2200	0.2200
		Highest	0.2200	0.2200

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0488	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.2000e-004
Energy	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	20.7111	20.7111	8.3000e-004	2.3000e-004	20.8004
Mobile	0.1002	1.3149	0.8019	3.7900e-003	0.1695	3.7500e-003	0.1732	0.0456	3.5600e-003	0.0491	0.0000	353.6374	353.6374	0.0531	0.0000	354.9645
Waste						0.0000	0.0000		0.0000	0.0000	1.5001	0.0000	1.5001	0.0887	0.0000	3.7164
Water						0.0000	0.0000		0.0000	0.0000	0.1654	1.1463	1.3117	0.0170	4.1000e-004	1.8606
<b>Total</b>	<b>0.1494</b>	<b>1.3186</b>	<b>0.8051</b>	<b>3.8100e-003</b>	<b>0.1695</b>	<b>4.0300e-003</b>	<b>0.1735</b>	<b>0.0456</b>	<b>3.8400e-003</b>	<b>0.0494</b>	<b>1.6655</b>	<b>375.4951</b>	<b>377.1606</b>	<b>0.1596</b>	<b>6.4000e-004</b>	<b>381.3422</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0488	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.2000e-004
Energy	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	20.7111	20.7111	8.3000e-004	2.3000e-004	20.8004
Mobile	0.1002	1.3149	0.8019	3.7900e-003	0.1695	3.7500e-003	0.1732	0.0456	3.5600e-003	0.0491	0.0000	353.6374	353.6374	0.0531	0.0000	354.9645
Waste						0.0000	0.0000		0.0000	0.0000	1.5001	0.0000	1.5001	0.0887	0.0000	3.7164
Water						0.0000	0.0000		0.0000	0.0000	0.1654	1.1463	1.3117	0.0170	4.1000e-004	1.8606
<b>Total</b>	<b>0.1494</b>	<b>1.3186</b>	<b>0.8051</b>	<b>3.8100e-003</b>	<b>0.1695</b>	<b>4.0300e-003</b>	<b>0.1735</b>	<b>0.0456</b>	<b>3.8400e-003</b>	<b>0.0494</b>	<b>1.6655</b>	<b>375.4951</b>	<b>377.1606</b>	<b>0.1596</b>	<b>6.4000e-004</b>	<b>381.3422</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2020	4/7/2020	5	5	
2	Grading	Grading	4/8/2020	4/17/2020	5	8	

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 4****Acres of Paving: 4.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253
<b>Total</b>	<b>0.0102</b>	<b>0.1060</b>	<b>0.0538</b>	<b>1.0000e-004</b>	<b>0.0452</b>	<b>5.4900e-003</b>	<b>0.0507</b>	<b>0.0248</b>	<b>5.0500e-003</b>	<b>0.0299</b>	<b>0.0000</b>	<b>8.3577</b>	<b>8.3577</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.6000e-004	1.4600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3066	0.3066	1.0000e-005	0.0000	0.3069
<b>Total</b>	<b>2.0000e-004</b>	<b>1.6000e-004</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3066</b>	<b>0.3066</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3069</b>



## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**3.2 Site Preparation - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252
<b>Total</b>	<b>0.0102</b>	<b>0.1060</b>	<b>0.0538</b>	<b>1.0000e-004</b>	<b>0.0203</b>	<b>5.4900e-003</b>	<b>0.0258</b>	<b>0.0112</b>	<b>5.0500e-003</b>	<b>0.0162</b>	<b>0.0000</b>	<b>8.3577</b>	<b>8.3577</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4252</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.6000e-004	1.4600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3066	0.3066	1.0000e-005	0.0000	0.3069
<b>Total</b>	<b>2.0000e-004</b>	<b>1.6000e-004</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3066</b>	<b>0.3066</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3069</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
<b>Total</b>	<b>9.7200e-003</b>	<b>0.1055</b>	<b>0.0642</b>	<b>1.2000e-004</b>	<b>0.0262</b>	<b>5.0900e-003</b>	<b>0.0313</b>	<b>0.0135</b>	<b>4.6900e-003</b>	<b>0.0182</b>	<b>0.0000</b>	<b>10.4235</b>	<b>10.4235</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>10.5078</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.1000e-004	1.9500e-003	0.0000	4.8000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4088	0.4088	2.0000e-005	0.0000	0.4091
<b>Total</b>	<b>2.7000e-004</b>	<b>2.1000e-004</b>	<b>1.9500e-003</b>	<b>0.0000</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.4088</b>	<b>0.4088</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.4091</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**3.3 Grading - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0118	0.0000	0.0118	6.0600e-003	0.0000	6.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
<b>Total</b>	<b>9.7200e-003</b>	<b>0.1055</b>	<b>0.0642</b>	<b>1.2000e-004</b>	<b>0.0118</b>	<b>5.0900e-003</b>	<b>0.0169</b>	<b>6.0600e-003</b>	<b>4.6900e-003</b>	<b>0.0108</b>	<b>0.0000</b>	<b>10.4235</b>	<b>10.4235</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>10.5078</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.1000e-004	1.9500e-003	0.0000	4.8000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4088	0.4088	2.0000e-005	0.0000	0.4091
<b>Total</b>	<b>2.7000e-004</b>	<b>2.1000e-004</b>	<b>1.9500e-003</b>	<b>0.0000</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.4088</b>	<b>0.4088</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.4091</b>

**4.0 Operational Detail - Mobile**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1002	1.3149	0.8019	3.7900e-003	0.1695	3.7500e-003	0.1732	0.0456	3.5600e-003	0.0491	0.0000	353.6374	353.6374	0.0531	0.0000	354.9645
Unmitigated	0.1002	1.3149	0.8019	3.7900e-003	0.1695	3.7500e-003	0.1732	0.0456	3.5600e-003	0.0491	0.0000	353.6374	353.6374	0.0531	0.0000	354.9645

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	312.01	295.96	143.83	439,977	439,977
Total	312.01	295.96	143.83	439,977	439,977

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

**4.4 Fleet Mix**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.487262	0.029057	0.146825	0.126841	0.021860	0.004787	0.012229	0.159772	0.001758	0.001914	0.005918	0.000991	0.000785
Strip Mall	0.487262	0.029057	0.146825	0.126841	0.021860	0.004787	0.012229	0.159772	0.001758	0.001914	0.005918	0.000991	0.000785

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	16.6913	16.6913	7.5000e-004	1.6000e-004	16.7567
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	16.6913	16.6913	7.5000e-004	1.6000e-004	16.7567
NaturalGas Mitigated	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0198	4.0198	8.0000e-005	7.0000e-005	4.0437
NaturalGas Unmitigated	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0198	4.0198	8.0000e-005	7.0000e-005	4.0437

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	75328	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0198	4.0198	8.0000e-005	7.0000e-005	4.0437
<b>Total</b>		<b>4.1000e-004</b>	<b>3.6900e-003</b>	<b>3.1000e-003</b>	<b>2.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>4.0198</b>	<b>4.0198</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>4.0437</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	75328	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0198	4.0198	8.0000e-005	7.0000e-005	4.0437
<b>Total</b>		<b>4.1000e-004</b>	<b>3.6900e-003</b>	<b>3.1000e-003</b>	<b>2.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>4.0198</b>	<b>4.0198</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>4.0437</b>



## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	57376	16.6913	7.5000e-004	1.6000e-004	16.7567
<b>Total</b>		<b>16.6913</b>	<b>7.5000e-004</b>	<b>1.6000e-004</b>	<b>16.7567</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	57376	16.6913	7.5000e-004	1.6000e-004	16.7567
<b>Total</b>		<b>16.6913</b>	<b>7.5000e-004</b>	<b>1.6000e-004</b>	<b>16.7567</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0488	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.2000e-004
Unmitigated	0.0488	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.2000e-004

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.2000e-004
<b>Total</b>	<b>0.0488</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.2000e-004</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.2000e-004
<b>Total</b>	<b>0.0488</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.2000e-004</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.3117	0.0170	4.1000e-004	1.8606
Unmitigated	1.3117	0.0170	4.1000e-004	1.8606

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.521471 / 0.319611	1.3117	0.0170	4.1000e-004	1.8606
<b>Total</b>		<b>1.3117</b>	<b>0.0170</b>	<b>4.1000e-004</b>	<b>1.8606</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.521471 / 0.319611	1.3117	0.0170	4.1000e-004	1.8606
<b>Total</b>		<b>1.3117</b>	<b>0.0170</b>	<b>4.1000e-004</b>	<b>1.8606</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.5001	0.0887	0.0000	3.7164
Unmitigated	1.5001	0.0887	0.0000	3.7164

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.39	1.5001	0.0887	0.0000	3.7164
<b>Total</b>		<b>1.5001</b>	<b>0.0887</b>	<b>0.0000</b>	<b>3.7164</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.39	1.5001	0.0887	0.0000	3.7164
<b>Total</b>		<b>1.5001</b>	<b>0.0887</b>	<b>0.0000</b>	<b>3.7164</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Annual

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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# **CalEEMod Output Gas Station and Convenience Market Construction and Operation Annual**

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

## Hanford Armona Rd Mixed Use Gas Station Run

### Kings County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.55	Acre	1.55	67,518.00	0
Convenience Market With Gas Pumps	4.00	Pump	0.08	3,500.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

Project Characteristics -

Land Use - 3,500 SF convenience market with 8 fueling position

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings

Area Coating - Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Architectural Coatings

Fleet Mix - Project specific fleet mix for gas station/convenience store

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Parking	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblAreaCoating	Area_EF_Parking	150	65
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	65	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	65	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	65	150
tblFleetMix	HHD	0.16	4.3200e-004
tblFleetMix	LDA	0.49	0.62
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	MHD	0.01	2.0300e-004
tblLandUse	LandUseSquareFeet	564.70	3,500.00
tblLandUse	LotAcreage	0.01	0.08

## 2.0 Emissions Summary

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## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2109	1.5605	1.3776	2.6400e-003	0.0299	0.0769	0.1068	8.1200e-003	0.0742	0.0824	0.0000	223.4837	223.4837	0.0364	0.0000	224.3926
2021	0.0329	0.1144	0.1192	2.1000e-004	2.1700e-003	5.6600e-003	7.8300e-003	5.9000e-004	5.3900e-003	5.9700e-003	0.0000	18.2773	18.2773	3.6200e-003	0.0000	18.3678
Maximum	0.2109	1.5605	1.3776	2.6400e-003	0.0299	0.0769	0.1068	8.1200e-003	0.0742	0.0824	0.0000	223.4837	223.4837	0.0364	0.0000	224.3926

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2109	1.5604	1.3776	2.6400e-003	0.0299	0.0769	0.1068	8.1200e-003	0.0742	0.0824	0.0000	223.4835	223.4835	0.0364	0.0000	224.3923
2021	0.0329	0.1144	0.1192	2.1000e-004	2.1700e-003	5.6600e-003	7.8300e-003	5.9000e-004	5.3900e-003	5.9700e-003	0.0000	18.2773	18.2773	3.6200e-003	0.0000	18.3678
Maximum	0.2109	1.5604	1.3776	2.6400e-003	0.0299	0.0769	0.1068	8.1200e-003	0.0742	0.0824	0.0000	223.4835	223.4835	0.0364	0.0000	224.3923

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-9-2020	7-8-2020	0.6024	0.6024
2	7-9-2020	10-8-2020	0.6091	0.6091
3	10-9-2020	1-8-2021	0.6056	0.6056
4	1-9-2021	4-8-2021	0.1011	0.1011
		Highest	0.6091	0.6091

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0197	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
Energy	2.0000e-004	1.8400e-003	1.5400e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	17.1713	17.1713	7.2000e-004	1.8000e-004	17.2427
Mobile	0.3858	0.3613	2.4066	3.9100e-003	0.3540	4.3200e-003	0.3583	0.0944	4.0100e-003	0.0985	0.0000	353.1121	353.1121	0.0191	0.0000	353.5892
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0133	0.0920	0.1052	1.3700e-003	3.0000e-005	0.1492
<b>Total</b>	<b>0.4057</b>	<b>0.3631</b>	<b>2.4082</b>	<b>3.9200e-003</b>	<b>0.3540</b>	<b>4.4600e-003</b>	<b>0.3585</b>	<b>0.0944</b>	<b>4.1500e-003</b>	<b>0.0986</b>	<b>0.0133</b>	<b>370.3755</b>	<b>370.3887</b>	<b>0.0212</b>	<b>2.1000e-004</b>	<b>370.9812</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0219	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
Energy	2.0000e-004	1.8400e-003	1.5400e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	17.1713	17.1713	7.2000e-004	1.8000e-004	17.2427
Mobile	0.3832	0.3488	2.3387	3.6800e-003	0.3296	4.1400e-003	0.3337	0.0879	3.8400e-003	0.0918	0.0000	332.0281	332.0281	0.0184	0.0000	332.4870
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0133	0.0920	0.1052	1.3700e-003	3.0000e-005	0.1492
<b>Total</b>	<b>0.4053</b>	<b>0.3506</b>	<b>2.3403</b>	<b>3.6900e-003</b>	<b>0.3296</b>	<b>4.2800e-003</b>	<b>0.3338</b>	<b>0.0879</b>	<b>3.9800e-003</b>	<b>0.0919</b>	<b>0.0133</b>	<b>349.2915</b>	<b>349.3048</b>	<b>0.0205</b>	<b>2.1000e-004</b>	<b>349.8791</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.10</b>	<b>3.44</b>	<b>2.82</b>	<b>5.87</b>	<b>6.90</b>	<b>4.04</b>	<b>6.87</b>	<b>6.90</b>	<b>4.10</b>	<b>6.79</b>	<b>0.00</b>	<b>5.69</b>	<b>5.69</b>	<b>3.40</b>	<b>0.00</b>	<b>5.69</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/9/2020	1/13/2021	5	200	
2	Paving	Paving	1/14/2021	1/27/2021	5	10	
3	Architectural Coating	Architectural Coating	1/28/2021	2/10/2021	5	10	

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 1.55****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,250; Non-Residential Outdoor: 1,750; Striped Parking Area: 4,051 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	29.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1939	1.4123	1.2595	2.1100e-003		0.0760	0.0760		0.0734	0.0734	0.0000	173.3727	173.3727	0.0322	0.0000	174.1774
<b>Total</b>	<b>0.1939</b>	<b>1.4123</b>	<b>1.2595</b>	<b>2.1100e-003</b>		<b>0.0760</b>	<b>0.0760</b>		<b>0.0734</b>	<b>0.0734</b>	<b>0.0000</b>	<b>173.3727</b>	<b>173.3727</b>	<b>0.0322</b>	<b>0.0000</b>	<b>174.1774</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.2 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7100e-003	0.1386	0.0282	3.3000e-004	7.6300e-003	7.1000e-004	8.3400e-003	2.2000e-003	6.8000e-004	2.8800e-003	0.0000	31.2439	31.2439	3.4700e-003	0.0000	31.3306
Worker	0.0123	9.5700e-003	0.0900	2.1000e-004	0.0223	1.5000e-004	0.0224	5.9100e-003	1.4000e-004	6.0500e-003	0.0000	18.8671	18.8671	7.0000e-004	0.0000	18.8846
<b>Total</b>	<b>0.0170</b>	<b>0.1482</b>	<b>0.1182</b>	<b>5.4000e-004</b>	<b>0.0299</b>	<b>8.6000e-004</b>	<b>0.0307</b>	<b>8.1100e-003</b>	<b>8.2000e-004</b>	<b>8.9300e-003</b>	<b>0.0000</b>	<b>50.1110</b>	<b>50.1110</b>	<b>4.1700e-003</b>	<b>0.0000</b>	<b>50.2152</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1939	1.4123	1.2595	2.1100e-003		0.0760	0.0760		0.0734	0.0734	0.0000	173.3725	173.3725	0.0322	0.0000	174.1771
<b>Total</b>	<b>0.1939</b>	<b>1.4123</b>	<b>1.2595</b>	<b>2.1100e-003</b>		<b>0.0760</b>	<b>0.0760</b>		<b>0.0734</b>	<b>0.0734</b>	<b>0.0000</b>	<b>173.3725</b>	<b>173.3725</b>	<b>0.0322</b>	<b>0.0000</b>	<b>174.1771</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.2 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7100e-003	0.1386	0.0282	3.3000e-004	7.6300e-003	7.1000e-004	8.3400e-003	2.2000e-003	6.8000e-004	2.8800e-003	0.0000	31.2439	31.2439	3.4700e-003	0.0000	31.3306
Worker	0.0123	9.5700e-003	0.0900	2.1000e-004	0.0223	1.5000e-004	0.0224	5.9100e-003	1.4000e-004	6.0500e-003	0.0000	18.8671	18.8671	7.0000e-004	0.0000	18.8846
<b>Total</b>	<b>0.0170</b>	<b>0.1482</b>	<b>0.1182</b>	<b>5.4000e-004</b>	<b>0.0299</b>	<b>8.6000e-004</b>	<b>0.0307</b>	<b>8.1100e-003</b>	<b>8.2000e-004</b>	<b>8.9300e-003</b>	<b>0.0000</b>	<b>50.1110</b>	<b>50.1110</b>	<b>4.1700e-003</b>	<b>0.0000</b>	<b>50.2152</b>

**3.2 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1600e-003	0.0614	0.0581	1.0000e-004		3.0800e-003	3.0800e-003		2.9700e-003	2.9700e-003	0.0000	8.1696	8.1696	1.4600e-003	0.0000	8.2061
<b>Total</b>	<b>8.1600e-003</b>	<b>0.0614</b>	<b>0.0581</b>	<b>1.0000e-004</b>		<b>3.0800e-003</b>	<b>3.0800e-003</b>		<b>2.9700e-003</b>	<b>2.9700e-003</b>	<b>0.0000</b>	<b>8.1696</b>	<b>8.1696</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>8.2061</b>



## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.2 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	5.9600e-003	1.1700e-003	2.0000e-005	3.6000e-004	2.0000e-005	3.8000e-004	1.0000e-004	2.0000e-005	1.2000e-004	0.0000	1.4584	1.4584	1.6000e-004	0.0000	1.4624
Worker	5.3000e-004	4.0000e-004	3.8200e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.8624	0.8624	3.0000e-005	0.0000	0.8631
<b>Total</b>	<b>7.2000e-004</b>	<b>6.3600e-003</b>	<b>4.9900e-003</b>	<b>3.0000e-005</b>	<b>1.4100e-003</b>	<b>3.0000e-005</b>	<b>1.4400e-003</b>	<b>3.8000e-004</b>	<b>3.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>2.3208</b>	<b>2.3208</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>2.3255</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1600e-003	0.0614	0.0581	1.0000e-004		3.0800e-003	3.0800e-003		2.9700e-003	2.9700e-003	0.0000	8.1696	8.1696	1.4600e-003	0.0000	8.2061
<b>Total</b>	<b>8.1600e-003</b>	<b>0.0614</b>	<b>0.0581</b>	<b>1.0000e-004</b>		<b>3.0800e-003</b>	<b>3.0800e-003</b>		<b>2.9700e-003</b>	<b>2.9700e-003</b>	<b>0.0000</b>	<b>8.1696</b>	<b>8.1696</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>8.2061</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.2 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	5.9600e-003	1.1700e-003	2.0000e-005	3.6000e-004	2.0000e-005	3.8000e-004	1.0000e-004	2.0000e-005	1.2000e-004	0.0000	1.4584	1.4584	1.6000e-004	0.0000	1.4624
Worker	5.3000e-004	4.0000e-004	3.8200e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.8624	0.8624	3.0000e-005	0.0000	0.8631
<b>Total</b>	<b>7.2000e-004</b>	<b>6.3600e-003</b>	<b>4.9900e-003</b>	<b>3.0000e-005</b>	<b>1.4100e-003</b>	<b>3.0000e-005</b>	<b>1.4400e-003</b>	<b>3.8000e-004</b>	<b>3.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>2.3208</b>	<b>2.3208</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>2.3255</b>

**3.3 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	2.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.9000e-003</b>	<b>0.0387</b>	<b>0.0443</b>	<b>7.0000e-005</b>		<b>2.0800e-003</b>	<b>2.0800e-003</b>		<b>1.9100e-003</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>5.8825</b>	<b>5.8825</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.9291</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.3 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	2.0000e-004	1.9000e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4295	0.4295	1.0000e-005	0.0000	0.4299
<b>Total</b>	<b>2.6000e-004</b>	<b>2.0000e-004</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4295</b>	<b>0.4295</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4299</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	2.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.9000e-003</b>	<b>0.0387</b>	<b>0.0443</b>	<b>7.0000e-005</b>		<b>2.0800e-003</b>	<b>2.0800e-003</b>		<b>1.9100e-003</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>5.8825</b>	<b>5.8825</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.9291</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.3 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	2.0000e-004	1.9000e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4295	0.4295	1.0000e-005	0.0000	0.4299
<b>Total</b>	<b>2.6000e-004</b>	<b>2.0000e-004</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4295</b>	<b>0.4295</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4299</b>

**3.4 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
<b>Total</b>	<b>0.0177</b>	<b>7.6300e-003</b>	<b>9.0900e-003</b>	<b>1.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2788</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.4 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	9.0000e-005	8.8000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1983	0.1983	1.0000e-005	0.0000	0.1984
<b>Total</b>	<b>1.2000e-004</b>	<b>9.0000e-005</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1983</b>	<b>0.1983</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1984</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
<b>Total</b>	<b>0.0177</b>	<b>7.6300e-003</b>	<b>9.0900e-003</b>	<b>1.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2788</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**3.4 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	9.0000e-005	8.8000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1983	0.1983	1.0000e-005	0.0000	0.1984
<b>Total</b>	<b>1.2000e-004</b>	<b>9.0000e-005</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1983</b>	<b>0.1983</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1984</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network



## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3832	0.3488	2.3387	3.6800e-003	0.3296	4.1400e-003	0.3337	0.0879	3.8400e-003	0.0918	0.0000	332.0281	332.0281	0.0184	0.0000	332.4870
Unmitigated	0.3858	0.3613	2.4066	3.9100e-003	0.3540	4.3200e-003	0.3583	0.0944	4.0100e-003	0.0985	0.0000	353.1121	353.1121	0.0191	0.0000	353.5892

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,170.40	817.88	667.52	945,405	880,172
Parking Lot	0.00	0.00	0.00		
Total	2,170.40	817.88	667.52	945,405	880,172

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.621212	0.035740	0.186095	0.120572	0.020115	0.004575	0.000203	0.000432	0.001742	0.001833	0.005782	0.000964	0.000735
Parking Lot	0.493375	0.028385	0.147799	0.120572	0.020115	0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15.1729	15.1729	6.9000e-004	1.4000e-004	15.2323
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15.1729	15.1729	6.9000e-004	1.4000e-004	15.2323
NaturalGas Mitigated	2.0000e-004	1.8400e-003	1.5400e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9985	1.9985	4.0000e-005	4.0000e-005	2.0104
NaturalGas Unmitigated	2.0000e-004	1.8400e-003	1.5400e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9985	1.9985	4.0000e-005	4.0000e-005	2.0104

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Convenience Market With Gas Pumps	37450	2.0000e-004	1.8400e-003	1.5400e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9985	1.9985	4.0000e-005	4.0000e-005	2.0104
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.0000e-004</b>	<b>1.8400e-003</b>	<b>1.5400e-003</b>	<b>1.0000e-005</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.9985</b>	<b>1.9985</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>2.0104</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Convenience Market With Gas Pumps	37450	2.0000e-004	1.8400e-003	1.5400e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9985	1.9985	4.0000e-005	4.0000e-005	2.0104
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.0000e-004</b>	<b>1.8400e-003</b>	<b>1.5400e-003</b>	<b>1.0000e-005</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.9985</b>	<b>1.9985</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>2.0104</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	28525	8.2983	3.8000e-004	8.0000e-005	8.3308
Parking Lot	23631.3	6.8746	3.1000e-004	6.0000e-005	6.9016
<b>Total</b>		<b>15.1729</b>	<b>6.9000e-004</b>	<b>1.4000e-004</b>	<b>15.2323</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	28525	8.2983	3.8000e-004	8.0000e-005	8.3308
Parking Lot	23631.3	6.8746	3.1000e-004	6.0000e-005	6.9016
<b>Total</b>		<b>15.1729</b>	<b>6.9000e-004</b>	<b>1.4000e-004</b>	<b>15.2323</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0219	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
Unmitigated	0.0197	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
<b>Total</b>	<b>0.0197</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.1000e-004</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.8400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
<b>Total</b>	<b>0.0219</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.1000e-004</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**



## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.1052	1.3700e-003	3.0000e-005	0.1492
Unmitigated	0.1052	1.3700e-003	3.0000e-005	0.1492

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.0418287 / 0.025637	0.1052	1.3700e-003	3.0000e-005	0.1492
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.1052</b>	<b>1.3700e-003</b>	<b>3.0000e-005</b>	<b>0.1492</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.0418287 / 0.025637	0.1052	1.3700e-003	3.0000e-005	0.1492
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.1052</b>	<b>1.3700e-003</b>	<b>3.0000e-005</b>	<b>0.1492</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Construction and Operation Fast Food Restaurants Annual**

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

## Lemoore Mixed Use Fast Food Pads

### Kings County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	0.82	Acre	0.82	35,632.08	0
Fast Food Restaurant with Drive Thru	6.00	1000sqft	0.14	6,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data



## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

Project Characteristics -

Land Use - Site Plan

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings

Area Coating - Rule 4601 Architectural Coatings compliance

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Fleet Mix - Project specific fleet mix for fast food restaurant

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Parking	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblAreaCoating	Area_EF_Parking	150	65
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblFleetMix	HHD	0.16	8.9000e-005
tblFleetMix	LDA	0.49	0.64
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	LHD1	0.02	8.9000e-004
tblFleetMix	LHD2	4.5750e-003	5.3000e-004
tblFleetMix	MHD	0.01	5.9000e-005
tblLandUse	LandUseSquareFeet	35,719.20	35,632.08

**2.0 Emissions Summary**

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0734	0.5103	0.4297	7.7000e-004	9.5800e-003	0.0277	0.0372	2.6000e-003	0.0255	0.0281	0.0000	68.7072	68.7072	0.0182	0.0000	69.1623
Maximum	0.0734	0.5103	0.4297	7.7000e-004	9.5800e-003	0.0277	0.0372	2.6000e-003	0.0255	0.0281	0.0000	68.7072	68.7072	0.0182	0.0000	69.1623

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0734	0.5103	0.4297	7.7000e-004	9.5800e-003	0.0277	0.0372	2.6000e-003	0.0255	0.0281	0.0000	68.7072	68.7072	0.0182	0.0000	69.1622
Maximum	0.0734	0.5103	0.4297	7.7000e-004	9.5800e-003	0.0277	0.0372	2.6000e-003	0.0255	0.0281	0.0000	68.7072	68.7072	0.0182	0.0000	69.1622

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-4-2020	7-3-2020	0.3483	0.3483
2	7-4-2020	9-30-2020	0.2351	0.2351
		Highest	0.3483	0.3483

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0279	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	121.5671	121.5671	3.7400e-003	1.7400e-003	122.1798
Mobile	0.7375	0.6877	5.6614	0.0113	1.1196	9.6800e-003	1.1292	0.2981	8.9600e-003	0.3071	0.0000	1,023.8619	1,023.8619	0.0467	0.0000	1,025.0297
Waste						0.0000	0.0000		0.0000	0.0000	14.0287	0.0000	14.0287	0.8291	0.0000	34.7555
Water						0.0000	0.0000		0.0000	0.0000	0.5778	2.9852	3.5629	0.0595	1.4300e-003	5.4758
<b>Total</b>	<b>0.7722</b>	<b>0.7496</b>	<b>5.7134</b>	<b>0.0117</b>	<b>1.1196</b>	<b>0.0144</b>	<b>1.1339</b>	<b>0.2981</b>	<b>0.0137</b>	<b>0.3118</b>	<b>14.6065</b>	<b>1,148.4143</b>	<b>1,163.0208</b>	<b>0.9390</b>	<b>3.1700e-003</b>	<b>1,187.4409</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0279	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	121.5671	121.5671	3.7400e-003	1.7400e-003	122.1798
Mobile	0.7300	0.6597	5.4482	0.0106	1.0423	9.2300e-003	1.0515	0.2776	8.5300e-003	0.2861	0.0000	959.0738	959.0738	0.0445	0.0000	960.1854
Waste						0.0000	0.0000		0.0000	0.0000	14.0287	0.0000	14.0287	0.8291	0.0000	34.7555
Water						0.0000	0.0000		0.0000	0.0000	0.5778	2.9852	3.5629	0.0595	1.4300e-003	5.4758
<b>Total</b>	<b>0.7647</b>	<b>0.7216</b>	<b>5.5002</b>	<b>0.0110</b>	<b>1.0423</b>	<b>0.0139</b>	<b>1.0562</b>	<b>0.2776</b>	<b>0.0132</b>	<b>0.2908</b>	<b>14.6065</b>	<b>1,083.6262</b>	<b>1,098.2327</b>	<b>0.9368</b>	<b>3.1700e-003</b>	<b>1,122.5967</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.96</b>	<b>3.74</b>	<b>3.73</b>	<b>6.07</b>	<b>6.90</b>	<b>3.13</b>	<b>6.85</b>	<b>6.90</b>	<b>3.15</b>	<b>6.73</b>	<b>0.00</b>	<b>5.64</b>	<b>5.57</b>	<b>0.24</b>	<b>0.00</b>	<b>5.46</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/4/2020	8/21/2020	5	100	
2	Paving	Paving	8/22/2020	8/28/2020	5	5	
3	Architectural Coating	Architectural Coating	8/29/2020	9/4/2020	5	5	

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0.82****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,000; Non-Residential Outdoor: 3,000; Striped Parking Area: 2,138 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	5	17.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0431	0.4426	0.3694	5.7000e-004		0.0261	0.0261		0.0240	0.0240	0.0000	50.0302	50.0302	0.0162	0.0000	50.4348
<b>Total</b>	<b>0.0431</b>	<b>0.4426</b>	<b>0.3694</b>	<b>5.7000e-004</b>		<b>0.0261</b>	<b>0.0261</b>		<b>0.0240</b>	<b>0.0240</b>	<b>0.0000</b>	<b>50.0302</b>	<b>50.0302</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.4348</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4400e-003	0.0423	8.6100e-003	1.0000e-004	2.3300e-003	2.2000e-004	2.5500e-003	6.7000e-004	2.1000e-004	8.8000e-004	0.0000	9.5422	9.5422	1.0600e-003	0.0000	9.5687
Worker	3.7600e-003	2.9400e-003	0.0276	6.0000e-005	6.8300e-003	5.0000e-005	6.8800e-003	1.8100e-003	4.0000e-005	1.8600e-003	0.0000	5.7906	5.7906	2.1000e-004	0.0000	5.7960
<b>Total</b>	<b>5.2000e-003</b>	<b>0.0453</b>	<b>0.0362</b>	<b>1.6000e-004</b>	<b>9.1600e-003</b>	<b>2.7000e-004</b>	<b>9.4300e-003</b>	<b>2.4800e-003</b>	<b>2.5000e-004</b>	<b>2.7400e-003</b>	<b>0.0000</b>	<b>15.3328</b>	<b>15.3328</b>	<b>1.2700e-003</b>	<b>0.0000</b>	<b>15.3646</b>



## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**3.2 Building Construction - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0431	0.4426	0.3694	5.7000e-004		0.0261	0.0261		0.0240	0.0240	0.0000	50.0302	50.0302	0.0162	0.0000	50.4347
<b>Total</b>	<b>0.0431</b>	<b>0.4426</b>	<b>0.3694</b>	<b>5.7000e-004</b>		<b>0.0261</b>	<b>0.0261</b>		<b>0.0240</b>	<b>0.0240</b>	<b>0.0000</b>	<b>50.0302</b>	<b>50.0302</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.4347</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4400e-003	0.0423	8.6100e-003	1.0000e-004	2.3300e-003	2.2000e-004	2.5500e-003	6.7000e-004	2.1000e-004	8.8000e-004	0.0000	9.5422	9.5422	1.0600e-003	0.0000	9.5687
Worker	3.7600e-003	2.9400e-003	0.0276	6.0000e-005	6.8300e-003	5.0000e-005	6.8800e-003	1.8100e-003	4.0000e-005	1.8600e-003	0.0000	5.7906	5.7906	2.1000e-004	0.0000	5.7960
<b>Total</b>	<b>5.2000e-003</b>	<b>0.0453</b>	<b>0.0362</b>	<b>1.6000e-004</b>	<b>9.1600e-003</b>	<b>2.7000e-004</b>	<b>9.4300e-003</b>	<b>2.4800e-003</b>	<b>2.5000e-004</b>	<b>2.7400e-003</b>	<b>0.0000</b>	<b>15.3328</b>	<b>15.3328</b>	<b>1.2700e-003</b>	<b>0.0000</b>	<b>15.3646</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**3.3 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9300e-003	0.0181	0.0178	3.0000e-005		9.9000e-004	9.9000e-004		9.2000e-004	9.2000e-004	0.0000	2.3482	2.3482	6.8000e-004	0.0000	2.3653
Paving	1.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.0000e-003</b>	<b>0.0181</b>	<b>0.0178</b>	<b>3.0000e-005</b>		<b>9.9000e-004</b>	<b>9.9000e-004</b>		<b>9.2000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>	<b>2.3482</b>	<b>2.3482</b>	<b>6.8000e-004</b>	<b>0.0000</b>	<b>2.3653</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.6000e-004	1.4600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3066	0.3066	1.0000e-005	0.0000	0.3069
<b>Total</b>	<b>2.0000e-004</b>	<b>1.6000e-004</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3066</b>	<b>0.3066</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3069</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**3.3 Paving - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9300e-003	0.0181	0.0178	3.0000e-005		9.9000e-004	9.9000e-004		9.2000e-004	9.2000e-004	0.0000	2.3482	2.3482	6.8000e-004	0.0000	2.3653
Paving	1.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.0000e-003</b>	<b>0.0181</b>	<b>0.0178</b>	<b>3.0000e-005</b>		<b>9.9000e-004</b>	<b>9.9000e-004</b>		<b>9.2000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>	<b>2.3482</b>	<b>2.3482</b>	<b>6.8000e-004</b>	<b>0.0000</b>	<b>2.3653</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.6000e-004	1.4600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3066	0.3066	1.0000e-005	0.0000	0.3069
<b>Total</b>	<b>2.0000e-004</b>	<b>1.6000e-004</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3066</b>	<b>0.3066</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3069</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**3.4 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396
<b>Total</b>	<b>0.0219</b>	<b>4.2100e-003</b>	<b>4.5800e-003</b>	<b>1.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.6396</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	2.4000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0511	0.0511	0.0000	0.0000	0.0511
<b>Total</b>	<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0511</b>	<b>0.0511</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0511</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**3.4 Architectural Coating - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396
<b>Total</b>	<b>0.0219</b>	<b>4.2100e-003</b>	<b>4.5800e-003</b>	<b>1.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.6396</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	2.4000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0511	0.0511	0.0000	0.0000	0.0511
<b>Total</b>	<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0511</b>	<b>0.0511</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0511</b>

**4.0 Operational Detail - Mobile**

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7300	0.6597	5.4482	0.0106	1.0423	9.2300e-003	1.0515	0.2776	8.5300e-003	0.2861	0.0000	959.0738	959.0738	0.0445	0.0000	960.1854
Unmitigated	0.7375	0.6877	5.6614	0.0113	1.1196	9.6800e-003	1.1292	0.2981	8.9600e-003	0.3071	0.0000	1,023.8619	1,023.8619	0.0467	0.0000	1,025.0297

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	2,976.72	4,332.18	3256.32	2,999,464	2,792,501
Parking Lot	0.00	0.00	0.00		
Total	2,976.72	4,332.18	3,256.32	2,999,464	2,792,501

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0



## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.638715	0.036747	0.191338	0.120572	0.000890	0.000530	0.000059	0.000089	0.001742	0.001833	0.005782	0.000964	0.000735
Parking Lot	0.493375	0.028385	0.147799	0.120572	0.020115	0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	54.1943	54.1943	2.4500e-003	5.1000e-004	54.4066
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	54.1943	54.1943	2.4500e-003	5.1000e-004	54.4066
NaturalGas Mitigated	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	67.3729	67.3729	1.2900e-003	1.2400e-003	67.7732
NaturalGas Unmitigated	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	67.3729	67.3729	1.2900e-003	1.2400e-003	67.7732

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	1.26252e+006	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	67.3729	67.3729	1.2900e-003	1.2400e-003	67.7732
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>6.8100e-003</b>	<b>0.0619</b>	<b>0.0520</b>	<b>3.7000e-004</b>		<b>4.7000e-003</b>	<b>4.7000e-003</b>		<b>4.7000e-003</b>	<b>4.7000e-003</b>	<b>0.0000</b>	<b>67.3729</b>	<b>67.3729</b>	<b>1.2900e-003</b>	<b>1.2400e-003</b>	<b>67.7732</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	1.26252e+006	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7000e-003	4.7000e-003		4.7000e-003	4.7000e-003	0.0000	67.3729	67.3729	1.2900e-003	1.2400e-003	67.7732
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>6.8100e-003</b>	<b>0.0619</b>	<b>0.0520</b>	<b>3.7000e-004</b>		<b>4.7000e-003</b>	<b>4.7000e-003</b>		<b>4.7000e-003</b>	<b>4.7000e-003</b>	<b>0.0000</b>	<b>67.3729</b>	<b>67.3729</b>	<b>1.2900e-003</b>	<b>1.2400e-003</b>	<b>67.7732</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	173820	50.5662	2.2900e-003	4.7000e-004	50.7644
Parking Lot	12471.2	3.6280	1.6000e-004	3.0000e-005	3.6422
<b>Total</b>		<b>54.1943</b>	<b>2.4500e-003</b>	<b>5.0000e-004</b>	<b>54.4066</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	173820	50.5662	2.2900e-003	4.7000e-004	50.7644
Parking Lot	12471.2	3.6280	1.6000e-004	3.0000e-005	3.6422
<b>Total</b>		<b>54.1943</b>	<b>2.4500e-003</b>	<b>5.0000e-004</b>	<b>54.4066</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0279	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Unmitigated	0.0279	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.1300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0257					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
<b>Total</b>	<b>0.0279</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.3000e-004</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.1300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0257					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
<b>Total</b>	<b>0.0279</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.3000e-004</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.5629	0.0595	1.4300e-003	5.4758
Unmitigated	3.5629	0.0595	1.4300e-003	5.4758

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	1.8212 / 0.116247	3.5629	0.0595	1.4300e-003	5.4758
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.5629</b>	<b>0.0595</b>	<b>1.4300e-003</b>	<b>5.4758</b>



## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	1.8212 / 0.116247	3.5629	0.0595	1.4300e-003	5.4758
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.5629</b>	<b>0.0595</b>	<b>1.4300e-003</b>	<b>5.4758</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.0287	0.8291	0.0000	34.7555
Unmitigated	14.0287	0.8291	0.0000	34.7555

## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	69.11	14.0287	0.8291	0.0000	34.7555
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>14.0287</b>	<b>0.8291</b>	<b>0.0000</b>	<b>34.7555</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	69.11	14.0287	0.8291	0.0000	34.7555
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>14.0287</b>	<b>0.8291</b>	<b>0.0000</b>	<b>34.7555</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Lemoore Mixed Use Fast Food Pads - Kings County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Construction and Operation Hotel Annual**

## Lemoore Mixed Use Project Hotel - Kings County, Annual

## Lemoore Mixed Use Project Hotel

### Kings County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.40	Acre	1.40	60,984.00	0
Hotel	90.00	Room	0.32	130,680.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Lemoore Mixed Use Project Hotel - Kings County, Annual

Project Characteristics -

Land Use - Site Plan

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings compliance

Area Coating - Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Architectural Coatings compliance

Fleet Mix - Project specific truck fleet trip fraction

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Parking	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblAreaCoating	Area_EF_Parking	150	65
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblFleetMix	HHD	0.16	1.2120e-003
tblFleetMix	LDA	0.49	0.64
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	LHD1	0.02	2.4250e-003
tblFleetMix	LHD2	4.5750e-003	1.6160e-003
tblFleetMix	MHD	0.01	4.0400e-004
tblLandUse	LotAcreage	3.00	0.32

**2.0 Emissions Summary**



## Lemoore Mixed Use Project Hotel - Kings County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2403	1.7971	1.5836	3.5400e-003	0.0819	0.0783	0.1601	0.0222	0.0756	0.0978	0.0000	306.7839	306.7839	0.0431	0.0000	307.8614
2021	0.4167	0.1247	0.1294	2.6000e-004	5.0200e-003	5.7000e-003	0.0107	1.3600e-003	5.4300e-003	6.7800e-003	0.0000	22.4631	22.4631	3.9400e-003	0.0000	22.5616
Maximum	0.4167	1.7971	1.5836	3.5400e-003	0.0819	0.0783	0.1601	0.0222	0.0756	0.0978	0.0000	306.7839	306.7839	0.0431	0.0000	307.8614

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2403	1.7971	1.5835	3.5400e-003	0.0819	0.0783	0.1601	0.0222	0.0756	0.0978	0.0000	306.7837	306.7837	0.0431	0.0000	307.8612
2021	0.4167	0.1247	0.1294	2.6000e-004	5.0200e-003	5.7000e-003	0.0107	1.3600e-003	5.4300e-003	6.7800e-003	0.0000	22.4631	22.4631	3.9400e-003	0.0000	22.5616
Maximum	0.4167	1.7971	1.5835	3.5400e-003	0.0819	0.0783	0.1601	0.0222	0.0756	0.0978	0.0000	306.7837	306.7837	0.0431	0.0000	307.8612

## Lemoore Mixed Use Project Hotel - Kings County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-9-2020	7-8-2020	0.6924	0.6924
2	7-9-2020	10-8-2020	0.7002	0.7002
3	10-9-2020	1-8-2021	0.6975	0.6975
4	1-9-2021	4-8-2021	0.4885	0.4885
		Highest	0.7002	0.7002

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5543	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
Energy	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	483.4444	483.4444	0.0173	6.1000e-003	485.6937
Mobile	0.1879	0.2743	1.9525	4.9100e-003	0.5017	3.7600e-003	0.5055	0.1337	3.4900e-003	0.1371	0.0000	444.8131	444.8131	0.0185	0.0000	445.2766
Waste						0.0000	0.0000		0.0000	0.0000	10.0014	0.0000	10.0014	0.5911	0.0000	24.7780
Water						0.0000	0.0000		0.0000	0.0000	0.7243	3.8520	4.5763	0.0746	1.7900e-003	6.9747
<b>Total</b>	<b>0.7599</b>	<b>0.4354</b>	<b>2.0886</b>	<b>5.8800e-003</b>	<b>0.5017</b>	<b>0.0160</b>	<b>0.5177</b>	<b>0.1337</b>	<b>0.0157</b>	<b>0.1494</b>	<b>10.7257</b>	<b>932.1112</b>	<b>942.8368</b>	<b>0.7015</b>	<b>7.8900e-003</b>	<b>962.7247</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5543	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
Energy	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	483.4444	483.4444	0.0173	6.1000e-003	485.6937
Mobile	0.1845	0.2608	1.8569	4.5900e-003	0.4671	3.5500e-003	0.4706	0.1244	3.2900e-003	0.1277	0.0000	415.5329	415.5329	0.0175	0.0000	415.9712
Waste						0.0000	0.0000		0.0000	0.0000	10.0014	0.0000	10.0014	0.5911	0.0000	24.7780
Water						0.0000	0.0000		0.0000	0.0000	0.7243	3.8520	4.5763	0.0746	1.7900e-003	6.9747
<b>Total</b>	<b>0.7566</b>	<b>0.4219</b>	<b>1.9931</b>	<b>5.5600e-003</b>	<b>0.4671</b>	<b>0.0158</b>	<b>0.4829</b>	<b>0.1244</b>	<b>0.0155</b>	<b>0.1400</b>	<b>10.7257</b>	<b>902.8309</b>	<b>913.5566</b>	<b>0.7005</b>	<b>7.8900e-003</b>	<b>933.4193</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.44</b>	<b>3.11</b>	<b>4.57</b>	<b>5.44</b>	<b>6.90</b>	<b>1.31</b>	<b>6.73</b>	<b>6.90</b>	<b>1.27</b>	<b>6.30</b>	<b>0.00</b>	<b>3.14</b>	<b>3.11</b>	<b>0.14</b>	<b>0.00</b>	<b>3.04</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/9/2020	1/13/2021	5	200	
2	Paving	Paving	1/14/2021	1/27/2021	5	10	
3	Architectural Coating	Architectural Coating	1/28/2021	2/10/2021	5	10	

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 1.4****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 196,020; Non-Residential Outdoor: 65,340; Striped Parking Area: 3,659 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	81.00	31.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1939	1.4123	1.2595	2.1100e-003		0.0760	0.0760		0.0734	0.0734	0.0000	173.3727	173.3727	0.0322	0.0000	174.1774
<b>Total</b>	<b>0.1939</b>	<b>1.4123</b>	<b>1.2595</b>	<b>2.1100e-003</b>		<b>0.0760</b>	<b>0.0760</b>		<b>0.0734</b>	<b>0.0734</b>	<b>0.0000</b>	<b>173.3727</b>	<b>173.3727</b>	<b>0.0322</b>	<b>0.0000</b>	<b>174.1774</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.2 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.3581	0.0728	8.5000e-004	0.0197	1.8200e-003	0.0215	5.6900e-003	1.7500e-003	7.4400e-003	0.0000	80.7133	80.7133	8.9600e-003	0.0000	80.9374
Worker	0.0342	0.0267	0.2513	5.8000e-004	0.0622	4.2000e-004	0.0626	0.0165	3.9000e-004	0.0169	0.0000	52.6979	52.6979	1.9500e-003	0.0000	52.7467
<b>Total</b>	<b>0.0464</b>	<b>0.3848</b>	<b>0.3241</b>	<b>1.4300e-003</b>	<b>0.0819</b>	<b>2.2400e-003</b>	<b>0.0841</b>	<b>0.0222</b>	<b>2.1400e-003</b>	<b>0.0243</b>	<b>0.0000</b>	<b>133.4112</b>	<b>133.4112</b>	<b>0.0109</b>	<b>0.0000</b>	<b>133.6840</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1939	1.4123	1.2595	2.1100e-003		0.0760	0.0760		0.0734	0.0734	0.0000	173.3725	173.3725	0.0322	0.0000	174.1771
<b>Total</b>	<b>0.1939</b>	<b>1.4123</b>	<b>1.2595</b>	<b>2.1100e-003</b>		<b>0.0760</b>	<b>0.0760</b>		<b>0.0734</b>	<b>0.0734</b>	<b>0.0000</b>	<b>173.3725</b>	<b>173.3725</b>	<b>0.0322</b>	<b>0.0000</b>	<b>174.1771</b>



## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.2 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.3581	0.0728	8.5000e-004	0.0197	1.8200e-003	0.0215	5.6900e-003	1.7500e-003	7.4400e-003	0.0000	80.7133	80.7133	8.9600e-003	0.0000	80.9374
Worker	0.0342	0.0267	0.2513	5.8000e-004	0.0622	4.2000e-004	0.0626	0.0165	3.9000e-004	0.0169	0.0000	52.6979	52.6979	1.9500e-003	0.0000	52.7467
<b>Total</b>	<b>0.0464</b>	<b>0.3848</b>	<b>0.3241</b>	<b>1.4300e-003</b>	<b>0.0819</b>	<b>2.2400e-003</b>	<b>0.0841</b>	<b>0.0222</b>	<b>2.1400e-003</b>	<b>0.0243</b>	<b>0.0000</b>	<b>133.4112</b>	<b>133.4112</b>	<b>0.0109</b>	<b>0.0000</b>	<b>133.6840</b>

**3.2 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1600e-003	0.0614	0.0581	1.0000e-004		3.0800e-003	3.0800e-003		2.9700e-003	2.9700e-003	0.0000	8.1696	8.1696	1.4600e-003	0.0000	8.2061
<b>Total</b>	<b>8.1600e-003</b>	<b>0.0614</b>	<b>0.0581</b>	<b>1.0000e-004</b>		<b>3.0800e-003</b>	<b>3.0800e-003</b>		<b>2.9700e-003</b>	<b>2.9700e-003</b>	<b>0.0000</b>	<b>8.1696</b>	<b>8.1696</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>8.2061</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.2 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	0.0154	3.0200e-003	4.0000e-005	9.3000e-004	5.0000e-005	9.8000e-004	2.7000e-004	4.0000e-005	3.1000e-004	0.0000	3.7674	3.7674	4.1000e-004	0.0000	3.7778
Worker	1.4800e-003	1.1200e-003	0.0107	3.0000e-005	2.9300e-003	2.0000e-005	2.9500e-003	7.8000e-004	2.0000e-005	8.0000e-004	0.0000	2.4088	2.4088	8.0000e-005	0.0000	2.4108
<b>Total</b>	<b>1.9600e-003</b>	<b>0.0165</b>	<b>0.0137</b>	<b>7.0000e-005</b>	<b>3.8600e-003</b>	<b>7.0000e-005</b>	<b>3.9300e-003</b>	<b>1.0500e-003</b>	<b>6.0000e-005</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>6.1762</b>	<b>6.1762</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>6.1885</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1600e-003	0.0614	0.0581	1.0000e-004		3.0800e-003	3.0800e-003		2.9700e-003	2.9700e-003	0.0000	8.1696	8.1696	1.4600e-003	0.0000	8.2061
<b>Total</b>	<b>8.1600e-003</b>	<b>0.0614</b>	<b>0.0581</b>	<b>1.0000e-004</b>		<b>3.0800e-003</b>	<b>3.0800e-003</b>		<b>2.9700e-003</b>	<b>2.9700e-003</b>	<b>0.0000</b>	<b>8.1696</b>	<b>8.1696</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>8.2061</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.2 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	0.0154	3.0200e-003	4.0000e-005	9.3000e-004	5.0000e-005	9.8000e-004	2.7000e-004	4.0000e-005	3.1000e-004	0.0000	3.7674	3.7674	4.1000e-004	0.0000	3.7778
Worker	1.4800e-003	1.1200e-003	0.0107	3.0000e-005	2.9300e-003	2.0000e-005	2.9500e-003	7.8000e-004	2.0000e-005	8.0000e-004	0.0000	2.4088	2.4088	8.0000e-005	0.0000	2.4108
<b>Total</b>	<b>1.9600e-003</b>	<b>0.0165</b>	<b>0.0137</b>	<b>7.0000e-005</b>	<b>3.8600e-003</b>	<b>7.0000e-005</b>	<b>3.9300e-003</b>	<b>1.0500e-003</b>	<b>6.0000e-005</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>6.1762</b>	<b>6.1762</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>6.1885</b>

**3.3 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	1.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.7000e-003</b>	<b>0.0387</b>	<b>0.0443</b>	<b>7.0000e-005</b>		<b>2.0800e-003</b>	<b>2.0800e-003</b>		<b>1.9100e-003</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>5.8825</b>	<b>5.8825</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.9291</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.3 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	2.0000e-004	1.9000e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4295	0.4295	1.0000e-005	0.0000	0.4299
<b>Total</b>	<b>2.6000e-004</b>	<b>2.0000e-004</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4295</b>	<b>0.4295</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4299</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	1.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.7000e-003</b>	<b>0.0387</b>	<b>0.0443</b>	<b>7.0000e-005</b>		<b>2.0800e-003</b>	<b>2.0800e-003</b>		<b>1.9100e-003</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>5.8825</b>	<b>5.8825</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.9291</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.3 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	2.0000e-004	1.9000e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4295	0.4295	1.0000e-005	0.0000	0.4299
<b>Total</b>	<b>2.6000e-004</b>	<b>2.0000e-004</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4295</b>	<b>0.4295</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4299</b>

**3.4 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3992					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
<b>Total</b>	<b>0.4003</b>	<b>7.6300e-003</b>	<b>9.0900e-003</b>	<b>1.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2788</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.4 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.5000e-004	2.3400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5287	0.5287	2.0000e-005	0.0000	0.5291
<b>Total</b>	<b>3.3000e-004</b>	<b>2.5000e-004</b>	<b>2.3400e-003</b>	<b>1.0000e-005</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>6.5000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.5287</b>	<b>0.5287</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5291</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3992					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
<b>Total</b>	<b>0.4003</b>	<b>7.6300e-003</b>	<b>9.0900e-003</b>	<b>1.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2788</b>



## Lemoore Mixed Use Project Hotel - Kings County, Annual

**3.4 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.5000e-004	2.3400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5287	0.5287	2.0000e-005	0.0000	0.5291
<b>Total</b>	<b>3.3000e-004</b>	<b>2.5000e-004</b>	<b>2.3400e-003</b>	<b>1.0000e-005</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>6.5000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.5287</b>	<b>0.5287</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5291</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network

## Lemoore Mixed Use Project Hotel - Kings County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1845	0.2608	1.8569	4.5900e-003	0.4671	3.5500e-003	0.4706	0.1244	3.2900e-003	0.1277	0.0000	415.5329	415.5329	0.0175	0.0000	415.9712
Unmitigated	0.1879	0.2743	1.9525	4.9100e-003	0.5017	3.7600e-003	0.5055	0.1337	3.4900e-003	0.1371	0.0000	444.8131	444.8131	0.0185	0.0000	445.2766

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	735.30	737.10	535.50	1,343,278	1,250,592
Parking Lot	0.00	0.00	0.00		
Total	735.30	737.10	535.50	1,343,278	1,250,592

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.635705	0.036574	0.190436	0.120572	0.002425	0.001616	0.000404	0.001212	0.001742	0.001833	0.005782	0.000964	0.000735
Parking Lot	0.493375	0.028385	0.147799	0.120572	0.020115	0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	308.0588	308.0588	0.0139	2.8800e-003	309.2659
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	308.0588	308.0588	0.0139	2.8800e-003	309.2659
NaturalGas Mitigated	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	175.3856	175.3856	3.3600e-003	3.2200e-003	176.4278
NaturalGas Unmitigated	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	175.3856	175.3856	3.3600e-003	3.2200e-003	176.4278

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	3.2866e+006	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	175.3856	175.3856	3.3600e-003	3.2200e-003	176.4278
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0177</b>	<b>0.1611</b>	<b>0.1353</b>	<b>9.7000e-004</b>		<b>0.0122</b>	<b>0.0122</b>		<b>0.0122</b>	<b>0.0122</b>	<b>0.0000</b>	<b>175.3856</b>	<b>175.3856</b>	<b>3.3600e-003</b>	<b>3.2200e-003</b>	<b>176.4278</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	3.2866e+006	0.0177	0.1611	0.1353	9.7000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	175.3856	175.3856	3.3600e-003	3.2200e-003	176.4278
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0177</b>	<b>0.1611</b>	<b>0.1353</b>	<b>9.7000e-004</b>		<b>0.0122</b>	<b>0.0122</b>		<b>0.0122</b>	<b>0.0122</b>	<b>0.0000</b>	<b>175.3856</b>	<b>175.3856</b>	<b>3.3600e-003</b>	<b>3.2200e-003</b>	<b>176.4278</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.0376e+006	301.8495	0.0137	2.8200e-003	303.0322
Parking Lot	21344.4	6.2093	2.8000e-004	6.0000e-005	6.2337
<b>Total</b>		<b>308.0588</b>	<b>0.0139</b>	<b>2.8800e-003</b>	<b>309.2659</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.0376e+006	301.8495	0.0137	2.8200e-003	303.0322
Parking Lot	21344.4	6.2093	2.8000e-004	6.0000e-005	6.2337
<b>Total</b>		<b>308.0588</b>	<b>0.0139</b>	<b>2.8800e-003</b>	<b>309.2659</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Lemoore Mixed Use Project Hotel - Kings County, Annual

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5543	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
Unmitigated	0.5543	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
<b>Total</b>	<b>0.5543</b>	<b>1.0000e-005</b>	<b>8.4000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.6300e-003</b>	<b>1.6300e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7400e-003</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6300e-003	1.6300e-003	0.0000	0.0000	1.7400e-003
<b>Total</b>	<b>0.5543</b>	<b>1.0000e-005</b>	<b>8.4000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.6300e-003</b>	<b>1.6300e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7400e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**



## Lemoore Mixed Use Project Hotel - Kings County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.5763	0.0746	1.7900e-003	6.9747
Unmitigated	4.5763	0.0746	1.7900e-003	6.9747

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.28301 / 0.253668	4.5763	0.0746	1.7900e-003	6.9747
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>4.5763</b>	<b>0.0746</b>	<b>1.7900e-003</b>	<b>6.9747</b>

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.28301 / 0.253668	4.5763	0.0746	1.7900e-003	6.9747
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>4.5763</b>	<b>0.0746</b>	<b>1.7900e-003</b>	<b>6.9747</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.0014	0.5911	0.0000	24.7780
Unmitigated	10.0014	0.5911	0.0000	24.7780

## Lemoore Mixed Use Project Hotel - Kings County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	49.27	10.0014	0.5911	0.0000	24.7780
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>10.0014</b>	<b>0.5911</b>	<b>0.0000</b>	<b>24.7780</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	49.27	10.0014	0.5911	0.0000	24.7780
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>10.0014</b>	<b>0.5911</b>	<b>0.0000</b>	<b>24.7780</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Lemoore Mixed Use Project Hotel - Kings County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Construction and Operation Retail Shopping Center Annual**

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

## Lemoore Mixed Use Retail Shopping Center

### Kings County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.05	Acre	1.05	45,650.88	0
Strip Mall	7.04	1000sqft	0.16	7,040.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site Plan Data

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings compliance

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Architectural Coatings compliance

Fleet Mix - Fleet mix revised to reflect truck survey data for retail shops

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Parking	150.00	65.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	65
tblFleetMix	HHD	0.16	1.1800e-003
tblFleetMix	LDA	0.49	0.64
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	LHD1	0.02	7.2900e-004
tblFleetMix	LHD2	4.5750e-003	7.2900e-004
tblFleetMix	MHD	0.01	3.1860e-003
tblLandUse	LandUseSquareFeet	45,738.00	45,650.88

## 2.0 Emissions Summary

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## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2063	1.5232	1.3457	2.5000e-003	0.0218	0.0767	0.0985	5.9300e-003	0.0740	0.0800	0.0000	210.4681	210.4681	0.0353	0.0000	211.3504
2021	0.0407	0.1127	0.1176	2.1000e-004	1.7100e-003	5.6500e-003	7.3600e-003	4.6000e-004	5.3800e-003	5.8400e-003	0.0000	17.6087	17.6087	3.5700e-003	0.0000	17.6980
Maximum	0.2063	1.5232	1.3457	2.5000e-003	0.0218	0.0767	0.0985	5.9300e-003	0.0740	0.0800	0.0000	210.4681	210.4681	0.0353	0.0000	211.3504

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2063	1.5232	1.3457	2.5000e-003	0.0218	0.0767	0.0985	5.9300e-003	0.0740	0.0800	0.0000	210.4678	210.4678	0.0353	0.0000	211.3502
2021	0.0407	0.1127	0.1176	2.1000e-004	1.7100e-003	5.6500e-003	7.3600e-003	4.6000e-004	5.3800e-003	5.8400e-003	0.0000	17.6087	17.6087	3.5700e-003	0.0000	17.6980
Maximum	0.2063	1.5232	1.3457	2.5000e-003	0.0218	0.0767	0.0985	5.9300e-003	0.0740	0.0800	0.0000	210.4678	210.4678	0.0353	0.0000	211.3502

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-9-2020	7-8-2020	0.5883	0.5883
2	7-9-2020	10-8-2020	0.5948	0.5948
3	10-9-2020	1-8-2021	0.5912	0.5912
4	1-9-2021	4-8-2021	0.1084	0.1084
		Highest	0.5948	0.5948

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0363	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.5000e-004
Energy	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	25.3593	25.3593	1.0400e-003	2.7000e-004	25.4668
Mobile	0.0721	0.0998	0.6839	1.6300e-003	0.1644	1.2800e-003	0.1657	0.0438	1.1900e-003	0.0450	0.0000	147.9464	147.9464	6.3700e-003	0.0000	148.1058
Waste						0.0000	0.0000		0.0000	0.0000	1.5001	0.0000	1.5001	0.0887	0.0000	3.7164
Water						0.0000	0.0000		0.0000	0.0000	0.1654	1.1463	1.3117	0.0170	4.1000e-004	1.8606
<b>Total</b>	<b>0.1088</b>	<b>0.1034</b>	<b>0.6871</b>	<b>1.6500e-003</b>	<b>0.1644</b>	<b>1.5600e-003</b>	<b>0.1660</b>	<b>0.0438</b>	<b>1.4700e-003</b>	<b>0.0453</b>	<b>1.6655</b>	<b>174.4521</b>	<b>176.1176</b>	<b>0.1131</b>	<b>6.8000e-004</b>	<b>179.1497</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0330	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.5000e-004
Energy	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	25.3593	25.3593	1.0400e-003	2.7000e-004	25.4668
Mobile	0.0710	0.0953	0.6526	1.5300e-003	0.1531	1.2100e-003	0.1543	0.0408	1.1200e-003	0.0419	0.0000	138.3107	138.3107	6.0400e-003	0.0000	138.4618
Waste						0.0000	0.0000		0.0000	0.0000	1.5001	0.0000	1.5001	0.0887	0.0000	3.7164
Water						0.0000	0.0000		0.0000	0.0000	0.1654	1.1463	1.3117	0.0170	4.1000e-004	1.8606
<b>Total</b>	<b>0.1044</b>	<b>0.0990</b>	<b>0.6558</b>	<b>1.5500e-003</b>	<b>0.1531</b>	<b>1.4900e-003</b>	<b>0.1546</b>	<b>0.0408</b>	<b>1.4000e-003</b>	<b>0.0422</b>	<b>1.6655</b>	<b>164.8164</b>	<b>166.4819</b>	<b>0.1128</b>	<b>6.8000e-004</b>	<b>169.5057</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>4.06</b>	<b>4.29</b>	<b>4.55</b>	<b>6.06</b>	<b>6.90</b>	<b>4.49</b>	<b>6.88</b>	<b>6.92</b>	<b>4.76</b>	<b>6.80</b>	<b>0.00</b>	<b>5.52</b>	<b>5.47</b>	<b>0.29</b>	<b>0.00</b>	<b>5.38</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/9/2020	1/13/2021	5	200	
2	Paving	Paving	1/14/2021	1/27/2021	5	10	
3	Architectural Coating	Architectural Coating	1/28/2021	2/10/2021	5	10	

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 1.05****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,560; Non-Residential Outdoor: 3,520; Striped Parking Area: 2,739 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	21.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1939	1.4123	1.2595	2.1100e-003		0.0760	0.0760		0.0734	0.0734	0.0000	173.3727	173.3727	0.0322	0.0000	174.1774
<b>Total</b>	<b>0.1939</b>	<b>1.4123</b>	<b>1.2595</b>	<b>2.1100e-003</b>		<b>0.0760</b>	<b>0.0760</b>		<b>0.0734</b>	<b>0.0734</b>	<b>0.0000</b>	<b>173.3727</b>	<b>173.3727</b>	<b>0.0322</b>	<b>0.0000</b>	<b>174.1774</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.2 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5300e-003	0.1040	0.0211	2.5000e-004	5.7200e-003	5.3000e-004	6.2500e-003	1.6500e-003	5.1000e-004	2.1600e-003	0.0000	23.4329	23.4329	2.6000e-003	0.0000	23.4980
Worker	8.8700e-003	6.9300e-003	0.0652	1.5000e-004	0.0161	1.1000e-004	0.0162	4.2800e-003	1.0000e-004	4.3800e-003	0.0000	13.6624	13.6624	5.1000e-004	0.0000	13.6751
<b>Total</b>	<b>0.0124</b>	<b>0.1109</b>	<b>0.0863</b>	<b>4.0000e-004</b>	<b>0.0218</b>	<b>6.4000e-004</b>	<b>0.0225</b>	<b>5.9300e-003</b>	<b>6.1000e-004</b>	<b>6.5400e-003</b>	<b>0.0000</b>	<b>37.0953</b>	<b>37.0953</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>37.1730</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1939	1.4123	1.2595	2.1100e-003		0.0760	0.0760		0.0734	0.0734	0.0000	173.3725	173.3725	0.0322	0.0000	174.1771
<b>Total</b>	<b>0.1939</b>	<b>1.4123</b>	<b>1.2595</b>	<b>2.1100e-003</b>		<b>0.0760</b>	<b>0.0760</b>		<b>0.0734</b>	<b>0.0734</b>	<b>0.0000</b>	<b>173.3725</b>	<b>173.3725</b>	<b>0.0322</b>	<b>0.0000</b>	<b>174.1771</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.2 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5300e-003	0.1040	0.0211	2.5000e-004	5.7200e-003	5.3000e-004	6.2500e-003	1.6500e-003	5.1000e-004	2.1600e-003	0.0000	23.4329	23.4329	2.6000e-003	0.0000	23.4980
Worker	8.8700e-003	6.9300e-003	0.0652	1.5000e-004	0.0161	1.1000e-004	0.0162	4.2800e-003	1.0000e-004	4.3800e-003	0.0000	13.6624	13.6624	5.1000e-004	0.0000	13.6751
<b>Total</b>	<b>0.0124</b>	<b>0.1109</b>	<b>0.0863</b>	<b>4.0000e-004</b>	<b>0.0218</b>	<b>6.4000e-004</b>	<b>0.0225</b>	<b>5.9300e-003</b>	<b>6.1000e-004</b>	<b>6.5400e-003</b>	<b>0.0000</b>	<b>37.0953</b>	<b>37.0953</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>37.1730</b>

**3.2 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1600e-003	0.0614	0.0581	1.0000e-004		3.0800e-003	3.0800e-003		2.9700e-003	2.9700e-003	0.0000	8.1696	8.1696	1.4600e-003	0.0000	8.2061
<b>Total</b>	<b>8.1600e-003</b>	<b>0.0614</b>	<b>0.0581</b>	<b>1.0000e-004</b>		<b>3.0800e-003</b>	<b>3.0800e-003</b>		<b>2.9700e-003</b>	<b>2.9700e-003</b>	<b>0.0000</b>	<b>8.1696</b>	<b>8.1696</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>8.2061</b>



## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.2 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.4700e-003	8.8000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0938	1.0938	1.2000e-004	0.0000	1.0968
Worker	3.8000e-004	2.9000e-004	2.7700e-003	1.0000e-005	7.6000e-004	0.0000	7.6000e-004	2.0000e-004	0.0000	2.1000e-004	0.0000	0.6245	0.6245	2.0000e-005	0.0000	0.6250
<b>Total</b>	<b>5.2000e-004</b>	<b>4.7600e-003</b>	<b>3.6500e-003</b>	<b>2.0000e-005</b>	<b>1.0300e-003</b>	<b>1.0000e-005</b>	<b>1.0400e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>1.7183</b>	<b>1.7183</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.7218</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1600e-003	0.0614	0.0581	1.0000e-004		3.0800e-003	3.0800e-003		2.9700e-003	2.9700e-003	0.0000	8.1696	8.1696	1.4600e-003	0.0000	8.2061
<b>Total</b>	<b>8.1600e-003</b>	<b>0.0614</b>	<b>0.0581</b>	<b>1.0000e-004</b>		<b>3.0800e-003</b>	<b>3.0800e-003</b>		<b>2.9700e-003</b>	<b>2.9700e-003</b>	<b>0.0000</b>	<b>8.1696</b>	<b>8.1696</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>8.2061</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.2 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.4700e-003	8.8000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0938	1.0938	1.2000e-004	0.0000	1.0968
Worker	3.8000e-004	2.9000e-004	2.7700e-003	1.0000e-005	7.6000e-004	0.0000	7.6000e-004	2.0000e-004	0.0000	2.1000e-004	0.0000	0.6245	0.6245	2.0000e-005	0.0000	0.6250
<b>Total</b>	<b>5.2000e-004</b>	<b>4.7600e-003</b>	<b>3.6500e-003</b>	<b>2.0000e-005</b>	<b>1.0300e-003</b>	<b>1.0000e-005</b>	<b>1.0400e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>1.7183</b>	<b>1.7183</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.7218</b>

**3.3 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	1.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.2500e-003</b>	<b>0.0387</b>	<b>0.0443</b>	<b>7.0000e-005</b>		<b>2.0800e-003</b>	<b>2.0800e-003</b>		<b>1.9100e-003</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>5.8825</b>	<b>5.8825</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.9291</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.3 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	2.0000e-004	1.9000e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4295	0.4295	1.0000e-005	0.0000	0.4299
<b>Total</b>	<b>2.6000e-004</b>	<b>2.0000e-004</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4295</b>	<b>0.4295</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4299</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	1.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.2500e-003</b>	<b>0.0387</b>	<b>0.0443</b>	<b>7.0000e-005</b>		<b>2.0800e-003</b>	<b>2.0800e-003</b>		<b>1.9100e-003</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>5.8825</b>	<b>5.8825</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.9291</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.3 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	2.0000e-004	1.9000e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4295	0.4295	1.0000e-005	0.0000	0.4299
<b>Total</b>	<b>2.6000e-004</b>	<b>2.0000e-004</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.3000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4295</b>	<b>0.4295</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4299</b>

**3.4 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
<b>Total</b>	<b>0.0264</b>	<b>7.6300e-003</b>	<b>9.0900e-003</b>	<b>1.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2788</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.4 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1322	0.1322	0.0000	0.0000	0.1323
<b>Total</b>	<b>8.0000e-005</b>	<b>6.0000e-005</b>	<b>5.9000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1322</b>	<b>0.1322</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1323</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
<b>Total</b>	<b>0.0264</b>	<b>7.6300e-003</b>	<b>9.0900e-003</b>	<b>1.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2788</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**3.4 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1322	0.1322	0.0000	0.0000	0.1323
<b>Total</b>	<b>8.0000e-005</b>	<b>6.0000e-005</b>	<b>5.9000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1322</b>	<b>0.1322</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1323</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0710	0.0953	0.6526	1.5300e-003	0.1531	1.2100e-003	0.1543	0.0408	1.1200e-003	0.0419	0.0000	138.3107	138.3107	6.0400e-003	0.0000	138.4618
Unmitigated	0.0721	0.0998	0.6839	1.6300e-003	0.1644	1.2800e-003	0.1657	0.0438	1.1900e-003	0.0450	0.0000	147.9464	147.9464	6.3700e-003	0.0000	148.1058

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Strip Mall	312.01	295.96	143.83	439,977	409,619
Total	312.01	295.96	143.83	439,977	409,619

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.493375	0.028385	0.147799	0.120572	0.020115	0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735
Strip Mall	0.635582	0.036567	0.190400	0.120572	0.000729	0.000729	0.003186	0.001180	0.001742	0.001833	0.005782	0.000964	0.000735



## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21.3395	21.3395	9.6000e-004	2.0000e-004	21.4231
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21.3395	21.3395	9.6000e-004	2.0000e-004	21.4231
NaturalGas Mitigated	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0198	4.0198	8.0000e-005	7.0000e-005	4.0437
NaturalGas Unmitigated	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0198	4.0198	8.0000e-005	7.0000e-005	4.0437

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	75328	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0198	4.0198	8.0000e-005	7.0000e-005	4.0437
<b>Total</b>		<b>4.1000e-004</b>	<b>3.6900e-003</b>	<b>3.1000e-003</b>	<b>2.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>4.0198</b>	<b>4.0198</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>4.0437</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	75328	4.1000e-004	3.6900e-003	3.1000e-003	2.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	4.0198	4.0198	8.0000e-005	7.0000e-005	4.0437
<b>Total</b>		<b>4.1000e-004</b>	<b>3.6900e-003</b>	<b>3.1000e-003</b>	<b>2.0000e-005</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>4.0198</b>	<b>4.0198</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>4.0437</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	15977.8	4.6481	2.1000e-004	4.0000e-005	4.6663
Strip Mall	57376	16.6913	7.5000e-004	1.6000e-004	16.7567
<b>Total</b>		<b>21.3395</b>	<b>9.6000e-004</b>	<b>2.0000e-004</b>	<b>21.4231</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	15977.8	4.6481	2.1000e-004	4.0000e-005	4.6663
Strip Mall	57376	16.6913	7.5000e-004	1.6000e-004	16.7567
<b>Total</b>		<b>21.3395</b>	<b>9.6000e-004</b>	<b>2.0000e-004</b>	<b>21.4231</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0330	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.5000e-004
Unmitigated	0.0363	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.5000e-004

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.8500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0305					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.5000e-004
<b>Total</b>	<b>0.0363</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.5000e-004</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0305					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.5000e-004
<b>Total</b>	<b>0.0330</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.5000e-004</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.3117	0.0170	4.1000e-004	1.8606
Unmitigated	1.3117	0.0170	4.1000e-004	1.8606

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.521471 / 0.319611	1.3117	0.0170	4.1000e-004	1.8606
<b>Total</b>		<b>1.3117</b>	<b>0.0170</b>	<b>4.1000e-004</b>	<b>1.8606</b>

## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.521471 / 0.319611	1.3117	0.0170	4.1000e-004	1.8606
<b>Total</b>		<b>1.3117</b>	<b>0.0170</b>	<b>4.1000e-004</b>	<b>1.8606</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.5001	0.0887	0.0000	3.7164
Unmitigated	1.5001	0.0887	0.0000	3.7164



## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.39	1.5001	0.0887	0.0000	3.7164
<b>Total</b>		<b>1.5001</b>	<b>0.0887</b>	<b>0.0000</b>	<b>3.7164</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.39	1.5001	0.0887	0.0000	3.7164
<b>Total</b>		<b>1.5001</b>	<b>0.0887</b>	<b>0.0000</b>	<b>3.7164</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Lemoore Mixed Use Retail Shopping Center - Kings County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Multi-Family Residential Summer Daily**

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

## Hanford-Armona Mixed Use Apartment 176 Units

### Kings County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	176.00	Dwelling Unit	10.35	176,000.00	503

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	37
<b>Climate Zone</b>	3			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site Plan

Construction Phase -

Architectural Coating - Compliance with Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation - 2.2 miles to Downtown Lemoore

Area Mitigation - Comply with Rule 4601 Architectural Coatings

Fleet Mix - Apartment Fleet Mix based on survey of SJV apartments

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	65.00
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	150	65
tblFleetMix	HHD	0.16	4.2900e-004
tblFleetMix	LDA	0.49	0.63
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	LHD1	0.02	2.5900e-003
tblFleetMix	LHD2	4.7870e-003	1.2580e-003
tblFleetMix	MHD	0.01	2.4200e-004
tblLandUse	LotAcreage	11.00	10.35
tblWoodstoves	NumberCatalytic	10.35	0.00
tblWoodstoves	NumberNoncatalytic	10.35	0.00

## 2.0 Emissions Summary

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## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8492	54.5935	34.2265	0.0637	18.2141	2.3914	20.6055	9.9699	2.2001	12.1700	0.0000	6,309.9610	6,309.9610	1.9498	0.0000	6,358.7066
2020	71.9498	21.8599	22.0657	0.0430	1.1721	1.1356	2.3077	0.3138	1.0678	1.3816	0.0000	4,177.5982	4,177.5982	0.7224	0.0000	4,195.6575
Maximum	71.9498	54.5935	34.2265	0.0637	18.2141	2.3914	20.6055	9.9699	2.2001	12.1700	0.0000	6,309.9610	6,309.9610	1.9498	0.0000	6,358.7066

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8492	54.5935	34.2265	0.0637	8.2777	2.3914	10.6691	4.5080	2.2001	6.7081	0.0000	6,309.9610	6,309.9610	1.9498	0.0000	6,358.7066
2020	71.9498	21.8599	22.0657	0.0430	1.1721	1.1356	2.3077	0.3138	1.0678	1.3816	0.0000	4,177.5982	4,177.5982	0.7224	0.0000	4,195.6575
Maximum	71.9498	54.5935	34.2265	0.0637	8.2777	2.3914	10.6691	4.5080	2.2001	6.7081	0.0000	6,309.9610	6,309.9610	1.9498	0.0000	6,358.7066

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.26	0.00	43.37	53.11	0.00	40.30	0.00	0.00	0.00	0.00	0.00	0.00

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.3031	1.7742	15.2518	0.0110		0.2099	0.2099		0.2099	0.2099	0.0000	2,076.0276	2,076.0276	0.0648	0.0376	2,088.8463
Energy	0.0735	0.6282	0.2673	4.0100e-003		0.0508	0.0508		0.0508	0.0508		801.9394	801.9394	0.0154	0.0147	806.7049
Mobile	2.8506	3.6679	32.1873	0.0803	7.5676	0.0533	7.6210	2.0125	0.0495	2.0620		8,018.9423	8,018.9423	0.3186		8,026.9063
<b>Total</b>	<b>8.2272</b>	<b>6.0703</b>	<b>47.7064</b>	<b>0.0954</b>	<b>7.5676</b>	<b>0.3141</b>	<b>7.8817</b>	<b>2.0125</b>	<b>0.3102</b>	<b>2.3227</b>	<b>0.0000</b>	<b>10,896.9093</b>	<b>10,896.9093</b>	<b>0.3987</b>	<b>0.0523</b>	<b>10,922.4576</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.6023	0.1685	14.5685	7.7000e-004		0.0801	0.0801		0.0801	0.0801	0.0000	26.1452	26.1452	0.0255	0.0000	26.7826
Energy	0.0735	0.6282	0.2673	4.0100e-003		0.0508	0.0508		0.0508	0.0508		801.9394	801.9394	0.0154	0.0147	806.7049
Mobile	2.7926	3.4637	30.3266	0.0750	7.0455	0.0501	7.0956	1.8736	0.0465	1.9201		7,480.5030	7,480.5030	0.2990		7,487.9774
<b>Total</b>	<b>7.4684</b>	<b>4.2604</b>	<b>45.1624</b>	<b>0.0797</b>	<b>7.0455</b>	<b>0.1810</b>	<b>7.2265</b>	<b>1.8736</b>	<b>0.1774</b>	<b>2.0510</b>	<b>0.0000</b>	<b>8,308.5876</b>	<b>8,308.5876</b>	<b>0.3398</b>	<b>0.0147</b>	<b>8,321.4649</b>



## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	9.22	29.82	5.33	16.39	6.90	42.36	8.31	6.90	42.81	11.70	0.00	23.75	23.75	14.77	71.88	23.81

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2019	4/12/2019	5	10	
2	Grading	Grading	4/13/2019	5/24/2019	5	30	
3	Building Construction	Building Construction	5/25/2019	7/17/2020	5	300	
4	Paving	Paving	7/18/2020	8/14/2020	5	20	
5	Architectural Coating	Architectural Coating	8/15/2020	9/11/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 75****Acres of Paving: 0****Residential Indoor: 356,400; Residential Outdoor: 118,800; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	127.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.2 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0993	0.0660	0.7648	1.5400e-003	0.1479	1.0100e-003	0.1489	0.0392	9.3000e-004	0.0402		152.9473	152.9473	6.4700e-003		153.1091
<b>Total</b>	<b>0.0993</b>	<b>0.0660</b>	<b>0.7648</b>	<b>1.5400e-003</b>	<b>0.1479</b>	<b>1.0100e-003</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.3000e-004</b>	<b>0.0402</b>		<b>152.9473</b>	<b>152.9473</b>	<b>6.4700e-003</b>		<b>153.1091</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>8.1298</b>	<b>2.3904</b>	<b>10.5202</b>	<b>4.4688</b>	<b>2.1991</b>	<b>6.6679</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.2 Site Preparation - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0993	0.0660	0.7648	1.5400e-003	0.1479	1.0100e-003	0.1489	0.0392	9.3000e-004	0.0402		152.9473	152.9473	6.4700e-003		153.1091
<b>Total</b>	<b>0.0993</b>	<b>0.0660</b>	<b>0.7648</b>	<b>1.5400e-003</b>	<b>0.1479</b>	<b>1.0100e-003</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.3000e-004</b>	<b>0.0402</b>		<b>152.9473</b>	<b>152.9473</b>	<b>6.4700e-003</b>		<b>153.1091</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>8.6733</b>	<b>2.3827</b>	<b>11.0560</b>	<b>3.5965</b>	<b>2.1920</b>	<b>5.7885</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.3 Grading - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1103	0.0733	0.8498	1.7100e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0400e-003	0.0446		169.9415	169.9415	7.1900e-003		170.1212
<b>Total</b>	<b>0.1103</b>	<b>0.0733</b>	<b>0.8498</b>	<b>1.7100e-003</b>	<b>0.1643</b>	<b>1.1300e-003</b>	<b>0.1654</b>	<b>0.0436</b>	<b>1.0400e-003</b>	<b>0.0446</b>		<b>169.9415</b>	<b>169.9415</b>	<b>7.1900e-003</b>		<b>170.1212</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>3.9030</b>	<b>2.3827</b>	<b>6.2857</b>	<b>1.6184</b>	<b>2.1920</b>	<b>3.8105</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.3 Grading - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1103	0.0733	0.8498	1.7100e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0400e-003	0.0446		169.9415	169.9415	7.1900e-003		170.1212
<b>Total</b>	<b>0.1103</b>	<b>0.0733</b>	<b>0.8498</b>	<b>1.7100e-003</b>	<b>0.1643</b>	<b>1.1300e-003</b>	<b>0.1654</b>	<b>0.0436</b>	<b>1.0400e-003</b>	<b>0.0446</b>		<b>169.9415</b>	<b>169.9415</b>	<b>7.1900e-003</b>		<b>170.1212</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>



## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.4 Building Construction - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0930	2.4738	0.4986	5.5900e-003	0.1289	0.0174	0.1462	0.0371	0.0166	0.0537		584.0879	584.0879	0.0632		585.6675
Worker	0.7005	0.4654	5.3960	0.0109	1.0433	7.1500e-003	1.0504	0.2767	6.5900e-003	0.2833		1,079.1283	1,079.1283	0.0457		1,080.2696
<b>Total</b>	<b>0.7935</b>	<b>2.9391</b>	<b>5.8946</b>	<b>0.0165</b>	<b>1.1721</b>	<b>0.0245</b>	<b>1.1966</b>	<b>0.3138</b>	<b>0.0232</b>	<b>0.3370</b>		<b>1,663.2162</b>	<b>1,663.2162</b>	<b>0.1088</b>		<b>1,665.9371</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>	<b>0.0000</b>	<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.4 Building Construction - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0930	2.4738	0.4986	5.5900e-003	0.1289	0.0174	0.1462	0.0371	0.0166	0.0537		584.0879	584.0879	0.0632		585.6675
Worker	0.7005	0.4654	5.3960	0.0109	1.0433	7.1500e-003	1.0504	0.2767	6.5900e-003	0.2833		1,079.1283	1,079.1283	0.0457		1,080.2696
<b>Total</b>	<b>0.7935</b>	<b>2.9391</b>	<b>5.8946</b>	<b>0.0165</b>	<b>1.1721</b>	<b>0.0245</b>	<b>1.1966</b>	<b>0.3138</b>	<b>0.0232</b>	<b>0.3370</b>		<b>1,663.2162</b>	<b>1,663.2162</b>	<b>0.1088</b>		<b>1,665.9371</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.4 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0768	2.2653	0.4346	5.5400e-003	0.1289	0.0116	0.1405	0.0371	0.0111	0.0482		578.9150	578.9150	0.0601		580.4167
Worker	0.6335	0.4085	4.7826	0.0105	1.0433	6.9100e-003	1.0502	0.2767	6.3700e-003	0.2831		1,045.6202	1,045.6202	0.0395		1,046.6063
<b>Total</b>	<b>0.7103</b>	<b>2.6739</b>	<b>5.2172</b>	<b>0.0161</b>	<b>1.1721</b>	<b>0.0185</b>	<b>1.1907</b>	<b>0.3138</b>	<b>0.0175</b>	<b>0.3313</b>		<b>1,624.5352</b>	<b>1,624.5352</b>	<b>0.0995</b>		<b>1,627.0230</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>	<b>0.0000</b>	<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.4 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0768	2.2653	0.4346	5.5400e-003	0.1289	0.0116	0.1405	0.0371	0.0111	0.0482		578.9150	578.9150	0.0601		580.4167
Worker	0.6335	0.4085	4.7826	0.0105	1.0433	6.9100e-003	1.0502	0.2767	6.3700e-003	0.2831		1,045.6202	1,045.6202	0.0395		1,046.6063
<b>Total</b>	<b>0.7103</b>	<b>2.6739</b>	<b>5.2172</b>	<b>0.0161</b>	<b>1.1721</b>	<b>0.0185</b>	<b>1.1907</b>	<b>0.3138</b>	<b>0.0175</b>	<b>0.3313</b>		<b>1,624.5352</b>	<b>1,624.5352</b>	<b>0.0995</b>		<b>1,627.0230</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.5 Paving - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0483	0.5649	1.2400e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		123.4984	123.4984	4.6600e-003		123.6149
<b>Total</b>	<b>0.0748</b>	<b>0.0483</b>	<b>0.5649</b>	<b>1.2400e-003</b>	<b>0.1232</b>	<b>8.2000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.5000e-004</b>	<b>0.0334</b>		<b>123.4984</b>	<b>123.4984</b>	<b>4.6600e-003</b>		<b>123.6149</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.5 Paving - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0483	0.5649	1.2400e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		123.4984	123.4984	4.6600e-003		123.6149
<b>Total</b>	<b>0.0748</b>	<b>0.0483</b>	<b>0.5649</b>	<b>1.2400e-003</b>	<b>0.1232</b>	<b>8.2000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.5000e-004</b>	<b>0.0334</b>		<b>123.4984</b>	<b>123.4984</b>	<b>4.6600e-003</b>		<b>123.6149</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.5829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>71.8251</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.6 Architectural Coating - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.0804	0.9415	2.0700e-003	0.2054	1.3600e-003	0.2067	0.0545	1.2500e-003	0.0557		205.8307	205.8307	7.7700e-003		206.0249
<b>Total</b>	<b>0.1247</b>	<b>0.0804</b>	<b>0.9415</b>	<b>2.0700e-003</b>	<b>0.2054</b>	<b>1.3600e-003</b>	<b>0.2067</b>	<b>0.0545</b>	<b>1.2500e-003</b>	<b>0.0557</b>		<b>205.8307</b>	<b>205.8307</b>	<b>7.7700e-003</b>		<b>206.0249</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.5829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>71.8251</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**3.6 Architectural Coating - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1247	0.0804	0.9415	2.0700e-003	0.2054	1.3600e-003	0.2067	0.0545	1.2500e-003	0.0557		205.8307	205.8307	7.7700e-003		206.0249
<b>Total</b>	<b>0.1247</b>	<b>0.0804</b>	<b>0.9415</b>	<b>2.0700e-003</b>	<b>0.2054</b>	<b>1.3600e-003</b>	<b>0.2067</b>	<b>0.0545</b>	<b>1.2500e-003</b>	<b>0.0557</b>		<b>205.8307</b>	<b>205.8307</b>	<b>7.7700e-003</b>		<b>206.0249</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7926	3.4637	30.3266	0.0750	7.0455	0.0501	7.0956	1.8736	0.0465	1.9201		7,480.503 0	7,480.503 0	0.2990		7,487.977 4
Unmitigated	2.8506	3.6679	32.1873	0.0803	7.5676	0.0533	7.6210	2.0125	0.0495	2.0620		8,018.942 3	8,018.942 3	0.3186		8,026.906 3

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,159.84	1,260.16	1068.32	3,323,349	3,094,038
Total	1,159.84	1,260.16	1,068.32	3,323,349	3,094,038

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.629948	0.037566	0.189820	0.126841	0.002590	0.001258	0.000242	0.000429	0.001758	0.001914	0.005918	0.000991	0.000785

## 5.0 Energy Detail

Historical Energy Use: N

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0735	0.6282	0.2673	4.0100e-003		0.0508	0.0508		0.0508	0.0508		801.9394	801.9394	0.0154	0.0147	806.7049
NaturalGas Unmitigated	0.0735	0.6282	0.2673	4.0100e-003		0.0508	0.0508		0.0508	0.0508		801.9394	801.9394	0.0154	0.0147	806.7049

## 5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	6816.48	0.0735	0.6282	0.2673	4.0100e-003		0.0508	0.0508		0.0508	0.0508		801.9394	801.9394	0.0154	0.0147	806.7049
<b>Total</b>		<b>0.0735</b>	<b>0.6282</b>	<b>0.2673</b>	<b>4.0100e-003</b>		<b>0.0508</b>	<b>0.0508</b>		<b>0.0508</b>	<b>0.0508</b>		<b>801.9394</b>	<b>801.9394</b>	<b>0.0154</b>	<b>0.0147</b>	<b>806.7049</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	6.81648	0.0735	0.6282	0.2673	4.0100e-003		0.0508	0.0508		0.0508	0.0508		801.9394	801.9394	0.0154	0.0147	806.7049
<b>Total</b>		<b>0.0735</b>	<b>0.6282</b>	<b>0.2673</b>	<b>4.0100e-003</b>		<b>0.0508</b>	<b>0.0508</b>		<b>0.0508</b>	<b>0.0508</b>		<b>801.9394</b>	<b>801.9394</b>	<b>0.0154</b>	<b>0.0147</b>	<b>806.7049</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

No Hearths Installed

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.6023	0.1685	14.5685	7.7000e-004		0.0801	0.0801		0.0801	0.0801	0.0000	26.1452	26.1452	0.0255	0.0000	26.7826
Unmitigated	5.3031	1.7742	15.2518	0.0110		0.2099	0.2099		0.2099	0.2099	0.0000	2,076.0276	2,076.0276	0.0648	0.0376	2,088.8463

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7664					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1879	1.6057	0.6833	0.0103		0.1298	0.1298		0.1298	0.1298	0.0000	2,049.8824	2,049.8824	0.0393	0.0376	2,062.0638
Landscaping	0.4436	0.1685	14.5685	7.7000e-004		0.0801	0.0801		0.0801	0.0801		26.1452	26.1452	0.0255		26.7826
<b>Total</b>	<b>5.3031</b>	<b>1.7742</b>	<b>15.2518</b>	<b>0.0110</b>		<b>0.2099</b>	<b>0.2099</b>		<b>0.2099</b>	<b>0.2099</b>	<b>0.0000</b>	<b>2,076.0276</b>	<b>2,076.0276</b>	<b>0.0648</b>	<b>0.0376</b>	<b>2,088.8463</b>

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3922					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7664					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4436	0.1685	14.5685	7.7000e-004		0.0801	0.0801		0.0801	0.0801		26.1452	26.1452	0.0255		26.7826
<b>Total</b>	<b>4.6023</b>	<b>0.1685</b>	<b>14.5685</b>	<b>7.7000e-004</b>		<b>0.0801</b>	<b>0.0801</b>		<b>0.0801</b>	<b>0.0801</b>	<b>0.0000</b>	<b>26.1452</b>	<b>26.1452</b>	<b>0.0255</b>	<b>0.0000</b>	<b>26.7826</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

## Hanford-Armona Mixed Use Apartment 176 Units - Kings County, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Gas Station Convenience Market Summer Daily**

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

## Hanford Armona Rd Mixed Use Gas Station Run

### Kings County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.55	Acre	1.55	67,518.00	0
Convenience Market With Gas Pumps	4.00	Pump	0.08	3,500.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

Project Characteristics -

Land Use - 3,500 SF convenience market with 8 fueling position

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings

Area Coating - Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Architectural Coatings

Fleet Mix - Project specific fleet mix for gas station/convenience store

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Parking	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblAreaCoating	Area_EF_Parking	150	65
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	65	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	65	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	65	150
tblFleetMix	HHD	0.16	4.3200e-004
tblFleetMix	LDA	0.49	0.62
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	MHD	0.01	2.0300e-004
tblLandUse	LandUseSquareFeet	564.70	3,500.00
tblLandUse	LotAcreage	0.01	0.08

## 2.0 Emissions Summary

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## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.8366	20.7809	15.6368	0.0282	5.8653	1.0726	6.8180	2.9711	1.0354	3.8476	0.0000	2,656.9178	2,656.9178	0.5435	0.0000	2,668.4570
2019	3.6289	17.6488	15.0341	0.0281	0.3196	0.9284	1.2480	0.0866	0.8965	0.9832	0.0000	2,633.3352	2,633.3352	0.4383	0.0000	2,644.2920
Maximum	3.6289	20.7809	15.6368	0.0282	5.8653	1.0726	6.8180	2.9711	1.0354	3.8476	0.0000	2,656.9178	2,656.9178	0.5435	0.0000	2,668.4570

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.8366	20.7809	15.6368	0.0282	2.6755	1.0726	3.6283	1.3466	1.0354	2.2231	0.0000	2,656.9178	2,656.9178	0.5435	0.0000	2,668.4570
2019	3.6289	17.6488	15.0341	0.0281	0.3196	0.9284	1.2480	0.0866	0.8965	0.9832	0.0000	2,633.3352	2,633.3352	0.4383	0.0000	2,644.2920
Maximum	3.6289	20.7809	15.6368	0.0282	2.6755	1.0726	3.6283	1.3466	1.0354	2.2231	0.0000	2,656.9178	2,656.9178	0.5435	0.0000	2,668.4570

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.57	0.00	39.55	53.13	0.00	33.63	0.00	0.00	0.00	0.00	0.00	0.00

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1080	1.0000e-005	5.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2100e-003	1.2100e-003	0.0000		1.3000e-003
Energy	1.1100e-003	0.0101	8.4500e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		12.0709	12.0709	2.3000e-004	2.2000e-004	12.1426
Mobile	3.4419	2.3219	16.0670	0.0286	2.4487	0.0293	2.4780	0.6521	0.0272	0.6793		2,844.5436	2,844.5436	0.1403		2,848.0509
<b>Total</b>	<b>3.5510</b>	<b>2.3320</b>	<b>16.0760</b>	<b>0.0286</b>	<b>2.4487</b>	<b>0.0300</b>	<b>2.4787</b>	<b>0.6521</b>	<b>0.0279</b>	<b>0.6801</b>		<b>2,856.6157</b>	<b>2,856.6157</b>	<b>0.1405</b>	<b>2.2000e-004</b>	<b>2,860.1949</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1199	1.0000e-005	5.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2100e-003	1.2100e-003	0.0000		1.3000e-003
Energy	1.1100e-003	0.0101	8.4500e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		12.0709	12.0709	2.3000e-004	2.2000e-004	12.1426
Mobile	3.4234	2.2426	15.5141	0.0269	2.2797	0.0280	2.3078	0.6071	0.0260	0.6331		2,672.8445	2,672.8445	0.1344		2,676.2040
<b>Total</b>	<b>3.5444</b>	<b>2.2527</b>	<b>15.5232</b>	<b>0.0269</b>	<b>2.2797</b>	<b>0.0288</b>	<b>2.3085</b>	<b>0.6071</b>	<b>0.0268</b>	<b>0.6339</b>		<b>2,684.9167</b>	<b>2,684.9167</b>	<b>0.1346</b>	<b>2.2000e-004</b>	<b>2,688.3479</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.19	3.40	3.44	5.97	6.90	4.10	6.87	6.90	4.12	6.79	0.00	6.01	6.01	4.21	0.00	6.01

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/17/2018	8/20/2018	5	2	
2	Grading	Grading	8/21/2018	8/24/2018	5	4	
3	Building Construction	Building Construction	8/25/2018	5/31/2019	5	200	
4	Paving	Paving	6/1/2019	6/14/2019	5	10	
5	Architectural Coating	Architectural Coating	6/15/2019	6/28/2019	5	10	

**Acres of Grading (Site Preparation Phase): 1****Acres of Grading (Grading Phase): 1.5****Acres of Paving: 1.55****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,250; Non-Residential Outdoor: 1,750; Striped Parking Area: 4,051 (Architectural Coating – sqft)****OffRoad Equipment**



## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	29.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2018****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.363 0	1,735.363 0	0.5402		1,748.869 0
<b>Total</b>	<b>1.8061</b>	<b>20.7472</b>	<b>8.0808</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.9523</b>	<b>6.7518</b>	<b>2.9537</b>	<b>0.8761</b>	<b>3.8298</b>		<b>1,735.363 0</b>	<b>1,735.363 0</b>	<b>0.5402</b>		<b>1,748.869 0</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.2 Site Preparation - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0337	0.3875	7.1000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		70.0592	70.0592	3.2900e-003		70.1413
<b>Total</b>	<b>0.0494</b>	<b>0.0337</b>	<b>0.3875</b>	<b>7.1000e-004</b>	<b>0.0657</b>	<b>4.7000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.3000e-004</b>	<b>0.0179</b>		<b>70.0592</b>	<b>70.0592</b>	<b>3.2900e-003</b>		<b>70.1413</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
<b>Total</b>	<b>1.8061</b>	<b>20.7472</b>	<b>8.0808</b>	<b>0.0172</b>	<b>2.6098</b>	<b>0.9523</b>	<b>3.5621</b>	<b>1.3292</b>	<b>0.8761</b>	<b>2.2052</b>	<b>0.0000</b>	<b>1,735.3630</b>	<b>1,735.3630</b>	<b>0.5402</b>		<b>1,748.8690</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.2 Site Preparation - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0337	0.3875	7.1000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		70.0592	70.0592	3.2900e-003		70.1413
<b>Total</b>	<b>0.0494</b>	<b>0.0337</b>	<b>0.3875</b>	<b>7.1000e-004</b>	<b>0.0657</b>	<b>4.7000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.3000e-004</b>	<b>0.0179</b>		<b>70.0592</b>	<b>70.0592</b>	<b>3.2900e-003</b>		<b>70.1413</b>

**3.3 Grading - 2018****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311		1,421.2605	1,421.2605	0.4425		1,432.3219
<b>Total</b>	<b>1.4972</b>	<b>17.0666</b>	<b>6.7630</b>	<b>0.0141</b>	<b>4.9143</b>	<b>0.7947</b>	<b>5.7090</b>	<b>2.5256</b>	<b>0.7311</b>	<b>3.2568</b>		<b>1,421.2605</b>	<b>1,421.2605</b>	<b>0.4425</b>		<b>1,432.3219</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.3 Grading - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0337	0.3875	7.1000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		70.0592	70.0592	3.2900e-003		70.1413
<b>Total</b>	<b>0.0494</b>	<b>0.0337</b>	<b>0.3875</b>	<b>7.1000e-004</b>	<b>0.0657</b>	<b>4.7000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.3000e-004</b>	<b>0.0179</b>		<b>70.0592</b>	<b>70.0592</b>	<b>3.2900e-003</b>		<b>70.1413</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311	0.0000	1,421.2605	1,421.2605	0.4425		1,432.3219
<b>Total</b>	<b>1.4972</b>	<b>17.0666</b>	<b>6.7630</b>	<b>0.0141</b>	<b>2.2114</b>	<b>0.7947</b>	<b>3.0061</b>	<b>1.1365</b>	<b>0.7311</b>	<b>1.8677</b>	<b>0.0000</b>	<b>1,421.2605</b>	<b>1,421.2605</b>	<b>0.4425</b>		<b>1,432.3219</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.3 Grading - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0337	0.3875	7.1000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		70.0592	70.0592	3.2900e-003		70.1413
<b>Total</b>	<b>0.0494</b>	<b>0.0337</b>	<b>0.3875</b>	<b>7.1000e-004</b>	<b>0.0657</b>	<b>4.7000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.3000e-004</b>	<b>0.0179</b>		<b>70.0592</b>	<b>70.0592</b>	<b>3.2900e-003</b>		<b>70.1413</b>

**3.4 Building Construction - 2018****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
<b>Total</b>	<b>2.5919</b>	<b>17.4280</b>	<b>13.8766</b>	<b>0.0220</b>		<b>1.0580</b>	<b>1.0580</b>		<b>1.0216</b>	<b>1.0216</b>		<b>2,030.8389</b>	<b>2,030.8389</b>	<b>0.4088</b>		<b>2,041.0596</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.4 Building Construction - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0658	1.6513	0.3554	3.5600e-003	0.0814	0.0129	0.0942	0.0234	0.0123	0.0357		372.1145	372.1145	0.0408		373.1351
Worker	0.1789	0.1222	1.4048	2.5600e-003	0.2382	1.6900e-003	0.2399	0.0632	1.5600e-003	0.0648		253.9645	253.9645	0.0119		254.2623
<b>Total</b>	<b>0.2447</b>	<b>1.7736</b>	<b>1.7602</b>	<b>6.1200e-003</b>	<b>0.3196</b>	<b>0.0145</b>	<b>0.3341</b>	<b>0.0866</b>	<b>0.0139</b>	<b>0.1005</b>		<b>626.0789</b>	<b>626.0789</b>	<b>0.0527</b>		<b>627.3974</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
<b>Total</b>	<b>2.5919</b>	<b>17.4280</b>	<b>13.8766</b>	<b>0.0220</b>		<b>1.0580</b>	<b>1.0580</b>		<b>1.0216</b>	<b>1.0216</b>	<b>0.0000</b>	<b>2,030.8389</b>	<b>2,030.8389</b>	<b>0.4088</b>		<b>2,041.0596</b>



## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.4 Building Construction - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0658	1.6513	0.3554	3.5600e-003	0.0814	0.0129	0.0942	0.0234	0.0123	0.0357		372.1145	372.1145	0.0408		373.1351
Worker	0.1789	0.1222	1.4048	2.5600e-003	0.2382	1.6900e-003	0.2399	0.0632	1.5600e-003	0.0648		253.9645	253.9645	0.0119		254.2623
<b>Total</b>	<b>0.2447</b>	<b>1.7736</b>	<b>1.7602</b>	<b>6.1200e-003</b>	<b>0.3196</b>	<b>0.0145</b>	<b>0.3341</b>	<b>0.0866</b>	<b>0.0139</b>	<b>0.1005</b>		<b>626.0789</b>	<b>626.0789</b>	<b>0.0527</b>		<b>627.3974</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>		<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.4 Building Construction - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0587	1.5624	0.3149	3.5300e-003	0.0814	0.0110	0.0923	0.0234	0.0105	0.0339		368.8976	368.8976	0.0399		369.8953
Worker	0.1599	0.1063	1.2322	2.4800e-003	0.2382	1.6300e-003	0.2399	0.0632	1.5000e-003	0.0647		246.4151	246.4151	0.0104		246.6757
<b>Total</b>	<b>0.2187</b>	<b>1.6686</b>	<b>1.5471</b>	<b>6.0100e-003</b>	<b>0.3196</b>	<b>0.0126</b>	<b>0.3322</b>	<b>0.0866</b>	<b>0.0120</b>	<b>0.0986</b>		<b>615.3128</b>	<b>615.3128</b>	<b>0.0503</b>		<b>616.5710</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>	<b>0.0000</b>	<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.4 Building Construction - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0587	1.5624	0.3149	3.5300e-003	0.0814	0.0110	0.0923	0.0234	0.0105	0.0339		368.8976	368.8976	0.0399		369.8953
Worker	0.1599	0.1063	1.2322	2.4800e-003	0.2382	1.6300e-003	0.2399	0.0632	1.5000e-003	0.0647		246.4151	246.4151	0.0104		246.6757
<b>Total</b>	<b>0.2187</b>	<b>1.6686</b>	<b>1.5471</b>	<b>6.0100e-003</b>	<b>0.3196</b>	<b>0.0126</b>	<b>0.3322</b>	<b>0.0866</b>	<b>0.0120</b>	<b>0.0986</b>		<b>615.3128</b>	<b>615.3128</b>	<b>0.0503</b>		<b>616.5710</b>

**3.5 Paving - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815		1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.4061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3099</b>	<b>9.1743</b>	<b>8.9025</b>	<b>0.0135</b>		<b>0.5225</b>	<b>0.5225</b>		<b>0.4815</b>	<b>0.4815</b>		<b>1,325.0953</b>	<b>1,325.0953</b>	<b>0.4112</b>		<b>1,335.3751</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.5 Paving - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0717	0.0476	0.5524	1.1100e-003	0.1068	7.3000e-004	0.1075	0.0283	6.7000e-004	0.0290		110.4620	110.4620	4.6700e-003		110.5788
<b>Total</b>	<b>0.0717</b>	<b>0.0476</b>	<b>0.5524</b>	<b>1.1100e-003</b>	<b>0.1068</b>	<b>7.3000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.7000e-004</b>	<b>0.0290</b>		<b>110.4620</b>	<b>110.4620</b>	<b>4.6700e-003</b>		<b>110.5788</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815	0.0000	1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.4061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3099</b>	<b>9.1743</b>	<b>8.9025</b>	<b>0.0135</b>		<b>0.5225</b>	<b>0.5225</b>		<b>0.4815</b>	<b>0.4815</b>	<b>0.0000</b>	<b>1,325.0953</b>	<b>1,325.0953</b>	<b>0.4112</b>		<b>1,335.3751</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.5 Paving - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0717	0.0476	0.5524	1.1100e-003	0.1068	7.3000e-004	0.1075	0.0283	6.7000e-004	0.0290		110.4620	110.4620	4.6700e-003		110.5788
<b>Total</b>	<b>0.0717</b>	<b>0.0476</b>	<b>0.5524</b>	<b>1.1100e-003</b>	<b>0.1068</b>	<b>7.3000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.7000e-004</b>	<b>0.0290</b>		<b>110.4620</b>	<b>110.4620</b>	<b>4.6700e-003</b>		<b>110.5788</b>

**3.6 Architectural Coating - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>3.5958</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.6 Architectural Coating - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0331	0.0220	0.2549	5.1000e-004	0.0493	3.4000e-004	0.0496	0.0131	3.1000e-004	0.0134		50.9824	50.9824	2.1600e-003		51.0364
<b>Total</b>	<b>0.0331</b>	<b>0.0220</b>	<b>0.2549</b>	<b>5.1000e-004</b>	<b>0.0493</b>	<b>3.4000e-004</b>	<b>0.0496</b>	<b>0.0131</b>	<b>3.1000e-004</b>	<b>0.0134</b>		<b>50.9824</b>	<b>50.9824</b>	<b>2.1600e-003</b>		<b>51.0364</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.3294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>3.5958</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**3.6 Architectural Coating - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0331	0.0220	0.2549	5.1000e-004	0.0493	3.4000e-004	0.0496	0.0131	3.1000e-004	0.0134		50.9824	50.9824	2.1600e-003		51.0364
<b>Total</b>	<b>0.0331</b>	<b>0.0220</b>	<b>0.2549</b>	<b>5.1000e-004</b>	<b>0.0493</b>	<b>3.4000e-004</b>	<b>0.0496</b>	<b>0.0131</b>	<b>3.1000e-004</b>	<b>0.0134</b>		<b>50.9824</b>	<b>50.9824</b>	<b>2.1600e-003</b>		<b>51.0364</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network



## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4234	2.2426	15.5141	0.0269	2.2797	0.0280	2.3078	0.6071	0.0260	0.6331		2,672.8445	2,672.8445	0.1344		2,676.2040
Unmitigated	3.4419	2.3219	16.0670	0.0286	2.4487	0.0293	2.4780	0.6521	0.0272	0.6793		2,844.5436	2,844.5436	0.1403		2,848.0509

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,170.40	817.88	667.52	945,405	880,172
Parking Lot	0.00	0.00	0.00		
Total	2,170.40	817.88	667.52	945,405	880,172

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.621212	0.035740	0.186095	0.120572	0.020115	0.004575	0.000203	0.000432	0.001742	0.001833	0.005782	0.000964	0.000735
Parking Lot	0.493375	0.028385	0.147799	0.120572	0.020115	0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.1100e-003	0.0101	8.4500e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		12.0709	12.0709	2.3000e-004	2.2000e-004	12.1426
NaturalGas Unmitigated	1.1100e-003	0.0101	8.4500e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		12.0709	12.0709	2.3000e-004	2.2000e-004	12.1426

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market With Gas Pumps	102.603	1.1100e-003	0.0101	8.4500e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		12.0709	12.0709	2.3000e-004	2.2000e-004	12.1426
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1.1100e-003</b>	<b>0.0101</b>	<b>8.4500e-003</b>	<b>6.0000e-005</b>		<b>7.6000e-004</b>	<b>7.6000e-004</b>		<b>7.6000e-004</b>	<b>7.6000e-004</b>		<b>12.0709</b>	<b>12.0709</b>	<b>2.3000e-004</b>	<b>2.2000e-004</b>	<b>12.1426</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market With Gas Pumps	0.102603	1.1100e-003	0.0101	8.4500e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		12.0709	12.0709	2.3000e-004	2.2000e-004	12.1426
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1.1100e-003</b>	<b>0.0101</b>	<b>8.4500e-003</b>	<b>6.0000e-005</b>		<b>7.6000e-004</b>	<b>7.6000e-004</b>		<b>7.6000e-004</b>	<b>7.6000e-004</b>		<b>12.0709</b>	<b>12.0709</b>	<b>2.3000e-004</b>	<b>2.2000e-004</b>	<b>12.1426</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1199	1.0000e-005	5.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2100e-003	1.2100e-003	0.0000		1.3000e-003
Unmitigated	0.1080	1.0000e-005	5.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2100e-003	1.2100e-003	0.0000		1.3000e-003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.1200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0988					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2100e-003	1.2100e-003	0.0000		1.3000e-003
<b>Total</b>	<b>0.1080</b>	<b>1.0000e-005</b>	<b>5.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.2100e-003</b>	<b>1.2100e-003</b>	<b>0.0000</b>		<b>1.3000e-003</b>

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0988					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2100e-003	1.2100e-003	0.0000		1.3000e-003
<b>Total</b>	<b>0.1199</b>	<b>1.0000e-005</b>	<b>5.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.2100e-003</b>	<b>1.2100e-003</b>	<b>0.0000</b>		<b>1.3000e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Hanford Armona Rd Mixed Use Gas Station Run - Kings County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Fast Food Restaurants Summer Daily**



## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

## Lemoore Mixed Use Fast Food Pads

### Kings County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	6.00	1000sqft	0.14	6,000.00	0
Parking Lot	0.82	Acre	0.82	35,632.08	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

Project Characteristics -

Land Use - Site Plan

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings

Fleet Mix - Project specific fleet mix for fast food restaurant

Area Coating - Rule 4601 Architectural Coatings compliance

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Parking	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblAreaCoating	Area_EF_Parking	150	65
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblFleetMix	HHD	0.16	8.9000e-005
tblFleetMix	LDA	0.49	0.64
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	LHD1	0.02	8.9000e-004
tblFleetMix	LHD2	4.5750e-003	5.3000e-004
tblFleetMix	MHD	0.01	5.9000e-005
tblLandUse	LandUseSquareFeet	35,719.20	35,632.08

**2.0 Emissions Summary**

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	8.7760	9.7416	8.1878	0.0148	0.8349	0.5276	1.3027	0.4356	0.4855	0.8817	0.0000	1,456.2275	1,456.2275	0.3841	0.0000	1,465.8309
Maximum	8.7760	9.7416	8.1878	0.0148	0.8349	0.5276	1.3027	0.4356	0.4855	0.8817	0.0000	1,456.2275	1,456.2275	0.3841	0.0000	1,465.8309

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	8.7760	9.7416	8.1878	0.0148	0.4209	0.5276	0.8886	0.2080	0.4855	0.6542	0.0000	1,456.2275	1,456.2275	0.3841	0.0000	1,465.8309
Maximum	8.7760	9.7416	8.1878	0.0148	0.4209	0.5276	0.8886	0.2080	0.4855	0.6542	0.0000	1,456.2275	1,456.2275	0.3841	0.0000	1,465.8309

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	49.59	0.00	31.78	52.25	0.00	25.81	0.00	0.00	0.00	0.00	0.00	0.00

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1528	1.0000e-005	7.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4900e-003	1.4900e-003	0.0000		1.5900e-003
Energy	0.0373	0.3391	0.2849	2.0300e-003		0.0258	0.0258		0.0258	0.0258		406.9363	406.9363	7.8000e-003	7.4600e-003	409.3546
Mobile	7.1826	4.8120	43.6110	0.0915	8.4874	0.0719	8.5593	2.2563	0.0665	2.3228		9,113.9727	9,113.9727	0.3891		9,123.6989
<b>Total</b>	<b>7.3727</b>	<b>5.1511</b>	<b>43.8965</b>	<b>0.0935</b>	<b>8.4874</b>	<b>0.0976</b>	<b>8.5851</b>	<b>2.2563</b>	<b>0.0922</b>	<b>2.3486</b>		<b>9,520.9106</b>	<b>9,520.9106</b>	<b>0.3969</b>	<b>7.4600e-003</b>	<b>9,533.0551</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1528	1.0000e-005	7.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4900e-003	1.4900e-003	0.0000		1.5900e-003
Energy	0.0373	0.3391	0.2849	2.0300e-003		0.0258	0.0258		0.0258	0.0258		406.9363	406.9363	7.8000e-003	7.4600e-003	409.3546
Mobile	7.1237	4.6180	41.7000	0.0857	7.9018	0.0685	7.9703	2.1007	0.0633	2.1640		8,533.1156	8,533.1156	0.3689		8,542.3390
<b>Total</b>	<b>7.3137</b>	<b>4.9571</b>	<b>41.9855</b>	<b>0.0877</b>	<b>7.9018</b>	<b>0.0943</b>	<b>7.9960</b>	<b>2.1007</b>	<b>0.0891</b>	<b>2.1898</b>		<b>8,940.0535</b>	<b>8,940.0535</b>	<b>0.3767</b>	<b>7.4600e-003</b>	<b>8,951.6951</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.80	3.77	4.35	6.22	6.90	3.47	6.86	6.90	3.40	6.76	0.00	6.10	6.10	5.07	0.00	6.10

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2020	4/1/2020	5	1	
2	Grading	Grading	4/2/2020	4/3/2020	5	2	
3	Building Construction	Building Construction	4/4/2020	8/21/2020	5	100	
4	Paving	Paving	8/22/2020	8/28/2020	5	5	
5	Architectural Coating	Architectural Coating	8/29/2020	9/4/2020	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.82

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,000; Non-Residential Outdoor: 3,000; Striped Parking Area: 2,138 (Architectural Coating – sqft)

#### OffRoad Equipment

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	17.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area



## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085		943.4872	943.4872	0.3051		951.1158
<b>Total</b>	<b>0.6853</b>	<b>8.4307</b>	<b>4.0942</b>	<b>9.7400e-003</b>	<b>0.5303</b>	<b>0.3353</b>	<b>0.8656</b>	<b>0.0573</b>	<b>0.3085</b>	<b>0.3658</b>		<b>943.4872</b>	<b>943.4872</b>	<b>0.3051</b>		<b>951.1158</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0249	0.0161	0.1883	4.1000e-004	0.0411	2.7000e-004	0.0414	0.0109	2.5000e-004	0.0112		41.1662	41.1662	1.5500e-003		41.2050
<b>Total</b>	<b>0.0249</b>	<b>0.0161</b>	<b>0.1883</b>	<b>4.1000e-004</b>	<b>0.0411</b>	<b>2.7000e-004</b>	<b>0.0414</b>	<b>0.0109</b>	<b>2.5000e-004</b>	<b>0.0112</b>		<b>41.1662</b>	<b>41.1662</b>	<b>1.5500e-003</b>		<b>41.2050</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.2 Site Preparation - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085	0.0000	943.4872	943.4872	0.3051		951.1158
<b>Total</b>	<b>0.6853</b>	<b>8.4307</b>	<b>4.0942</b>	<b>9.7400e-003</b>	<b>0.2386</b>	<b>0.3353</b>	<b>0.5740</b>	<b>0.0258</b>	<b>0.3085</b>	<b>0.3343</b>	<b>0.0000</b>	<b>943.4872</b>	<b>943.4872</b>	<b>0.3051</b>		<b>951.1158</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0249	0.0161	0.1883	4.1000e-004	0.0411	2.7000e-004	0.0414	0.0109	2.5000e-004	0.0112		41.1662	41.1662	1.5500e-003		41.2050
<b>Total</b>	<b>0.0249</b>	<b>0.0161</b>	<b>0.1883</b>	<b>4.1000e-004</b>	<b>0.0411</b>	<b>2.7000e-004</b>	<b>0.0414</b>	<b>0.0109</b>	<b>2.5000e-004</b>	<b>0.0112</b>		<b>41.1662</b>	<b>41.1662</b>	<b>1.5500e-003</b>		<b>41.2050</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
<b>Total</b>	<b>0.8674</b>	<b>7.8729</b>	<b>7.6226</b>	<b>0.0120</b>	<b>0.7528</b>	<b>0.4672</b>	<b>1.2200</b>	<b>0.4138</b>	<b>0.4457</b>	<b>0.8595</b>		<b>1,147.2352</b>	<b>1,147.2352</b>	<b>0.2169</b>		<b>1,152.6578</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0322	0.3766	8.3000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		82.3323	82.3323	3.1100e-003		82.4100
<b>Total</b>	<b>0.0499</b>	<b>0.0322</b>	<b>0.3766</b>	<b>8.3000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>5.0000e-004</b>	<b>0.0223</b>		<b>82.3323</b>	<b>82.3323</b>	<b>3.1100e-003</b>		<b>82.4100</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.3 Grading - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3387	0.0000	0.3387	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.235 2	1,147.235 2	0.2169		1,152.657 8
<b>Total</b>	<b>0.8674</b>	<b>7.8729</b>	<b>7.6226</b>	<b>0.0120</b>	<b>0.3387</b>	<b>0.4672</b>	<b>0.8059</b>	<b>0.1862</b>	<b>0.4457</b>	<b>0.6319</b>	<b>0.0000</b>	<b>1,147.235 2</b>	<b>1,147.235 2</b>	<b>0.2169</b>		<b>1,152.657 8</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0322	0.3766	8.3000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		82.3323	82.3323	3.1100e-003		82.4100
<b>Total</b>	<b>0.0499</b>	<b>0.0322</b>	<b>0.3766</b>	<b>8.3000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>5.0000e-004</b>	<b>0.0223</b>		<b>82.3323</b>	<b>82.3323</b>	<b>3.1100e-003</b>		<b>82.4100</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.978 1	1,102.978 1	0.3567		1,111.8962
<b>Total</b>	<b>0.8617</b>	<b>8.8523</b>	<b>7.3875</b>	<b>0.0114</b>		<b>0.5224</b>	<b>0.5224</b>		<b>0.4806</b>	<b>0.4806</b>		<b>1,102.978 1</b>	<b>1,102.978 1</b>	<b>0.3567</b>		<b>1,111.8962</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0283	0.8346	0.1601	2.0400e-003	0.0475	4.2800e-003	0.0518	0.0137	4.0900e-003	0.0178		213.2845	213.2845	0.0221		213.8377
Worker	0.0848	0.0547	0.6402	1.4100e-003	0.1397	9.3000e-004	0.1406	0.0370	8.5000e-004	0.0379		139.9649	139.9649	5.2800e-003		140.0969
<b>Total</b>	<b>0.1131</b>	<b>0.8893</b>	<b>0.8003</b>	<b>3.4500e-003</b>	<b>0.1871</b>	<b>5.2100e-003</b>	<b>0.1923</b>	<b>0.0507</b>	<b>4.9400e-003</b>	<b>0.0557</b>		<b>353.2494</b>	<b>353.2494</b>	<b>0.0274</b>		<b>353.9346</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.4 Building Construction - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.978 1	1,102.978 1	0.3567		1,111.8962
<b>Total</b>	<b>0.8617</b>	<b>8.8523</b>	<b>7.3875</b>	<b>0.0114</b>		<b>0.5224</b>	<b>0.5224</b>		<b>0.4806</b>	<b>0.4806</b>	<b>0.0000</b>	<b>1,102.978 1</b>	<b>1,102.978 1</b>	<b>0.3567</b>		<b>1,111.8962</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0283	0.8346	0.1601	2.0400e-003	0.0475	4.2800e-003	0.0518	0.0137	4.0900e-003	0.0178		213.2845	213.2845	0.0221		213.8377
Worker	0.0848	0.0547	0.6402	1.4100e-003	0.1397	9.3000e-004	0.1406	0.0370	8.5000e-004	0.0379		139.9649	139.9649	5.2800e-003		140.0969
<b>Total</b>	<b>0.1131</b>	<b>0.8893</b>	<b>0.8003</b>	<b>3.4500e-003</b>	<b>0.1871</b>	<b>5.2100e-003</b>	<b>0.1923</b>	<b>0.0507</b>	<b>4.9400e-003</b>	<b>0.0557</b>		<b>353.2494</b>	<b>353.2494</b>	<b>0.0274</b>		<b>353.9346</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669		1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.4297					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2012</b>	<b>7.2266</b>	<b>7.1128</b>	<b>0.0113</b>		<b>0.3950</b>	<b>0.3950</b>		<b>0.3669</b>	<b>0.3669</b>		<b>1,035.3926</b>	<b>1,035.3926</b>	<b>0.3016</b>		<b>1,042.9323</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0898	0.0579	0.6779	1.4900e-003	0.1479	9.8000e-004	0.1489	0.0392	9.0000e-004	0.0401		148.1981	148.1981	5.5900e-003		148.3379
<b>Total</b>	<b>0.0898</b>	<b>0.0579</b>	<b>0.6779</b>	<b>1.4900e-003</b>	<b>0.1479</b>	<b>9.8000e-004</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.0000e-004</b>	<b>0.0401</b>		<b>148.1981</b>	<b>148.1981</b>	<b>5.5900e-003</b>		<b>148.3379</b>



## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.5 Paving - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7716	7.2266	7.1128	0.0113		0.3950	0.3950		0.3669	0.3669	0.0000	1,035.3926	1,035.3926	0.3016		1,042.9323
Paving	0.4297					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2012</b>	<b>7.2266</b>	<b>7.1128</b>	<b>0.0113</b>		<b>0.3950</b>	<b>0.3950</b>		<b>0.3669</b>	<b>0.3669</b>	<b>0.0000</b>	<b>1,035.3926</b>	<b>1,035.3926</b>	<b>0.3016</b>		<b>1,042.9323</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0898	0.0579	0.6779	1.4900e-003	0.1479	9.8000e-004	0.1489	0.0392	9.0000e-004	0.0401		148.1981	148.1981	5.5900e-003		148.3379
<b>Total</b>	<b>0.0898</b>	<b>0.0579</b>	<b>0.6779</b>	<b>1.4900e-003</b>	<b>0.1479</b>	<b>9.8000e-004</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.0000e-004</b>	<b>0.0401</b>		<b>148.1981</b>	<b>148.1981</b>	<b>5.5900e-003</b>		<b>148.3379</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.5189					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>8.7610</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0150	9.6500e-003	0.1130	2.5000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		24.6997	24.6997	9.3000e-004		24.7230
<b>Total</b>	<b>0.0150</b>	<b>9.6500e-003</b>	<b>0.1130</b>	<b>2.5000e-004</b>	<b>0.0246</b>	<b>1.6000e-004</b>	<b>0.0248</b>	<b>6.5400e-003</b>	<b>1.5000e-004</b>	<b>6.6900e-003</b>		<b>24.6997</b>	<b>24.6997</b>	<b>9.3000e-004</b>		<b>24.7230</b>

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**3.6 Architectural Coating - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.5189					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>8.7610</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0150	9.6500e-003	0.1130	2.5000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6900e-003		24.6997	24.6997	9.3000e-004		24.7230
<b>Total</b>	<b>0.0150</b>	<b>9.6500e-003</b>	<b>0.1130</b>	<b>2.5000e-004</b>	<b>0.0246</b>	<b>1.6000e-004</b>	<b>0.0248</b>	<b>6.5400e-003</b>	<b>1.5000e-004</b>	<b>6.6900e-003</b>		<b>24.6997</b>	<b>24.6997</b>	<b>9.3000e-004</b>		<b>24.7230</b>

**4.0 Operational Detail - Mobile**

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.1237	4.6180	41.7000	0.0857	7.9018	0.0685	7.9703	2.1007	0.0633	2.1640		8,533.1156	8,533.1156	0.3689		8,542.3390
Unmitigated	7.1826	4.8120	43.6110	0.0915	8.4874	0.0719	8.5593	2.2563	0.0665	2.3228		9,113.9727	9,113.9727	0.3891		9,123.6989

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	2,976.72	4,332.18	3256.32	2,999,464	2,792,501
Parking Lot	0.00	0.00	0.00		
Total	2,976.72	4,332.18	3,256.32	2,999,464	2,792,501

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.638715	0.036747	0.191338	0.120572	0.000890	0.000530	0.000059	0.000089	0.001742	0.001833	0.005782	0.000964	0.000735
Parking Lot	0.493375	0.028385	0.147799	0.120572	0.020115	0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0373	0.3391	0.2849	2.0300e-003		0.0258	0.0258		0.0258	0.0258		406.9363	406.9363	7.8000e-003	7.4600e-003	409.3546
NaturalGas Unmitigated	0.0373	0.3391	0.2849	2.0300e-003		0.0258	0.0258		0.0258	0.0258		406.9363	406.9363	7.8000e-003	7.4600e-003	409.3546

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	3458.96	0.0373	0.3391	0.2849	2.0300e-003		0.0258	0.0258		0.0258	0.0258		406.9363	406.9363	7.8000e-003	7.4600e-003	409.3546
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0373</b>	<b>0.3391</b>	<b>0.2849</b>	<b>2.0300e-003</b>		<b>0.0258</b>	<b>0.0258</b>		<b>0.0258</b>	<b>0.0258</b>		<b>406.9363</b>	<b>406.9363</b>	<b>7.8000e-003</b>	<b>7.4600e-003</b>	<b>409.3546</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	3.45896	0.0373	0.3391	0.2849	2.0300e-003		0.0258	0.0258		0.0258	0.0258		406.9363	406.9363	7.8000e-003	7.4600e-003	409.3546
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0373</b>	<b>0.3391</b>	<b>0.2849</b>	<b>2.0300e-003</b>		<b>0.0258</b>	<b>0.0258</b>		<b>0.0258</b>	<b>0.0258</b>		<b>406.9363</b>	<b>406.9363</b>	<b>7.8000e-003</b>	<b>7.4600e-003</b>	<b>409.3546</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1528	1.0000e-005	7.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4900e-003	1.4900e-003	0.0000		1.5900e-003
Unmitigated	0.1528	1.0000e-005	7.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4900e-003	1.4900e-003	0.0000		1.5900e-003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1410					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4900e-003	1.4900e-003	0.0000		1.5900e-003
<b>Total</b>	<b>0.1528</b>	<b>1.0000e-005</b>	<b>7.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>		<b>1.5900e-003</b>



## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1410					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4900e-003	1.4900e-003	0.0000		1.5900e-003
<b>Total</b>	<b>0.1528</b>	<b>1.0000e-005</b>	<b>7.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>		<b>1.5900e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Lemoore Mixed Use Fast Food Pads - Kings County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# CalEEMod Output Hotel Summer Daily

## Lemoore Mixed Use Project Hotel - Kings County, Summer

## Lemoore Mixed Use Project Hotel

### Kings County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.40	Acre	1.40	60,984.00	0
Hotel	90.00	Room	0.32	130,680.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Lemoore Mixed Use Project Hotel - Kings County, Summer

Project Characteristics -

Land Use - Site Plan

Construction Phase -

Architectural Coating - Rule 4601 Architectural Coatings compliance

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Architectural Coatings compliance

Fleet Mix - Project specific truck fleet trip fraction

Area Coating - Rule 4601 Architectural Coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Parking	150.00	65.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	65
tblAreaCoating	Area_EF_Nonresidential_Interior	150	65
tblAreaCoating	Area_EF_Parking	150	65
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblFleetMix	HHD	0.16	1.2120e-003
tblFleetMix	LDA	0.49	0.64
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	LHD1	0.02	2.4250e-003
tblFleetMix	LHD2	4.5750e-003	1.6160e-003
tblFleetMix	MHD	0.01	4.0400e-004
tblLandUse	LotAcreage	3.00	0.32

**2.0 Emissions Summary**

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.5599	18.7448	16.9475	0.0378	5.8653	0.8214	6.6867	2.9711	0.7910	3.7268	0.0000	3,612.5966	3,612.5966	0.5418	0.0000	3,624.9630
2021	80.1358	17.2474	16.2796	0.0375	0.8756	0.6989	1.5745	0.2370	0.6745	0.9116	0.0000	3,583.7880	3,583.7880	0.4753	0.0000	3,595.6707
Maximum	80.1358	18.7448	16.9475	0.0378	5.8653	0.8214	6.6867	2.9711	0.7910	3.7268	0.0000	3,612.5966	3,612.5966	0.5418	0.0000	3,624.9630

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.5599	18.7448	16.9475	0.0378	2.6755	0.8214	3.4969	1.3466	0.7910	2.1023	0.0000	3,612.5966	3,612.5966	0.5418	0.0000	3,624.9630
2021	80.1358	17.2474	16.2796	0.0375	0.8756	0.6989	1.5745	0.2370	0.6745	0.9116	0.0000	3,583.7880	3,583.7880	0.4753	0.0000	3,595.6707
Maximum	80.1358	18.7448	16.9475	0.0378	2.6755	0.8214	3.4969	1.3466	0.7910	2.1023	0.0000	3,612.5966	3,612.5966	0.5418	0.0000	3,624.9630

## Lemoore Mixed Use Project Hotel - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	47.32	0.00	38.61	50.64	0.00	35.02	0.00	0.00	0.00	0.00	0.00	0.00

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0378	9.0000e-005	9.3700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0200	0.0200	5.0000e-005		0.0213
Energy	0.0971	0.8828	0.7415	5.3000e-003		0.0671	0.0671		0.0671	0.0671		1,059.3399	1,059.3399	0.0203	0.0194	1,065.6350
Mobile	1.3769	1.4854	12.2982	0.0307	2.9384	0.0216	2.9599	0.7814	0.0200	0.8014		3,066.1532	3,066.1532	0.1225		3,069.2153
<b>Total</b>	<b>4.5118</b>	<b>2.3682</b>	<b>13.0491</b>	<b>0.0360</b>	<b>2.9384</b>	<b>0.0887</b>	<b>3.0271</b>	<b>0.7814</b>	<b>0.0871</b>	<b>0.8685</b>		<b>4,125.5131</b>	<b>4,125.5131</b>	<b>0.1428</b>	<b>0.0194</b>	<b>4,134.8716</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0378	9.0000e-005	9.3700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0200	0.0200	5.0000e-005		0.0213
Energy	0.0971	0.8828	0.7415	5.3000e-003		0.0671	0.0671		0.0671	0.0671		1,059.3399	1,059.3399	0.0203	0.0194	1,065.6350
Mobile	1.3562	1.4129	11.6370	0.0287	2.7356	0.0204	2.7560	0.7275	0.0189	0.7463		2,863.5724	2,863.5724	0.1155		2,866.4601
<b>Total</b>	<b>4.4911</b>	<b>2.2957</b>	<b>12.3879</b>	<b>0.0340</b>	<b>2.7356</b>	<b>0.0875</b>	<b>2.8231</b>	<b>0.7275</b>	<b>0.0860</b>	<b>0.8135</b>		<b>3,922.9322</b>	<b>3,922.9322</b>	<b>0.1359</b>	<b>0.0194</b>	<b>3,932.1164</b>



## Lemoore Mixed Use Project Hotel - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.46	3.06	5.07	5.64	6.90	1.36	6.74	6.90	1.30	6.34	0.00	4.91	4.91	4.88	0.00	4.90

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2020	4/2/2020	5	2	
2	Grading	Grading	4/3/2020	4/8/2020	5	4	
3	Building Construction	Building Construction	4/9/2020	1/13/2021	5	200	
4	Paving	Paving	1/14/2021	1/27/2021	5	10	
5	Architectural Coating	Architectural Coating	1/28/2021	2/10/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.4

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 196,020; Non-Residential Outdoor: 65,340; Striped Parking Area: 3,659 (Architectural Coating – sqft)

#### OffRoad Equipment

## Lemoore Mixed Use Project Hotel - Kings County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	81.00	31.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.4119	1,667.4119	0.5393		1,680.8937
<b>Total</b>	<b>1.6299</b>	<b>18.3464</b>	<b>7.7093</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.8210</b>	<b>6.6205</b>	<b>2.9537</b>	<b>0.7553</b>	<b>3.7090</b>		<b>1,667.4119</b>	<b>1,667.4119</b>	<b>0.5393</b>		<b>1,680.8937</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.2 Site Preparation - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0257	0.3013	6.6000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		65.8658	65.8658	2.4800e-003		65.9280
<b>Total</b>	<b>0.0399</b>	<b>0.0257</b>	<b>0.3013</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.4000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>65.8658</b>	<b>65.8658</b>	<b>2.4800e-003</b>		<b>65.9280</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553	0.0000	1,667.4119	1,667.4119	0.5393		1,680.8937
<b>Total</b>	<b>1.6299</b>	<b>18.3464</b>	<b>7.7093</b>	<b>0.0172</b>	<b>2.6098</b>	<b>0.8210</b>	<b>3.4308</b>	<b>1.3292</b>	<b>0.7553</b>	<b>2.0844</b>	<b>0.0000</b>	<b>1,667.4119</b>	<b>1,667.4119</b>	<b>0.5393</b>		<b>1,680.8937</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.2 Site Preparation - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0257	0.3013	6.6000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		65.8658	65.8658	2.4800e-003		65.9280
<b>Total</b>	<b>0.0399</b>	<b>0.0257</b>	<b>0.3013</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.4000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>65.8658</b>	<b>65.8658</b>	<b>2.4800e-003</b>		<b>65.9280</b>

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.718 3	1,365.718 3	0.4417		1,376.760 9
<b>Total</b>	<b>1.3498</b>	<b>15.0854</b>	<b>6.4543</b>	<b>0.0141</b>	<b>4.9143</b>	<b>0.6844</b>	<b>5.5986</b>	<b>2.5256</b>	<b>0.6296</b>	<b>3.1552</b>		<b>1,365.718 3</b>	<b>1,365.718 3</b>	<b>0.4417</b>		<b>1,376.760 9</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.3 Grading - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0257	0.3013	6.6000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		65.8658	65.8658	2.4800e-003		65.9280
<b>Total</b>	<b>0.0399</b>	<b>0.0257</b>	<b>0.3013</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.4000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>65.8658</b>	<b>65.8658</b>	<b>2.4800e-003</b>		<b>65.9280</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296	0.0000	1,365.718 3	1,365.718 3	0.4417		1,376.760 9
<b>Total</b>	<b>1.3498</b>	<b>15.0854</b>	<b>6.4543</b>	<b>0.0141</b>	<b>2.2114</b>	<b>0.6844</b>	<b>2.8958</b>	<b>1.1365</b>	<b>0.6296</b>	<b>1.7662</b>	<b>0.0000</b>	<b>1,365.718 3</b>	<b>1,365.718 3</b>	<b>0.4417</b>		<b>1,376.760 9</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.3 Grading - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0257	0.3013	6.6000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		65.8658	65.8658	2.4800e-003		65.9280
<b>Total</b>	<b>0.0399</b>	<b>0.0257</b>	<b>0.3013</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.4000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>65.8658</b>	<b>65.8658</b>	<b>2.4800e-003</b>		<b>65.9280</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>		<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.4 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1254	3.6960	0.7091	9.0300e-003	0.2102	0.0189	0.2292	0.0605	0.0181	0.0787		944.5456	944.5456	0.0980		946.9957
Worker	0.4040	0.2606	3.0503	6.7100e-003	0.6654	4.4100e-003	0.6698	0.1765	4.0600e-003	0.1806		666.8916	666.8916	0.0252		667.5206
<b>Total</b>	<b>0.5294</b>	<b>3.9566</b>	<b>3.7594</b>	<b>0.0157</b>	<b>0.8756</b>	<b>0.0234</b>	<b>0.8990</b>	<b>0.2370</b>	<b>0.0222</b>	<b>0.2592</b>		<b>1,611.4372</b>	<b>1,611.4372</b>	<b>0.1232</b>		<b>1,614.5162</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>	<b>0.0000</b>	<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>



## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.4 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1254	3.6960	0.7091	9.0300e-003	0.2102	0.0189	0.2292	0.0605	0.0181	0.0787		944.5456	944.5456	0.0980		946.9957
Worker	0.4040	0.2606	3.0503	6.7100e-003	0.6654	4.4100e-003	0.6698	0.1765	4.0600e-003	0.1806		666.8916	666.8916	0.0252		667.5206
<b>Total</b>	<b>0.5294</b>	<b>3.9566</b>	<b>3.7594</b>	<b>0.0157</b>	<b>0.8756</b>	<b>0.0234</b>	<b>0.8990</b>	<b>0.2370</b>	<b>0.0222</b>	<b>0.2592</b>		<b>1,611.4372</b>	<b>1,611.4372</b>	<b>0.1232</b>		<b>1,614.5162</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>		<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1056	3.3799	0.6224	8.9500e-003	0.2102	0.0102	0.2205	0.0605	9.8000e-003	0.0703		935.6662	935.6662	0.0957		938.0584
Worker	0.3710	0.2314	2.7578	6.5000e-003	0.6654	4.2800e-003	0.6697	0.1765	3.9500e-003	0.1804		646.9018	646.9018	0.0224		647.4606
<b>Total</b>	<b>0.4766</b>	<b>3.6113</b>	<b>3.3802</b>	<b>0.0155</b>	<b>0.8756</b>	<b>0.0145</b>	<b>0.8902</b>	<b>0.2370</b>	<b>0.0138</b>	<b>0.2508</b>		<b>1,582.5680</b>	<b>1,582.5680</b>	<b>0.1180</b>		<b>1,585.5190</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>	<b>0.0000</b>	<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1056	3.3799	0.6224	8.9500e-003	0.2102	0.0102	0.2205	0.0605	9.8000e-003	0.0703		935.6662	935.6662	0.0957		938.0584
Worker	0.3710	0.2314	2.7578	6.5000e-003	0.6654	4.2800e-003	0.6697	0.1765	3.9500e-003	0.1804		646.9018	646.9018	0.0224		647.4606
<b>Total</b>	<b>0.4766</b>	<b>3.6113</b>	<b>3.3802</b>	<b>0.0155</b>	<b>0.8756</b>	<b>0.0145</b>	<b>0.8902</b>	<b>0.2370</b>	<b>0.0138</b>	<b>0.2508</b>		<b>1,582.5680</b>	<b>1,582.5680</b>	<b>0.1180</b>		<b>1,585.5190</b>

**3.5 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.3668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1407</b>	<b>7.7422</b>	<b>8.8569</b>	<b>0.0135</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.3830</b>	<b>0.3830</b>		<b>1,296.8664</b>	<b>1,296.8664</b>	<b>0.4111</b>		<b>1,307.1442</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.5 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0372	0.4426	1.0400e-003	0.1068	6.9000e-004	0.1075	0.0283	6.3000e-004	0.0290		103.8237	103.8237	3.5900e-003		103.9134
<b>Total</b>	<b>0.0596</b>	<b>0.0372</b>	<b>0.4426</b>	<b>1.0400e-003</b>	<b>0.1068</b>	<b>6.9000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.3000e-004</b>	<b>0.0290</b>		<b>103.8237</b>	<b>103.8237</b>	<b>3.5900e-003</b>		<b>103.9134</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830	0.0000	1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.3668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1407</b>	<b>7.7422</b>	<b>8.8569</b>	<b>0.0135</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.3830</b>	<b>0.3830</b>	<b>0.0000</b>	<b>1,296.8664</b>	<b>1,296.8664</b>	<b>0.4111</b>		<b>1,307.1442</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.5 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0372	0.4426	1.0400e-003	0.1068	6.9000e-004	0.1075	0.0283	6.3000e-004	0.0290		103.8237	103.8237	3.5900e-003		103.9134
<b>Total</b>	<b>0.0596</b>	<b>0.0372</b>	<b>0.4426</b>	<b>1.0400e-003</b>	<b>0.1068</b>	<b>6.9000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.3000e-004</b>	<b>0.0290</b>		<b>103.8237</b>	<b>103.8237</b>	<b>3.5900e-003</b>		<b>103.9134</b>

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	79.8436					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>80.0625</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.6 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0733	0.0457	0.5448	1.2800e-003	0.1314	8.5000e-004	0.1323	0.0349	7.8000e-004	0.0356		127.7831	127.7831	4.4200e-003		127.8934
<b>Total</b>	<b>0.0733</b>	<b>0.0457</b>	<b>0.5448</b>	<b>1.2800e-003</b>	<b>0.1314</b>	<b>8.5000e-004</b>	<b>0.1323</b>	<b>0.0349</b>	<b>7.8000e-004</b>	<b>0.0356</b>		<b>127.7831</b>	<b>127.7831</b>	<b>4.4200e-003</b>		<b>127.8934</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	79.8436					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>80.0625</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**3.6 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0733	0.0457	0.5448	1.2800e-003	0.1314	8.5000e-004	0.1323	0.0349	7.8000e-004	0.0356		127.7831	127.7831	4.4200e-003		127.8934
<b>Total</b>	<b>0.0733</b>	<b>0.0457</b>	<b>0.5448</b>	<b>1.2800e-003</b>	<b>0.1314</b>	<b>8.5000e-004</b>	<b>0.1323</b>	<b>0.0349</b>	<b>7.8000e-004</b>	<b>0.0356</b>		<b>127.7831</b>	<b>127.7831</b>	<b>4.4200e-003</b>		<b>127.8934</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network

## Lemoore Mixed Use Project Hotel - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3562	1.4129	11.6370	0.0287	2.7356	0.0204	2.7560	0.7275	0.0189	0.7463		2,863.572 4	2,863.572 4	0.1155		2,866.460 1
Unmitigated	1.3769	1.4854	12.2982	0.0307	2.9384	0.0216	2.9599	0.7814	0.0200	0.8014		3,066.153 2	3,066.153 2	0.1225		3,069.215 3

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	735.30	737.10	535.50	1,343,278	1,250,592
Parking Lot	0.00	0.00	0.00		
Total	735.30	737.10	535.50	1,343,278	1,250,592

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.635705	0.036574	0.190436	0.120572	0.002425	0.001616	0.000404	0.001212	0.001742	0.001833	0.005782	0.000964	0.000735
Parking Lot	0.493375	0.028385	0.147799	0.120572	0.020115	0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735



## Lemoore Mixed Use Project Hotel - Kings County, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0971	0.8828	0.7415	5.3000e-003		0.0671	0.0671		0.0671	0.0671		1,059.3399	1,059.3399	0.0203	0.0194	1,065.6350
NaturalGas Unmitigated	0.0971	0.8828	0.7415	5.3000e-003		0.0671	0.0671		0.0671	0.0671		1,059.3399	1,059.3399	0.0203	0.0194	1,065.6350

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	9004.39	0.0971	0.8828	0.7415	5.3000e-003		0.0671	0.0671		0.0671	0.0671		1,059.3399	1,059.3399	0.0203	0.0194	1,065.6350
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0971</b>	<b>0.8828</b>	<b>0.7415</b>	<b>5.3000e-003</b>		<b>0.0671</b>	<b>0.0671</b>		<b>0.0671</b>	<b>0.0671</b>		<b>1,059.3399</b>	<b>1,059.3399</b>	<b>0.0203</b>	<b>0.0194</b>	<b>1,065.6350</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	9.00439	0.0971	0.8828	0.7415	5.3000e-003		0.0671	0.0671		0.0671	0.0671		1,059.3399	1,059.3399	0.0203	0.0194	1,065.6350
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0971</b>	<b>0.8828</b>	<b>0.7415</b>	<b>5.3000e-003</b>		<b>0.0671</b>	<b>0.0671</b>		<b>0.0671</b>	<b>0.0671</b>		<b>1,059.3399</b>	<b>1,059.3399</b>	<b>0.0203</b>	<b>0.0194</b>	<b>1,065.6350</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Lemoore Mixed Use Project Hotel - Kings County, Summer

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0378	9.0000e-005	9.3700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0200	0.0200	5.0000e-005		0.0213
Unmitigated	3.0378	9.0000e-005	9.3700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0200	0.0200	5.0000e-005		0.0213

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2188					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.8000e-004	9.0000e-005	9.3700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0200	0.0200	5.0000e-005		0.0213
<b>Total</b>	<b>3.0378</b>	<b>9.0000e-005</b>	<b>9.3700e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>0.0200</b>	<b>0.0200</b>	<b>5.0000e-005</b>		<b>0.0213</b>

## Lemoore Mixed Use Project Hotel - Kings County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2188					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8182					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.8000e-004	9.0000e-005	9.3700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0200	0.0200	5.0000e-005		0.0213
<b>Total</b>	<b>3.0378</b>	<b>9.0000e-005</b>	<b>9.3700e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>0.0200</b>	<b>0.0200</b>	<b>5.0000e-005</b>		<b>0.0213</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Lemoore Mixed Use Project Hotel - Kings County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Retail Shopping Center Summer Daily**

## Lemoore Mixed Use Retail - Kings County, Summer

## Lemoore Mixed Use Retail

### Kings County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.05	Acre	1.05	45,650.88	0
Strip Mall	7.04	1000sqft	0.16	7,040.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	37
Climate Zone	3			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site Plan Data

Construction Phase -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - Rule 4601 Architectural Coatings compliance

Fleet Mix - Fleet mix revised to reflect truck survey data for retail shops

Architectural Coating - Rule 4601 Architectural Coatings compliance

## Lemoore Mixed Use Retail - Kings County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	65.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	65.00
tblArchitecturalCoating	EF_Parking	150.00	65.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	65
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	65
tblFleetMix	HHD	0.16	1.1800e-003
tblFleetMix	LDA	0.49	0.64
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.15	0.19
tblFleetMix	LHD1	0.02	7.2900e-004
tblFleetMix	LHD2	4.5750e-003	7.2891e-004
tblFleetMix	MHD	0.01	3.1860e-003
tblLandUse	LandUseSquareFeet	45,738.00	45,650.88

## 2.0 Emissions Summary

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## Lemoore Mixed Use Retail - Kings County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.1716	18.3721	14.1848	0.0264	5.8653	0.8214	6.6867	2.9711	0.7751	3.7268	0.0000	2,448.280 2	2,448.280 2	0.5418	0.0000	2,458.441 8
2021	5.3044	14.6773	13.7951	0.0263	0.2335	0.6884	0.9220	0.0633	0.6647	0.7280	0.0000	2,440.580 3	2,440.580 3	0.4147	0.0000	2,450.351 4
Maximum	5.3044	18.3721	14.1848	0.0264	5.8653	0.8214	6.6867	2.9711	0.7751	3.7268	0.0000	2,448.280 2	2,448.280 2	0.5418	0.0000	2,458.441 8

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.1716	18.3721	14.1848	0.0264	2.6755	0.8214	3.4969	1.3466	0.7751	2.1023	0.0000	2,448.280 2	2,448.280 2	0.5418	0.0000	2,458.441 8
2021	5.3044	14.6773	13.7951	0.0263	0.2335	0.6884	0.9220	0.0633	0.6647	0.7280	0.0000	2,440.580 3	2,440.580 3	0.4147	0.0000	2,450.351 4
Maximum	5.3044	18.3721	14.1848	0.0264	2.6755	0.8214	3.4969	1.3466	0.7751	2.1023	0.0000	2,448.280 2	2,448.280 2	0.5418	0.0000	2,458.441 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.30	0.00	41.92	53.54	0.00	36.47	0.00	0.00	0.00	0.00	0.00	0.00

## Lemoore Mixed Use Retail - Kings County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1989	1.0000e-005	8.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7700e-003	1.7700e-003	0.0000		1.8900e-003
Energy	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
Mobile	0.5584	0.5680	4.4419	0.0107	1.0086	7.7000e-003	1.0163	0.2683	7.1300e-003	0.2754		1,067.0205	1,067.0205	0.0437		1,068.1140
<b>Total</b>	<b>0.7595</b>	<b>0.5882</b>	<b>4.4597</b>	<b>0.0108</b>	<b>1.0086</b>	<b>9.2400e-003</b>	<b>1.0179</b>	<b>0.2683</b>	<b>8.6700e-003</b>	<b>0.2770</b>		<b>1,091.3021</b>	<b>1,091.3021</b>	<b>0.0442</b>	<b>4.5000e-004</b>	<b>1,092.5399</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1808	1.0000e-005	8.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7700e-003	1.7700e-003	0.0000		1.8900e-003
Energy	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
Mobile	0.5513	0.5430	4.2153	9.9900e-003	0.9390	7.2800e-003	0.9463	0.2498	6.7500e-003	0.2565		997.2133	997.2133	0.0414		998.2470
<b>Total</b>	<b>0.7343</b>	<b>0.5633</b>	<b>4.2331</b>	<b>0.0101</b>	<b>0.9390</b>	<b>8.8200e-003</b>	<b>0.9479</b>	<b>0.2498</b>	<b>8.2900e-003</b>	<b>0.2581</b>		<b>1,021.4948</b>	<b>1,021.4948</b>	<b>0.0418</b>	<b>4.5000e-004</b>	<b>1,022.6729</b>

## Lemoore Mixed Use Retail - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	3.32	4.24	5.08	6.48	6.90	4.55	6.88	6.90	4.38	6.82	0.00	6.40	6.40	5.41	0.00	6.39

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2020	4/2/2020	5	2	
2	Grading	Grading	4/3/2020	4/8/2020	5	4	
3	Building Construction	Building Construction	4/9/2020	1/13/2021	5	200	
4	Paving	Paving	1/14/2021	1/27/2021	5	10	
5	Architectural Coating	Architectural Coating	1/28/2021	2/10/2021	5	10	

**Acres of Grading (Site Preparation Phase): 1****Acres of Grading (Grading Phase): 1.5****Acres of Paving: 1.05****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,560; Non-Residential Outdoor: 3,520; Striped Parking Area: 2,739 (Architectural Coating – sqft)****OffRoad Equipment**

## Lemoore Mixed Use Retail - Kings County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	21.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Lemoore Mixed Use Retail - Kings County, Summer

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.4119	1,667.4119	0.5393		1,680.8937
<b>Total</b>	<b>1.6299</b>	<b>18.3464</b>	<b>7.7093</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.8210</b>	<b>6.6205</b>	<b>2.9537</b>	<b>0.7553</b>	<b>3.7090</b>		<b>1,667.4119</b>	<b>1,667.4119</b>	<b>0.5393</b>		<b>1,680.8937</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.2 Site Preparation - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0257	0.3013	6.6000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		65.8658	65.8658	2.4800e-003		65.9280
<b>Total</b>	<b>0.0399</b>	<b>0.0257</b>	<b>0.3013</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.4000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>65.8658</b>	<b>65.8658</b>	<b>2.4800e-003</b>		<b>65.9280</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553	0.0000	1,667.4119	1,667.4119	0.5393		1,680.8937
<b>Total</b>	<b>1.6299</b>	<b>18.3464</b>	<b>7.7093</b>	<b>0.0172</b>	<b>2.6098</b>	<b>0.8210</b>	<b>3.4308</b>	<b>1.3292</b>	<b>0.7553</b>	<b>2.0844</b>	<b>0.0000</b>	<b>1,667.4119</b>	<b>1,667.4119</b>	<b>0.5393</b>		<b>1,680.8937</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.2 Site Preparation - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0257	0.3013	6.6000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		65.8658	65.8658	2.4800e-003		65.9280
<b>Total</b>	<b>0.0399</b>	<b>0.0257</b>	<b>0.3013</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.4000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>65.8658</b>	<b>65.8658</b>	<b>2.4800e-003</b>		<b>65.9280</b>

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.718 3	1,365.718 3	0.4417		1,376.760 9
<b>Total</b>	<b>1.3498</b>	<b>15.0854</b>	<b>6.4543</b>	<b>0.0141</b>	<b>4.9143</b>	<b>0.6844</b>	<b>5.5986</b>	<b>2.5256</b>	<b>0.6296</b>	<b>3.1552</b>		<b>1,365.718 3</b>	<b>1,365.718 3</b>	<b>0.4417</b>		<b>1,376.760 9</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.3 Grading - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0257	0.3013	6.6000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		65.8658	65.8658	2.4800e-003		65.9280
<b>Total</b>	<b>0.0399</b>	<b>0.0257</b>	<b>0.3013</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.4000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>65.8658</b>	<b>65.8658</b>	<b>2.4800e-003</b>		<b>65.9280</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296	0.0000	1,365.718 3	1,365.718 3	0.4417		1,376.760 9
<b>Total</b>	<b>1.3498</b>	<b>15.0854</b>	<b>6.4543</b>	<b>0.0141</b>	<b>2.2114</b>	<b>0.6844</b>	<b>2.8958</b>	<b>1.1365</b>	<b>0.6296</b>	<b>1.7662</b>	<b>0.0000</b>	<b>1,365.718 3</b>	<b>1,365.718 3</b>	<b>0.4417</b>		<b>1,376.760 9</b>



## Lemoore Mixed Use Retail - Kings County, Summer

**3.3 Grading - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0257	0.3013	6.6000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		65.8658	65.8658	2.4800e-003		65.9280
<b>Total</b>	<b>0.0399</b>	<b>0.0257</b>	<b>0.3013</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.4000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>65.8658</b>	<b>65.8658</b>	<b>2.4800e-003</b>		<b>65.9280</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>		<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.4 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0364	1.0731	0.2059	2.6200e-003	0.0610	5.5000e-003	0.0665	0.0176	5.2600e-003	0.0228		274.2229	274.2229	0.0285		274.9342
Worker	0.1048	0.0676	0.7908	1.7400e-003	0.1725	1.1400e-003	0.1737	0.0458	1.0500e-003	0.0468		172.8978	172.8978	6.5200e-003		173.0609
<b>Total</b>	<b>0.1411</b>	<b>1.1406</b>	<b>0.9967</b>	<b>4.3600e-003</b>	<b>0.2335</b>	<b>6.6400e-003</b>	<b>0.2402</b>	<b>0.0633</b>	<b>6.3100e-003</b>	<b>0.0697</b>		<b>447.1207</b>	<b>447.1207</b>	<b>0.0350</b>		<b>447.9951</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
<b>Total</b>	<b>2.0305</b>	<b>14.7882</b>	<b>13.1881</b>	<b>0.0220</b>		<b>0.7960</b>	<b>0.7960</b>		<b>0.7688</b>	<b>0.7688</b>	<b>0.0000</b>	<b>2,001.1595</b>	<b>2,001.1595</b>	<b>0.3715</b>		<b>2,010.4467</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.4 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0364	1.0731	0.2059	2.6200e-003	0.0610	5.5000e-003	0.0665	0.0176	5.2600e-003	0.0228		274.2229	274.2229	0.0285		274.9342
Worker	0.1048	0.0676	0.7908	1.7400e-003	0.1725	1.1400e-003	0.1737	0.0458	1.0500e-003	0.0468		172.8978	172.8978	6.5200e-003		173.0609
<b>Total</b>	<b>0.1411</b>	<b>1.1406</b>	<b>0.9967</b>	<b>4.3600e-003</b>	<b>0.2335</b>	<b>6.6400e-003</b>	<b>0.2402</b>	<b>0.0633</b>	<b>6.3100e-003</b>	<b>0.0697</b>		<b>447.1207</b>	<b>447.1207</b>	<b>0.0350</b>		<b>447.9951</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>		<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0306	0.9813	0.1807	2.6000e-003	0.0610	2.9700e-003	0.0640	0.0176	2.8400e-003	0.0204		271.6450	271.6450	0.0278		272.3396
Worker	0.0962	0.0600	0.7150	1.6900e-003	0.1725	1.1100e-003	0.1736	0.0458	1.0200e-003	0.0468		167.7153	167.7153	5.7900e-003		167.8601
<b>Total</b>	<b>0.1268</b>	<b>1.0413</b>	<b>0.8957</b>	<b>4.2900e-003</b>	<b>0.2335</b>	<b>4.0800e-003</b>	<b>0.2376</b>	<b>0.0633</b>	<b>3.8600e-003</b>	<b>0.0672</b>		<b>439.3603</b>	<b>439.3603</b>	<b>0.0336</b>		<b>440.1997</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
<b>Total</b>	<b>1.8125</b>	<b>13.6361</b>	<b>12.8994</b>	<b>0.0221</b>		<b>0.6843</b>	<b>0.6843</b>		<b>0.6608</b>	<b>0.6608</b>	<b>0.0000</b>	<b>2,001.2200</b>	<b>2,001.2200</b>	<b>0.3573</b>		<b>2,010.1517</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0306	0.9813	0.1807	2.6000e-003	0.0610	2.9700e-003	0.0640	0.0176	2.8400e-003	0.0204		271.6450	271.6450	0.0278		272.3396
Worker	0.0962	0.0600	0.7150	1.6900e-003	0.1725	1.1100e-003	0.1736	0.0458	1.0200e-003	0.0468		167.7153	167.7153	5.7900e-003		167.8601
<b>Total</b>	<b>0.1268</b>	<b>1.0413</b>	<b>0.8957</b>	<b>4.2900e-003</b>	<b>0.2335</b>	<b>4.0800e-003</b>	<b>0.2376</b>	<b>0.0633</b>	<b>3.8600e-003</b>	<b>0.0672</b>		<b>439.3603</b>	<b>439.3603</b>	<b>0.0336</b>		<b>440.1997</b>

**3.5 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0490</b>	<b>7.7422</b>	<b>8.8569</b>	<b>0.0135</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.3830</b>	<b>0.3830</b>		<b>1,296.8664</b>	<b>1,296.8664</b>	<b>0.4111</b>		<b>1,307.1442</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.5 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0372	0.4426	1.0400e-003	0.1068	6.9000e-004	0.1075	0.0283	6.3000e-004	0.0290		103.8237	103.8237	3.5900e-003		103.9134
<b>Total</b>	<b>0.0596</b>	<b>0.0372</b>	<b>0.4426</b>	<b>1.0400e-003</b>	<b>0.1068</b>	<b>6.9000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.3000e-004</b>	<b>0.0290</b>		<b>103.8237</b>	<b>103.8237</b>	<b>3.5900e-003</b>		<b>103.9134</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830	0.0000	1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0490</b>	<b>7.7422</b>	<b>8.8569</b>	<b>0.0135</b>		<b>0.4153</b>	<b>0.4153</b>		<b>0.3830</b>	<b>0.3830</b>	<b>0.0000</b>	<b>1,296.8664</b>	<b>1,296.8664</b>	<b>0.4111</b>		<b>1,307.1442</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.5 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0372	0.4426	1.0400e-003	0.1068	6.9000e-004	0.1075	0.0283	6.3000e-004	0.0290		103.8237	103.8237	3.5900e-003		103.9134
<b>Total</b>	<b>0.0596</b>	<b>0.0372</b>	<b>0.4426</b>	<b>1.0400e-003</b>	<b>0.1068</b>	<b>6.9000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.3000e-004</b>	<b>0.0290</b>		<b>103.8237</b>	<b>103.8237</b>	<b>3.5900e-003</b>		<b>103.9134</b>

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>5.2860</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**3.6 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0114	0.1362	3.2000e-004	0.0329	2.1000e-004	0.0331	8.7200e-003	1.9000e-004	8.9100e-003		31.9458	31.9458	1.1000e-003		31.9734
<b>Total</b>	<b>0.0183</b>	<b>0.0114</b>	<b>0.1362</b>	<b>3.2000e-004</b>	<b>0.0329</b>	<b>2.1000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9100e-003</b>		<b>31.9458</b>	<b>31.9458</b>	<b>1.1000e-003</b>		<b>31.9734</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>5.2860</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>



## Lemoore Mixed Use Retail - Kings County, Summer

**3.6 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0114	0.1362	3.2000e-004	0.0329	2.1000e-004	0.0331	8.7200e-003	1.9000e-004	8.9100e-003		31.9458	31.9458	1.1000e-003		31.9734
<b>Total</b>	<b>0.0183</b>	<b>0.0114</b>	<b>0.1362</b>	<b>3.2000e-004</b>	<b>0.0329</b>	<b>2.1000e-004</b>	<b>0.0331</b>	<b>8.7200e-003</b>	<b>1.9000e-004</b>	<b>8.9100e-003</b>		<b>31.9458</b>	<b>31.9458</b>	<b>1.1000e-003</b>		<b>31.9734</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

Improve Destination Accessibility

Improve Pedestrian Network

## Lemoore Mixed Use Retail - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5513	0.5430	4.2153	9.9900e-003	0.9390	7.2800e-003	0.9463	0.2498	6.7500e-003	0.2565		997.2133	997.2133	0.0414		998.2470
Unmitigated	0.5584	0.5680	4.4419	0.0107	1.0086	7.7000e-003	1.0163	0.2683	7.1300e-003	0.2754		1,067.0205	1,067.0205	0.0437		1,068.1140

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Strip Mall	312.01	295.96	143.83	439,977	409,619
Total	312.01	295.96	143.83	439,977	409,619

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.493375	0.028385	0.147799	0.120572	0.020115	0.004575	0.012018	0.162105	0.001742	0.001833	0.005782	0.000964	0.000735
Strip Mall	0.635582	0.036567	0.190400	0.120572	0.000729	0.000729	0.003186	0.001180	0.001742	0.001833	0.005782	0.000964	0.000735

## Lemoore Mixed Use Retail - Kings County, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
NaturalGas Unmitigated	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241

## Lemoore Mixed Use Retail - Kings County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	206.378	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
<b>Total</b>		<b>2.2300e-003</b>	<b>0.0202</b>	<b>0.0170</b>	<b>1.2000e-004</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>24.2798</b>	<b>24.2798</b>	<b>4.7000e-004</b>	<b>4.5000e-004</b>	<b>24.4241</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.206378	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
<b>Total</b>		<b>2.2300e-003</b>	<b>0.0202</b>	<b>0.0170</b>	<b>1.2000e-004</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>24.2798</b>	<b>24.2798</b>	<b>4.7000e-004</b>	<b>4.5000e-004</b>	<b>24.4241</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Lemoore Mixed Use Retail - Kings County, Summer

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1808	1.0000e-005	8.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7700e-003	1.7700e-003	0.0000		1.8900e-003
Unmitigated	0.1989	1.0000e-005	8.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7700e-003	1.7700e-003	0.0000		1.8900e-003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0320					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.0000e-005	1.0000e-005	8.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7700e-003	1.7700e-003	0.0000		1.8900e-003
<b>Total</b>	<b>0.1990</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>	<b>0.0000</b>		<b>1.8900e-003</b>

## Lemoore Mixed Use Retail - Kings County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.0000e-005	1.0000e-005	8.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7700e-003	1.7700e-003	0.0000		1.8900e-003
<b>Total</b>	<b>0.1808</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>1.7700e-003</b>	<b>1.7700e-003</b>	<b>0.0000</b>		<b>1.8900e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Lemoore Mixed Use Retail - Kings County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **CalEEMod Output Site Preparation and Grading Summer Daily**



## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

## Hanford Armona Rd Mixed Use Project Site Prep and Grading

### Kings County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	7.04	1000sqft	0.16	7,040.00	0
Other Non-Asphalt Surfaces	4.41	Acre	4.41	192,099.60	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	37
<b>Climate Zone</b>	3			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total acreage for Parcel A, B, and C 4.57 acres

Construction Phase -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
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## 2.0 Emissions Summary

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1663	42.4752	22.1915	0.0395	18.2141	2.1984	20.4125	9.9699	2.0225	11.9924	0.0000	3,833.299 7	3,833.299 7	1.1974	0.0000	3,863.235 4
Maximum	4.1663	42.4752	22.1915	0.0395	18.2141	2.1984	20.4125	9.9699	2.0225	11.9924	0.0000	3,833.299 7	3,833.299 7	1.1974	0.0000	3,863.235 4

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1663	42.4752	22.1915	0.0395	8.2777	2.1984	10.4761	4.5080	2.0225	6.5306	0.0000	3,833.299 7	3,833.299 7	1.1974	0.0000	3,863.235 4
Maximum	4.1663	42.4752	22.1915	0.0395	8.2777	2.1984	10.4761	4.5080	2.0225	6.5306	0.0000	3,833.299 7	3,833.299 7	1.1974	0.0000	3,863.235 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.55	0.00	48.68	54.78	0.00	45.54	0.00	0.00	0.00	0.00	0.00	0.00

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2676	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5100e-003	2.5100e-003	1.0000e-005		2.6700e-003
Energy	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
Mobile	0.7097	7.8601	4.9958	0.0239	1.0389	0.0221	1.0611	0.2789	0.0210	0.2999		2,456.3138	2,456.3138	0.3359		2,464.7118
<b>Total</b>	<b>0.9795</b>	<b>7.8804</b>	<b>5.0140</b>	<b>0.0240</b>	<b>1.0389</b>	<b>0.0237</b>	<b>1.0626</b>	<b>0.2789</b>	<b>0.0225</b>	<b>0.3015</b>		<b>2,480.5960</b>	<b>2,480.5960</b>	<b>0.3364</b>	<b>4.5000e-004</b>	<b>2,489.1386</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2676	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5100e-003	2.5100e-003	1.0000e-005		2.6700e-003
Energy	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
Mobile	0.7097	7.8601	4.9958	0.0239	1.0389	0.0221	1.0611	0.2789	0.0210	0.2999		2,456.3138	2,456.3138	0.3359		2,464.7118
<b>Total</b>	<b>0.9795</b>	<b>7.8804</b>	<b>5.0140</b>	<b>0.0240</b>	<b>1.0389</b>	<b>0.0237</b>	<b>1.0626</b>	<b>0.2789</b>	<b>0.0225</b>	<b>0.3015</b>		<b>2,480.5960</b>	<b>2,480.5960</b>	<b>0.3364</b>	<b>4.5000e-004</b>	<b>2,489.1386</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2020	4/7/2020	5	5	
2	Grading	Grading	4/8/2020	4/17/2020	5	8	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 4****Acres of Paving: 4.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

**Trips and VMT**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>		<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**3.2 Site Preparation - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0898	0.0579	0.6779	1.4900e-003	0.1479	9.8000e-004	0.1489	0.0392	9.0000e-004	0.0401		148.1981	148.1981	5.5900e-003		148.3379
<b>Total</b>	<b>0.0898</b>	<b>0.0579</b>	<b>0.6779</b>	<b>1.4900e-003</b>	<b>0.1479</b>	<b>9.8000e-004</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.0000e-004</b>	<b>0.0401</b>		<b>148.1981</b>	<b>148.1981</b>	<b>5.5900e-003</b>		<b>148.3379</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>8.1298</b>	<b>2.1974</b>	<b>10.3272</b>	<b>4.4688</b>	<b>2.0216</b>	<b>6.4904</b>	<b>0.0000</b>	<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**3.2 Site Preparation - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0898	0.0579	0.6779	1.4900e-003	0.1479	9.8000e-004	0.1489	0.0392	9.0000e-004	0.0401		148.1981	148.1981	5.5900e-003		148.3379
<b>Total</b>	<b>0.0898</b>	<b>0.0579</b>	<b>0.6779</b>	<b>1.4900e-003</b>	<b>0.1479</b>	<b>9.8000e-004</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.0000e-004</b>	<b>0.0401</b>		<b>148.1981</b>	<b>148.1981</b>	<b>5.5900e-003</b>		<b>148.3379</b>

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
<b>Total</b>	<b>2.4288</b>	<b>26.3859</b>	<b>16.0530</b>	<b>0.0297</b>	<b>6.5523</b>	<b>1.2734</b>	<b>7.8258</b>	<b>3.3675</b>	<b>1.1716</b>	<b>4.5390</b>		<b>2,872.4851</b>	<b>2,872.4851</b>	<b>0.9290</b>		<b>2,895.7106</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**3.3 Grading - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0483	0.5649	1.2400e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		123.4984	123.4984	4.6600e-003		123.6149
<b>Total</b>	<b>0.0748</b>	<b>0.0483</b>	<b>0.5649</b>	<b>1.2400e-003</b>	<b>0.1232</b>	<b>8.2000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.5000e-004</b>	<b>0.0334</b>		<b>123.4984</b>	<b>123.4984</b>	<b>4.6600e-003</b>		<b>123.6149</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.485 1	2,872.485 1	0.9290		2,895.710 6
<b>Total</b>	<b>2.4288</b>	<b>26.3859</b>	<b>16.0530</b>	<b>0.0297</b>	<b>2.9486</b>	<b>1.2734</b>	<b>4.2220</b>	<b>1.5154</b>	<b>1.1716</b>	<b>2.6869</b>	<b>0.0000</b>	<b>2,872.485 1</b>	<b>2,872.485 1</b>	<b>0.9290</b>		<b>2,895.710 6</b>



## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**3.3 Grading - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0483	0.5649	1.2400e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		123.4984	123.4984	4.6600e-003		123.6149
<b>Total</b>	<b>0.0748</b>	<b>0.0483</b>	<b>0.5649</b>	<b>1.2400e-003</b>	<b>0.1232</b>	<b>8.2000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.5000e-004</b>	<b>0.0334</b>		<b>123.4984</b>	<b>123.4984</b>	<b>4.6600e-003</b>		<b>123.6149</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7097	7.8601	4.9958	0.0239	1.0389	0.0221	1.0611	0.2789	0.0210	0.2999		2,456.3138	2,456.3138	0.3359		2,464.7118
Unmitigated	0.7097	7.8601	4.9958	0.0239	1.0389	0.0221	1.0611	0.2789	0.0210	0.2999		2,456.3138	2,456.3138	0.3359		2,464.7118

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	312.01	295.96	143.83	439,977	439,977
Total	312.01	295.96	143.83	439,977	439,977

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.487262	0.029057	0.146825	0.126841	0.021860	0.004787	0.012229	0.159772	0.001758	0.001914	0.005918	0.000991	0.000785
Strip Mall	0.487262	0.029057	0.146825	0.126841	0.021860	0.004787	0.012229	0.159772	0.001758	0.001914	0.005918	0.000991	0.000785

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
NaturalGas Unmitigated	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	206.378	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
<b>Total</b>		<b>2.2300e-003</b>	<b>0.0202</b>	<b>0.0170</b>	<b>1.2000e-004</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>24.2798</b>	<b>24.2798</b>	<b>4.7000e-004</b>	<b>4.5000e-004</b>	<b>24.4241</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.206378	2.2300e-003	0.0202	0.0170	1.2000e-004		1.5400e-003	1.5400e-003		1.5400e-003	1.5400e-003		24.2798	24.2798	4.7000e-004	4.5000e-004	24.4241
<b>Total</b>		<b>2.2300e-003</b>	<b>0.0202</b>	<b>0.0170</b>	<b>1.2000e-004</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>1.5400e-003</b>	<b>1.5400e-003</b>		<b>24.2798</b>	<b>24.2798</b>	<b>4.7000e-004</b>	<b>4.5000e-004</b>	<b>24.4241</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2676	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5100e-003	2.5100e-003	1.0000e-005		2.6700e-003
Unmitigated	0.2676	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5100e-003	2.5100e-003	1.0000e-005		2.6700e-003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0488					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2187					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5100e-003	2.5100e-003	1.0000e-005		2.6700e-003
<b>Total</b>	<b>0.2676</b>	<b>1.0000e-005</b>	<b>1.1800e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.5100e-003</b>	<b>2.5100e-003</b>	<b>1.0000e-005</b>		<b>2.6700e-003</b>

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0488					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2187					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.5100e-003	2.5100e-003	1.0000e-005		2.6700e-003
<b>Total</b>	<b>0.2676</b>	<b>1.0000e-005</b>	<b>1.1800e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.5100e-003</b>	<b>2.5100e-003</b>	<b>1.0000e-005</b>		<b>2.6700e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## Hanford Armona Rd Mixed Use Project Site Prep and Grading - Kings County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

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**APPENDIX B**  
**TRAFFIC IMPACT REPORT**



# Final Traffic Impact Analysis

## Mixed-Use Development

**On the Southeast Corner of State Route 41  
and Hanford-Armona Road**

**In the City of Lemoore, California**

***Prepared for:***

CVIF II, LLC.  
680 W. Shaw Ave., Ste. 200  
Fresno, CA 93704

July 19, 2018

Project No. 039-001



**Traffic Engineering, Inc.**

***Traffic Engineering, Transportation Planning, & Parking Solutions***

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

Phone: (559) 570-8991

[www.JLBtraffic.com](http://www.JLBtraffic.com)



*Traffic Engineering, Transportation Planning, & Parking Solutions*

## Final Traffic Impact Analysis

**For the Mixed-Use Development located on the Southeast Corner of State Route 41 and Hanford-Armona Road**

In the City of Lemoore, CA

July 19, 2018

This Draft Technical Letter has been prepared under the direction of a licensed Traffic Engineer. The licensed Traffic Engineer attests to the technical information contained therein and has judged the qualifications of any technical specialists providing engineering data from which recommendations, conclusions, and decisions are based.

Prepared by:

A handwritten signature in black ink, reading "Jose L Benavides", written over a horizontal line.

Jose Luis Benavides, PE, TE

President



*Traffic Engineering, Transportation Planning, & Parking Solutions*

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

Phone: (559) 570-8991

[www.JLBtraffic.com](http://www.JLBtraffic.com)

## Table of Contents

<b>Introduction and Summary.....</b>	<b>1</b>
Introduction .....	1
Summary .....	1
Existing Traffic Conditions.....	1
Existing plus Project Phase 1 Traffic Conditions .....	2
Existing plus Project Buildout Traffic Conditions .....	2
Cumulative Year 2040 plus Project Traffic Conditions.....	3
Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions.....	4
Queuing Analysis.....	4
Project's Equitable Fair Share .....	4
<b>TIA Scope of Work .....</b>	<b>5</b>
Study Scenarios.....	5
Existing Traffic Conditions.....	5
Existing plus Project Phase 1 Traffic Conditions .....	5
Existing plus Project Buildout Traffic Conditions .....	5
Cumulative Year 2040 plus Project Traffic Conditions.....	6
Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions.....	6
Study Facilities .....	6
Existing, Existing plus Project, and Cumulative Year 2040 plus Project Scenarios .....	6
Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Scenario Only .....	7
<b>Level of Service Analysis Methodology .....</b>	<b>7</b>
<b>Criteria of Significance .....</b>	<b>8</b>
<b>Operational Analysis Assumptions and Defaults .....</b>	<b>8</b>
<b>Existing Traffic Conditions .....</b>	<b>9</b>
Roadway Network.....	9
Results of Existing Level of Service Analysis .....	11
Traffic Signal Warrants.....	12
<b>Existing plus Project Phase 1 Traffic Conditions.....</b>	<b>14</b>
Project Phase 1 Description .....	14
Project Phase 1 Access.....	14



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[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

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Page | iii

Project Phase I Trip Generation .....	14
Project Phase 1 Trip Distribution .....	15
Results of Existing plus Project Phase 1 Level of Service Analysis .....	19
Traffic Signal Warrants.....	20
<b>Existing plus Project Buildout Traffic Conditions.....</b>	<b>22</b>
Project Buildout Description .....	22
Project Buildout Access.....	22
Project Buildout Trip Generation .....	23
Project Buildout Trip Distribution .....	24
Bikeways .....	24
Transit .....	25
Stopping Sight Distance .....	25
Results of Existing plus Project Buildout Level of Service Analysis.....	31
Traffic Signal Warrants.....	32
<b>Cumulative Year 2040 plus Project Traffic Conditions.....</b>	<b>34</b>
Description of Approved and Pipeline Projects .....	34
Results of Cumulative Year 2040 plus Project Level of Service Analysis .....	36
Traffic Signal Warrants.....	38
<b>Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions .....</b>	<b>40</b>
Results of Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Level of Service Analysis .....	40
<b>Queuing Analysis .....</b>	<b>44</b>
<b>Project's Pro-Rata Fair Share of Future Transportation Improvements.....</b>	<b>46</b>
<b>Conclusions and Recommendations.....</b>	<b>47</b>
Existing Traffic Conditions.....	47
Existing plus Project Phase 1 Traffic Conditions .....	47
Existing plus Project Buildout Traffic Conditions .....	48
Cumulative Year 2040 plus Project Traffic Conditions.....	49
Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions.....	50
Queuing Analysis.....	50
Project's Equitable Fair Share .....	50



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[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

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Fresno, CA 93710

(559) 570-8991

Page | iv

Study Participants .....	51
References.....	51

## List of Tables

Table I: Existing Intersection LOS Results .....	11
Table II: Existing Arterial Segment LOS Results .....	11
Table III: Existing Highway Segment LOS Results.....	12
Table IV: Project Phase I Trip Generation (General Plan Amendment).....	15
Table V: Existing plus Project Phase 1 Intersection LOS Results .....	20
Table VI: Existing plus Project Phase 1 Arterial Segment LOS Results.....	20
Table VII: Existing plus Project Phase 1 Highway Segment LOS Results .....	20
Table VIII: Proposed Project Buildout Trip Generation (General Plan Amendment).....	23
Table IX: Project Site Trip Generation (Consistent with the 2030 General Plan).....	24
Table X: Difference in Trip Generation .....	24
Table XI: Existing plus Project Buildout Intersection LOS Results .....	31
Table XII: Existing plus Project Buildout Arterial Segment LOS Results .....	31
Table XIII: Existing plus Project Buildout Highway Segment LOS Results.....	32
Table XIV: Cumulative Projects' Trip Generation .....	34
Table XV: Cumulative Year 2040 plus Project Intersection LOS Results .....	37
Table XVI: Cumulative Year 2040 plus Project Arterial Segment LOS Results .....	37
Table XVII: Cumulative Year 2040 plus Project Highway Segment LOS Results.....	37
Table XVIII: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Intersection LOS Results.....	41
Table XIX: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Arterial Segment LOS Results .....	41
Table XX: Cumulative Year 2040 plus Project plus Partial L-9 Interchange Highway Segment LOS Results .....	41
Table XXI: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Ramp Segment LOS Results .....	42
Table XXII: Queuing Analysis.....	45
Table XXIII: Project's Fair Share of Future Roadway Improvements.....	46



## List of Figures

Figure 1: Vicinity Map .....	10
Figure 2: Existing - Traffic Volumes, Geometrics and Controls.....	13
Figure 3: Project Site Plan .....	16
Figure 4: Multifamily Housing Percent Distribution .....	17
Figure 5: Phase 1 - Project Only Trips .....	18
Figure 6: Existing plus Project Phase 1 - Traffic Volumes, Geometrics and Controls .....	21
Figure 7A: Gasoline/Service Station with Convenience Market Percent Distribution.....	26
Figure 7B: Hotel Percent Distribution .....	27
Figure 7C: Fast-Food Restaurant with Drive-Through Window Percent Distribution.....	28
Figure 7D: Shopping Center Percent Distribution.....	29
Figure 8: Buildout - Project Only Trips.....	30
Figure 9: Existing plus Project Buildout - Traffic Volumes, Geometrics and Controls.....	33
Figure 10: Cumulative Project's Trip Assignment .....	35
Figure 11: Cumulative Year 2040 plus Project - Traffic Volumes, Geometrics and Controls.....	39
Figure 12: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange - Traffic Volumes, Geometrics and Controls.....	43

## List of Appendices

Appendix A: Scope of Work
Appendix B: Traffic Counts
Appendix C: Methodology
Appendix D: Existing Traffic Conditions
Appendix E: Existing plus Project Phase 1 Traffic Conditions
Appendix F: Existing plus Project Buildout Traffic Conditions
Appendix G: Cumulative Year 2040 plus Project Traffic Conditions
Appendix H: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions
Appendix I: Signal Warrants



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

(559) 570-8991

Page | vi

## Introduction and Summary

### Introduction

This report describes a Traffic Impact Analysis (TIA) prepared by JLB Traffic Engineering, Inc. (JLB) for the proposed Mixed-Use Development (Project) located on the southeast corner of State Route 41 and Hanford-Armona Road in the City of Lemoore. The Project proposes to develop a 16.19-acre site with 176 multi-family residential units (apartments), a gasoline/service station (8 fueling positions) with convenience market, a 90-room hotel, 6,000 square feet of fast-food restaurant with drive-through window, and 7,040 square feet of general shopping center. Based on information provided to JLB, the Project will undergo a General Plan Amendment and Zoning Map Amendment through the City of Lemoore. Figure 1 shows the location of the proposed Project site relative to the surrounding roadway network.

The purpose of this TIA is to evaluate the potential on-site and off-site traffic impacts, identify short-term roadway and circulation needs, determine potential mitigation measures, and identify any critical traffic issues that should be addressed in the on-going planning process. The scope of work was prepared via consultation with City of Lemoore, County of Kings and Caltrans staff.

### Summary

The potential traffic impacts of the proposed Project were evaluated in accordance with the standards set forth by the level of service (LOS) policy of the City of Lemoore, County of Kings and Caltrans.

#### *Existing Traffic Conditions*

- At present, the intersection of State Route 41 and Hanford-Armona Road operates below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. However, to improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be considered.
  - State Route 41 and Hanford-Armona Road
    - Modify the westbound left-through-right lane to a left-through lane;
    - Add a westbound right-turn lane; and
    - Modify the traffic signal to accommodate the added lane.
- At present, all arterial and highway segments operate at an acceptable LOS.



### *Existing plus Project Phase 1 Traffic Conditions*

- Phase 1 of the proposed Project is estimated to generate a maximum of 1,288 daily trips, 81 AM peak hour trips and 99 PM peak hour trips.
- Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to continue operating below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. Phase 1 of the Project is projected to add a maximum of 3.3 and 1.1 seconds of average delay during the AM and PM peaks respectively. Also, the addition of an average delay of less than five (5) seconds is often not considered a significant impact. Therefore, since the Phase 1 of the Project maintains the existing measures of effectiveness and it adds less than five (5) seconds of delay to existing operations, this impact would not be considered significant. However, if improvements were made to improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.
  - State Route 41 and Hanford-Armona Road
    - Add a westbound left-turn lane;
    - Modify the westbound left-through-right lane to a through lane;
    - Add a westbound right-turn lane; and
    - Modify the traffic signal to accommodate the added lanes while maintaining the east-west split phasing.
- Under this scenario, all arterial and highway segments are projected to operate at an acceptable LOS.

### *Existing plus Project Buildout Traffic Conditions*

- JLB analyzed the conceptual roadways within an earlier version of the Project site plan. Based on this review, it was recommended that the Project consider relocating the gasoline/service station (Shop A) and fast-food restaurant (Pad A) located near the northwest corner of the Project Site Plan further east and relocating the hotel in their place. The gasoline/service station and fast-food restaurant are estimated to attract higher volumes than those estimated to be generated by the hotel. Based on these comments, the Project site plan was revised to relocate the proposed Hotel and gasoline/service station as recommended by JLB. To further minimize traffic impacts, the latest Project site plan also included a reduction on the number of driveways to Hanford-Armona Road. By incorporating these modifications to the Project Site Plan, on-site and off-site traffic operations and circulation have been improved.
- It is recommended that the Project coordinate with KART to determine the best location for the placement of a bus turnout along the Project's frontage to Hanford-Armona Road.
- It is recommended that the Project implement Class II bike lanes along its frontage to Hanford-Armona Road.
- At buildout, the proposed Project is estimated to generate a maximum of 6,775 daily trips, 471 AM peak hour trips and 488 PM peak hour trips.





- Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to operate below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. To improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.
  - State Route 41 and Hanford-Armona Road
    - Add a westbound left-turn lane;
    - Modify the westbound left-through-right lane to a through lane;
    - Add a westbound right-turn lane; and
    - Modify the traffic signal to accommodate the added lanes while maintaining the east-west split phasing.
- Under this scenario, all arterial and highway segments are projected to operate at an acceptable LOS.

#### *Cumulative Year 2040 plus Project Traffic Conditions*

- Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to operate below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. To improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.
  - State Route 41 and Hanford-Armona Road
    - Add an eastbound left-turn lane;
    - Modify the eastbound left-through-right lane to a through-right lane;
    - Add two westbound left-turn lanes;
    - Modify the westbound left-through-right lane to a through lane;
    - Add a westbound right-turn lane;
    - Add a second southbound left-turn lane;
    - Implement overlap phasing of the westbound right-turn with the southbound left-turn phase;
    - Implement overlap phasing of the northbound right-turn with the westbound left-turn phase;
    - Implement protective left-turn phasing in all directions; and
    - Modify the traffic signal to accommodate the added lanes.
- Under this scenario, the intersections of Project Driveway 2 and Hanford-Armona Road and 19th Avenue and Cinnamon Drive are projected to exceed their LOS threshold during both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.
  - Project Driveway 2 and Hanford-Armona Road
    - Modify the eastbound right turn lane to an eastbound through-right lane;
    - Signalize the intersection with protective left-turn phasing in all directions; and
    - Modify the intersection to accommodate the modified lane geometrics.
  - 19th Avenue and Cinnamon Drive
    - Signalize the intersection with protective left-turn phasing in all directions.



- Under this scenario, the arterial segment of Hanford-Armona Road between State Route 41 and Project Driveway 2 is anticipated to exceed its LOS threshold. To improve its LOS, it is recommended that this segment of Hanford-Armona Road be widened to accommodate two lanes in each direction and be divided by a raised median island or a continuous two-way left-turn lane.
- Under this scenario, all highway segments are projected to operate at an acceptable LOS.

#### *Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions*

- Under this scenario, the intersections of Project Driveway 2 and Hanford-Armona Road and 19th Avenue and Cinnamon Drive are projected to exceed their LOS threshold during both peak periods. To improve the LOS at the intersections projected to exceed their LOS threshold, it is recommended that the following improvements be implemented.
  - Project Driveway 2 and Hanford-Armona Road
    - Modify the eastbound right turn lane to an eastbound through-right lane;
    - Signalize the intersection with protective left-turn phasing in all directions; and
    - Modify the intersection to accommodate the modified lane geometrics.
  - 19th Avenue and Cinnamon Drive
    - Signalize the intersection with protective left-turn phasing in all directions.
- Under this scenario, the arterial segment of Hanford-Armona Road between State Route 41 and Project Driveway 2 is anticipated to exceed its LOS threshold. To improve its LOS, it is recommended that this segment of Hanford-Armona Road be widened to accommodate two lanes in each direction and be divided by a raised median island or a continuous two-way left-turn lane.
- Under this scenario, all highway segments and the ramp segment are projected to operate at an acceptable LOS.

#### *Queuing Analysis*

- It is recommended that the City consider left- and right-turn lane storage lengths as indicated in the Queuing Analysis.

#### *Project's Equitable Fair Share*

- It is recommended that the Project contribute its equitable Fair Share as presented in Table XXIII.



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

(559) 570-8991

Page | 4

## TIA Scope of Work

The study focused on evaluating traffic conditions at the existing study intersections and segments that may potentially be impacted by the proposed Project. On January 30, 2018, a Draft Scope of Work for the preparation of a Traffic Impact Analysis for this Project was provided to the City of Lemoore, County of Kings and Caltrans for their review and comment. Any comments to the Draft Scope of Work were to be provided by February 20, 2018.

On Friday, February 16, 2018, Caltrans responded to the Draft Scope of Work. Caltrans indicated that the “Cumulative Year 2035 does not satisfy standard practice future analysis for this project” and requested that it be replaced with a Cumulative Year 2040 instead. Furthermore, Caltrans requested that the PM peak analysis for the intersection of State Route 41 and Hanford-Armona Road be analyzed between 3 pm and 5 pm. On Thursday, February 22, 2018, the County of Kings accepted the Draft Scope of Work as presented. On Friday, February 23, 2018, the City of Lemoore responded to the Draft Scope of Work. While the City had no comments to the Draft Scope of Work, it was requested that Project Trip Distribution percentages for each of the ingress/egress points be submitted for their review and approval. On March 8, 2018, JLB provided the Project Trip Distribution percentages for all of the ingress/egress points to the City for review. On March 28, 2018, the City approved the Project Trip Distribution Percentages and Draft Scope of Work.

Based on the comments received, this TIA includes the analysis of the Cumulative Year 2040 scenarios as requested by Caltrans. The Draft Scope of Work that was presented and the comments received from the lead agency and responsible agencies are included in Appendix A.

## Study Scenarios

### *Existing Traffic Conditions*

This scenario evaluates the Existing Traffic Conditions based on existing traffic volumes and roadway conditions from traffic counts and field surveys conducted in the year 2018.

### *Existing plus Project Phase 1 Traffic Conditions*

This scenario evaluates total traffic volumes and roadway conditions based on the Existing plus Project Phase 1 Traffic Conditions. The Existing plus Project Phase 1 traffic volumes were obtained by adding the Phase 1 Project Only Trips to the Existing Traffic Conditions scenario. The Phase 1 Project Only Trips to the study intersections were based on existing travel patterns, data provided by the developer, knowledge of the study area, engineering judgement, residential and commercial densities and the City’s General Plan.

### *Existing plus Project Buildout Traffic Conditions*

This scenario evaluates total traffic volumes and roadway conditions based on the Existing plus Project Buildout Traffic Conditions. The Existing plus Project Buildout traffic volumes were obtained by adding the Buildout Project Only Trips to the Existing Traffic Conditions scenario. The Buildout Project Only Trips to the study intersections were based on existing travel patterns, data provided by the developer, knowledge of the study area, engineering judgement, residential and commercial densities and the City’s General Plan.



Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

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Page | 5

### *Cumulative Year 2040 plus Project Traffic Conditions*

This scenario evaluates total traffic volumes and roadway conditions based on the Cumulative Year 2040 plus Project Traffic Conditions. To arrive at future year forecast volumes, JLB determined the annual growth rate for State Route 41. Based on a review of the Annual Average Daily Traffic (AADT) volumes obtained from Caltrans, the 20-year average growth rate of State Route 41 was determined to be 2.04 percent. Thus, JLB utilized an annual growth rate of 2.04 percent to expand the existing traffic volumes by 22 years. The 2.04 percent annual growth rate was presented in the Draft Scope of Work that was submitted to the City of Lemoore, County of Kings and Caltrans for review and approval. The use of the 2.04 annual growth rate was explicitly approved by Caltrans. Finally, JLB added the Cumulative Project Only Trips to the expanded existing traffic volumes to arrive at the Cumulative Year 2040 plus Project traffic volumes.

### *Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions*

This scenario evaluates total traffic volumes and roadway conditions based on the Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions. The Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange traffic volumes are the same as those determined in the previous scenario. However, under this scenario, it is assumed that the State Route 41 and Hanford-Armona Road at-grade highway intersection has been removed and replaced with a partial Type L-9 interchange. As a result, traffic volumes were rerouted as appropriate.

## Study Facilities

The existing peak hour turning movement and segment volume counts were conducted at the study intersections and segments in January and March 2018, while schools in the vicinity of the proposed Project were in session. The intersection turning movement counts included pedestrian volumes. The traffic counts for the existing study intersections and segments are contained in Appendix B. The existing intersection turning movement volumes, intersection geometrics and traffic controls are illustrated in Figure 2.

### *Existing, Existing plus Project, and Cumulative Year 2040 plus Project Scenarios*

#### Study Intersections:

1. State Route 41 / Hanford-Armona Road
2. Project Driveway 1 / Hanford-Armona Road
3. Project Driveway 2 / Hanford-Armona Road
4. 19th Avenue / Hanford-Armona Road
5. 19th Avenue / Cinnamon Drive

#### Arterial Study Segments:

1. Hanford-Armona Road between State Route 41 and Project Driveway 2
2. Hanford-Armona Road between Project Driveway 2 and 19th Avenue



#### Highway Study Segments:

1. State Route 41 between:
  - a. Glendale Avenue and Hanford-Armona Road (Northbound)
  - b. Glendale Avenue and Hanford-Armona Road (Southbound)
  - c. Hanford-Armona Road and Bush Street (Northbound)
  - d. Hanford-Armona Road and Bush Street (Southbound)

#### *Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Scenario Only*

#### Study Intersections:

6. State Route 41 SB Ramps / Hanford-Armona Road
7. State Route 41 NB Ramps / Hanford-Armona Road
3. Project Driveway 2 / Hanford-Armona Road
4. 19th Avenue / Hanford-Armona Road
5. 19th Avenue / Cinnamon Drive

#### Arterial Study Segments:

1. Hanford-Armona Road between State Route 41 and Project Driveway 2
2. Hanford-Armona Road between Project Driveway 2 and 19th Avenue

#### Highway Study Segments:

1. State Route 41 between:
  - a. Glendale Avenue and Hanford-Armona Road (Northbound)
  - b. Glendale Avenue and Hanford-Armona Road (Southbound)
  - c. Hanford-Armona Road and Bush Street (Northbound)
  - d. Hanford-Armona Road and Bush Street (Southbound)

#### Ramp Study Segment:

1. State Route 41 NB Ramps to Hanford-Armona Road

### Level of Service Analysis Methodology

Level of Service (LOS) is a qualitative index of the performance of an element of the transportation system. LOS is a rating scale running from "A" to "F", with "A" indicating no congestion of any kind and "F" indicating unacceptable congestion and delays. LOS in this study describes the operating conditions for signalized and unsignalized intersections.

The *2010 Highway Capacity Manual* (HCM) is the standard reference published by the Transportation Research Board and contains the specific criteria and methods to be used in assessing LOS. U-turn movements were analyzed using HCM 2000 methodologies and would yield more accurate results for the reason that HCM 2010 methodologies do not allow the analysis of U-turns or some shared turn lane movements. Synchro software was used to define LOS in this study. Details regarding these calculations are included in Appendix C.



## Criteria of Significance

The City of Lemoore 2030 General Plan does not currently have any adopted LOS standard. However, recent traffic studies have utilized LOS D as the acceptable level of traffic congestion. Therefore, LOS D is used to evaluate the potential significance of LOS impacts to City of Lemoore roadway facilities.

The County of Kings 2035 General Plan has established a “minimum” LOS standard within the County, which shall be no lower than LOS E for urban areas and LOS D for rural areas. For this study, LOS D is used to evaluate the potential significance of LOS impacts to intersections within the County of Kings.

Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities consistent with the Caltrans Guide for the Preparation of Traffic Impact Studies dated December 2002. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS threshold, then the existing measures of effectiveness (MOE) should be maintained. In this case, one of the study intersection is currently operating at LOS D. At locations where the existing LOS has dropped below the Caltrans LOS C to D transition, the existing MOEs should be maintained. Furthermore, the addition of an average delay of less than five seconds is often not considered a significant impact. The existing MOEs are described in the Existing Traffic Conditions scenario.

## Operational Analysis Assumptions and Defaults

The following operational analysis values, assumptions and defaults were used in this study to ensure a consistent analysis of LOS among the various scenarios.

- Yellow time consistent with the California Manual of Uniform Traffic Control Devices (CA MUTCD) based on approach speeds
- Yellow time of 3.2 seconds for left-turn phases
- All-red clearance intervals of 1.0 second for all phases
- Walk intervals of 7.0 seconds
- Flashing Don't Walk based on 3.5 feet/second walking speed with yellow plus all-red clearance subtracted and 2.0 seconds added
- All new or modified signals utilize protective left-turn phasing
- The heavy vehicle percentage factors utilized in this study varied from location to location based on actual count data and data from the State Route 41 Transportation Concept Report. The heavy vehicle factors were: 13 percent for traffic on State Route 41, 11 percent for traffic on Hanford-Armona Road, and three (3) percent at the Project driveways and the remaining study segments.
- An average of 3 pedestrian calls per hour at signalized intersections
- The number of observed pedestrians at existing intersections was utilized under all study scenarios
- At existing intersections, the observed approach Peak Hour Factor (PHF) is utilized in the Existing, Existing plus Project Phase 1 and Existing plus Project Buildout scenarios
- A PHF of 0.92, or the existing PHF if higher, is utilized in the Cumulative Year 2040 plus Project and Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange scenarios



## Existing Traffic Conditions

### Roadway Network

The Project site and surrounding study area are illustrated in Figure 1. Important roadways serving the Project are discussed below.

**Hanford-Armona Road** is an existing east-west two-lane arterial adjacent to the proposed Project. In this area, Hanford-Armona Road extends through the City of Lemoore SOI. Hanford-Armona Road is a two- to three-lane arterial divided by a two-way left-turn lane between Apricot Avenue and Lemoore Avenue, a four-lane undivided arterial between Lemoore Avenue and Cinnamon Drive, and a two-lane undivided arterial east of Cinnamon Drive. The City of Lemoore 2030 General Plan designates Hanford-Armona Road as a four-lane arterial between College Drive and Cinnamon Drive.

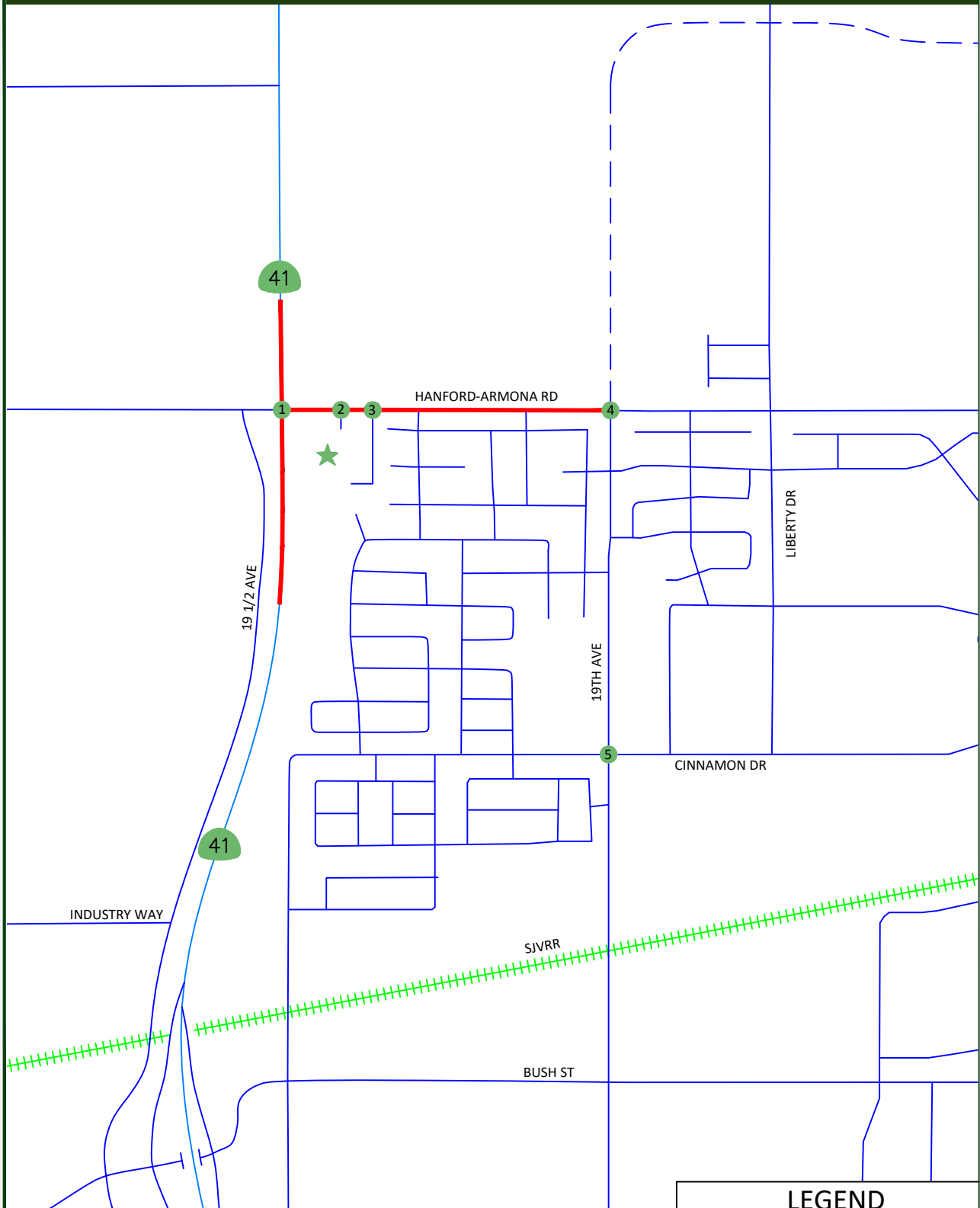
**State Route (SR) 41** is an existing north-south two- to four-lane expressway adjacent to the proposed Project. State Route 41 serves as the principal connection to various metropolitan areas within the Central San Joaquin Valley and the California Central Coast. In this area, State Route 41 connects to Hanford-Armona Road.

**19th Avenue** is an existing north-south two-lane arterial divided by a two-way left-turn lane in the vicinity of the proposed Project. In this area, 19th Avenue extends south of Hanford-Armona Road through the City of Lemoore SOI. 19th Avenue is a two-lane divided arterial between Hanford-Armona Road and Silverado Drive, a four-lane arterial between Silverado Drive and Iona Avenue, and a two-lane undivided arterial south of Iona Avenue through the City of Lemoore SOI. The City of Lemoore 2030 General Plan plans to extend 19th Avenue north of Hanford-Armona Road as a two-lane collector and designates 19th Avenue as a four-lane arterial between Hanford-Armona Road and Idaho Avenue.





**Cinnamon Drive** is an existing east-west two-lane divided collector in the vicinity of the proposed Project. In this area, Cinnamon Drive extends east of its connection to 19th ½ Avenue and changes orientation to intersect Hanford-Armona Road. Cinnamon Drive is a two-lane collector divided by a two-way left-turn lane between 19th ½ Avenue and Lemoore Avenue and a two-lane undivided collector east of Lemoore Avenue and south of Hanford-Armona Road. The City of Lemoore 2030 General Plan designates Cinnamon Drive as a four-lane collector between 19th ½ Avenue and Lemoore Avenue.







# LEGEND

-  = PROJECT LOCATION
-  = STUDY INTERSECTION
-  = STUDY SEGMENT
-  = PLANNED ROADWAY



Not To Scale



1300 E. Shaw Ave., Ste. 103, Fresno, CA 93710  
PHONE: (559) 570-8991, EMAIL: [info@JLBtraffic.com](mailto:info@JLBtraffic.com), [www.JLBtraffic.com](http://www.JLBtraffic.com)

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## Results of Existing Level of Service Analysis

Figure 2 illustrates the Existing Traffic Conditions turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Existing Traffic Conditions scenario are provided in Appendix D. Table I presents a summary of the Existing peak hour LOS at the study intersections, Table II presents a summary of the Existing LOS for the arterial study segments, and Table III presents a summary of the Existing LOS for the highway study segments.

At present, the intersection of State Route 41 and Hanford-Armona Road operates below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. However, to improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be considered.

- State Route 41 and Hanford-Armona Road
  - Modify the westbound left-through-right lane to a left-through lane;
  - Add a westbound right-turn lane; and
  - Modify the traffic signal to accommodate the added lane.

At present, all arterial and highway segments operate at an acceptable LOS.

**Table I: Existing Intersection LOS Results**

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	State Route 41 / Hanford-Armona Road	Signalized	42.1	D	36.2	D
		Signalized (Improved)	30.9	C	31.0	C
2	Project Driveway 1 / Hanford-Armona Road	Does Not Exist	N/A	N/A	N/A	N/A
3	Project Driveway 2 / Hanford-Armona Road	Does Not Exist	N/A	N/A	N/A	N/A
4	19th Avenue / Hanford-Armona Road	All-Way Stop	12.0	B	12.8	B
5	19th Avenue / Cinnamon Drive	All-Way Stop	20.3	C	12.1	B

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls  
LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

**Table II: Existing Arterial Segment LOS Results**

ID	Segment	Limits	Lanes	24-hour Volume	LOS
1	Hanford-Armona Road	State Route 41 and Project Driveway 2	2	7,465	C
2	Hanford-Armona Road	Project Driveway 2 and 19th Avenue	2	7,465	C

Note: LOS = Level of Service per the Florida Roadway Segment LOS Tables



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Page | 11

**Table III: Existing Highway Segment LOS Results**

ID	Segment	Limits	Lanes	AM			PM		
				Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
1	State Route 41	Glendale Avenue and Hanford-Armona Road (Northbound)	2	628	6.34	A	762	7.69	A
2	State Route 41	Glendale Avenue and Hanford-Armona Road (Southbound)	2	675	6.81	A	754	7.61	A
3	State Route 41	Hanford-Armona Road and Bush Street (Northbound)	2	495	5.00	A	814	8.22	A
4	State Route 41	Hanford-Armona Road and Bush Street (Southbound)	2	666	6.72	A	566	5.71	A

Note: LOS = Level of Service pursuant to Exhibit 11-5 and 14-2 of HCM 6

## Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Existing Traffic Conditions scenario. These warrants are found in Appendix I. These warrants were prepared pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, none of the unsignalized intersections satisfy the peak hour signal warrant.



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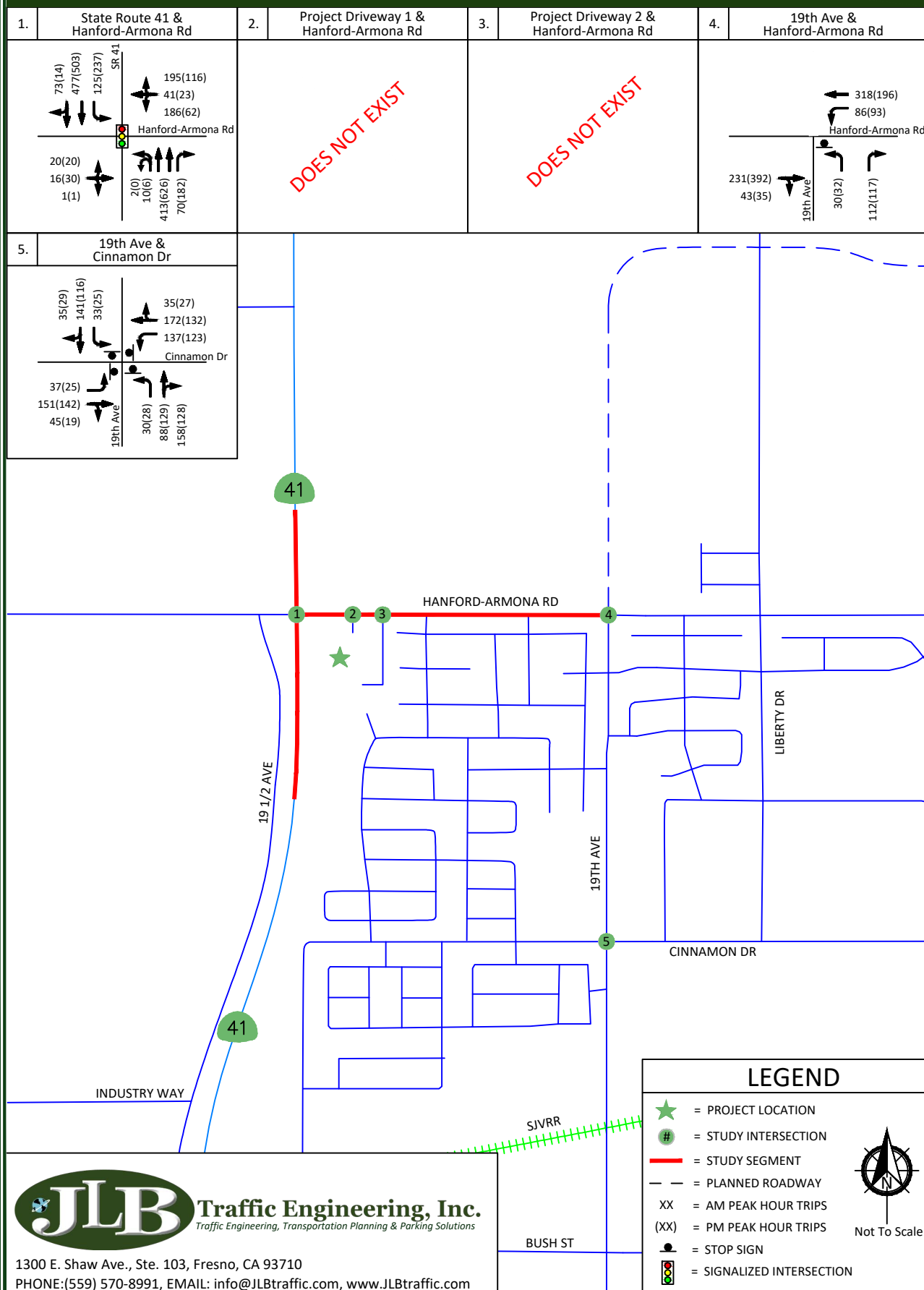
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Page | 12

# City of Lemoore - Hanford-Armona Road Mixed-Use Development Existing - Traffic Volumes, Geometrics and Controls

Figure 2



## Existing plus Project Phase 1 Traffic Conditions

### Project Phase 1 Description

Under Phase 1, the Project proposes to develop a 10.69-acre site with 176 multi-family residential units (apartments). Based on information provided to JLB, the Project will undergo a General Plan Amendment and a Zoning Map Amendment to change the proposed residential area to High-Density Residential. Figure 3 illustrates the latest Project Site Plan.

### Project Phase 1 Access

Based on the latest Project Site Plan, access to and from the Project site under Phase 1 will be from a total of two (2) points. The access driveway (Project Driveway 2) along Hanford-Armona Road is located at a point approximately 700 feet east of State Route 41 and is proposed as a full access. The other access driveway is located on the northwest corner of the intersection of Persimmon Street and Dogwood Avenue and is also proposed to have full access.

JLB analyzed the location of the proposed access points relative to the existing local roads and driveways in the Project's vicinity. Considering the current traffic controls at the intersection of State Route 41 and Hanford-Armona-Road and the proposed dedicated eastbound right-turn lanes, a review of the proposed placement of the Project driveways indicates that they are located at points that minimize traffic operational impacts to the existing roadway network.

JLB also analyzed the conceptual roadways within the earlier Project Site Plan. Based on this review, it was recommended that the Project consider relocating the gasoline/service station (Shop A) and fast-food restaurant (Pad A) located near the northwest corner of the Project Site Plan further east and relocating the hotel in their place. The gasoline/service station and fast-food restaurant are estimated to attract higher volumes than those estimated to be generated by the hotel. Based on these comments the Project site plan was revised to relocate the proposed Hotel and gasoline/service station as recommended by JLB. Further to minimize impacts the Project site plan reduced the number of driveways to Hanford-Armona Road. By incorporating these modifications to the Project Site Plan, on-site and off-site traffic operations and circulation would be improved.

### Project Phase I Trip Generation

Trip generation rates for the proposed Project were obtained from the 10th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table IV presents the trip generation for the proposed Phase 1 Project with trip generation rates for Multifamily Housing. Phase 1 of the proposed Project is estimated to generate a maximum of 1,288 daily trips, 81 AM peak hour trips and 99 PM peak hour trips.

**Table IV: Project Phase I Trip Generation (General Plan Amendment)**

Land Use (ITE Code)	Size	Unit	Daily		AM Peak Hour						PM Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Multifamily Housing (Low-Rise) (220)	176	d.u.	7.32	1,288	0.46	23	77	19	62	81	0.56	63	37	62	37	99
Total Project Trips				1,288				19	62	81				62	37	99

Note: d.u. = Dwelling Units  
f.p. = Fueling Positions  
o.r. = Occupied Rooms  
k.s.f. = Thousand Square Feet

## Project Phase 1 Trip Distribution

The Phase 1 trip distribution assumptions were developed based on existing travel patterns, data provided by the developer, knowledge of the study area and the City's General Plan. Project trip distribution percentages for Phase 1 of the Project was submitted to the City for review and approval. The trip distribution percentages that were utilized to distribute Phase 1 Project Only Trips to the study intersections are provided in Figure 4. Figure 5 illustrates the Phase 1 Project Only Trips to the study intersections.



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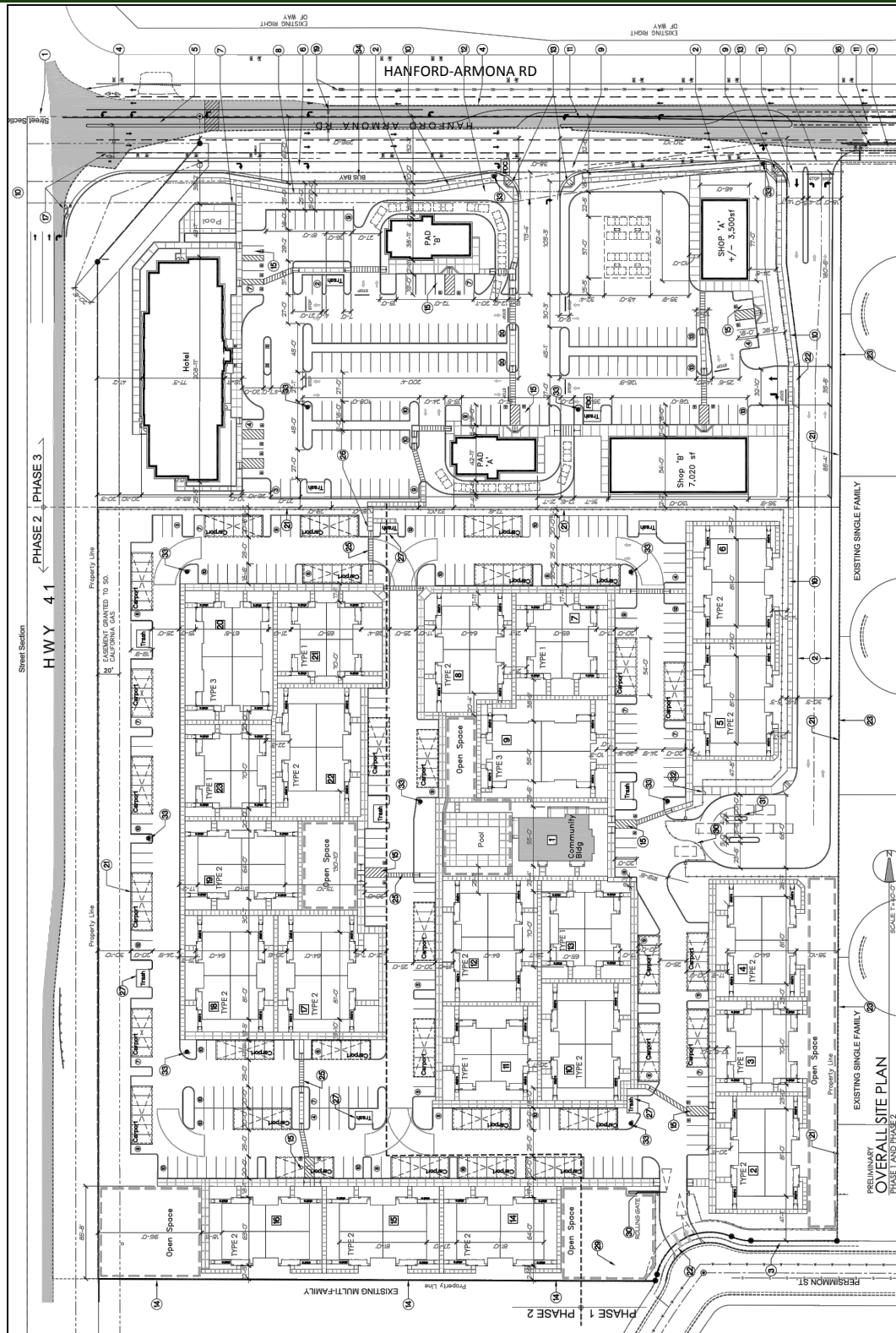
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Page | 15



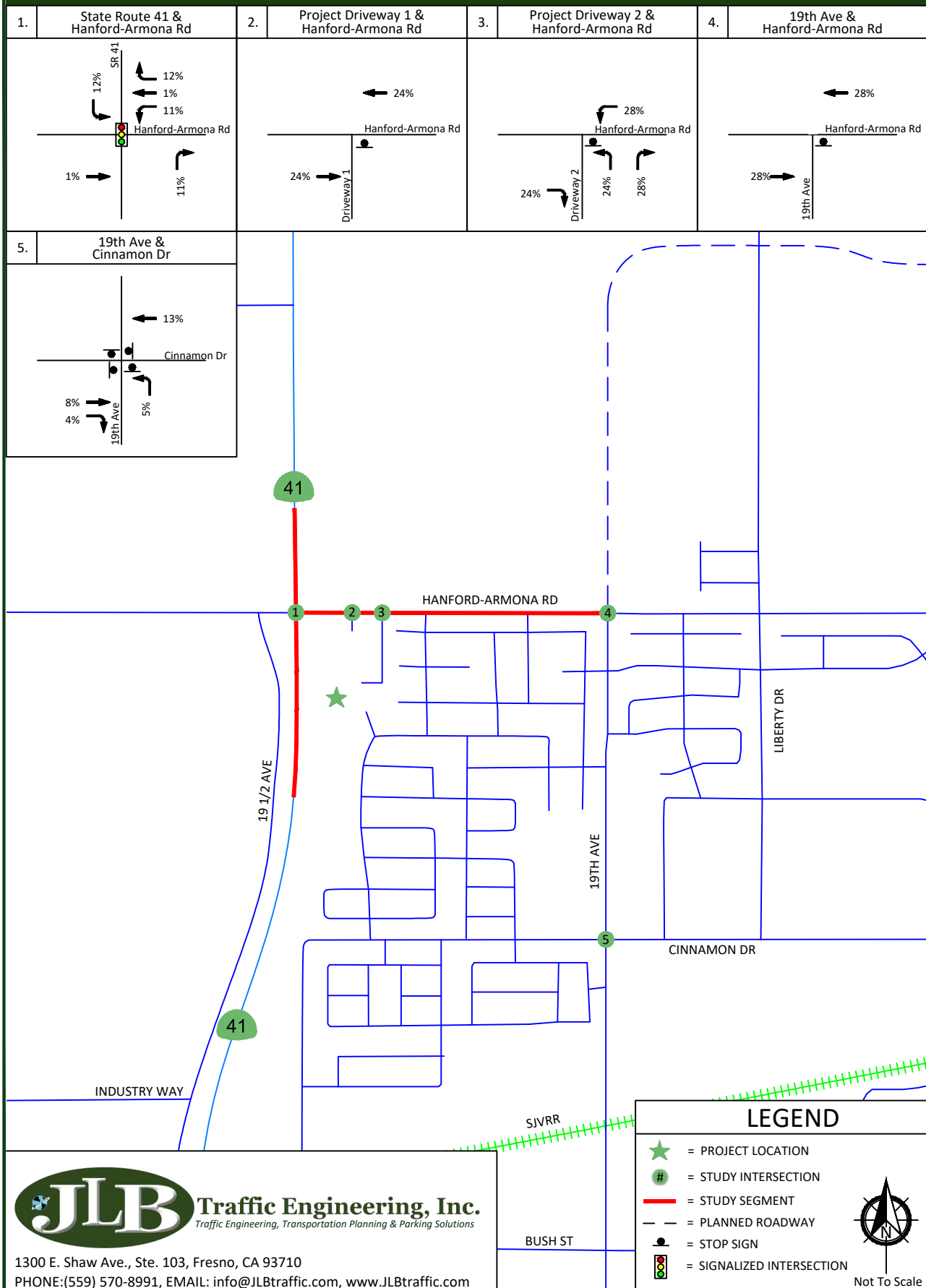
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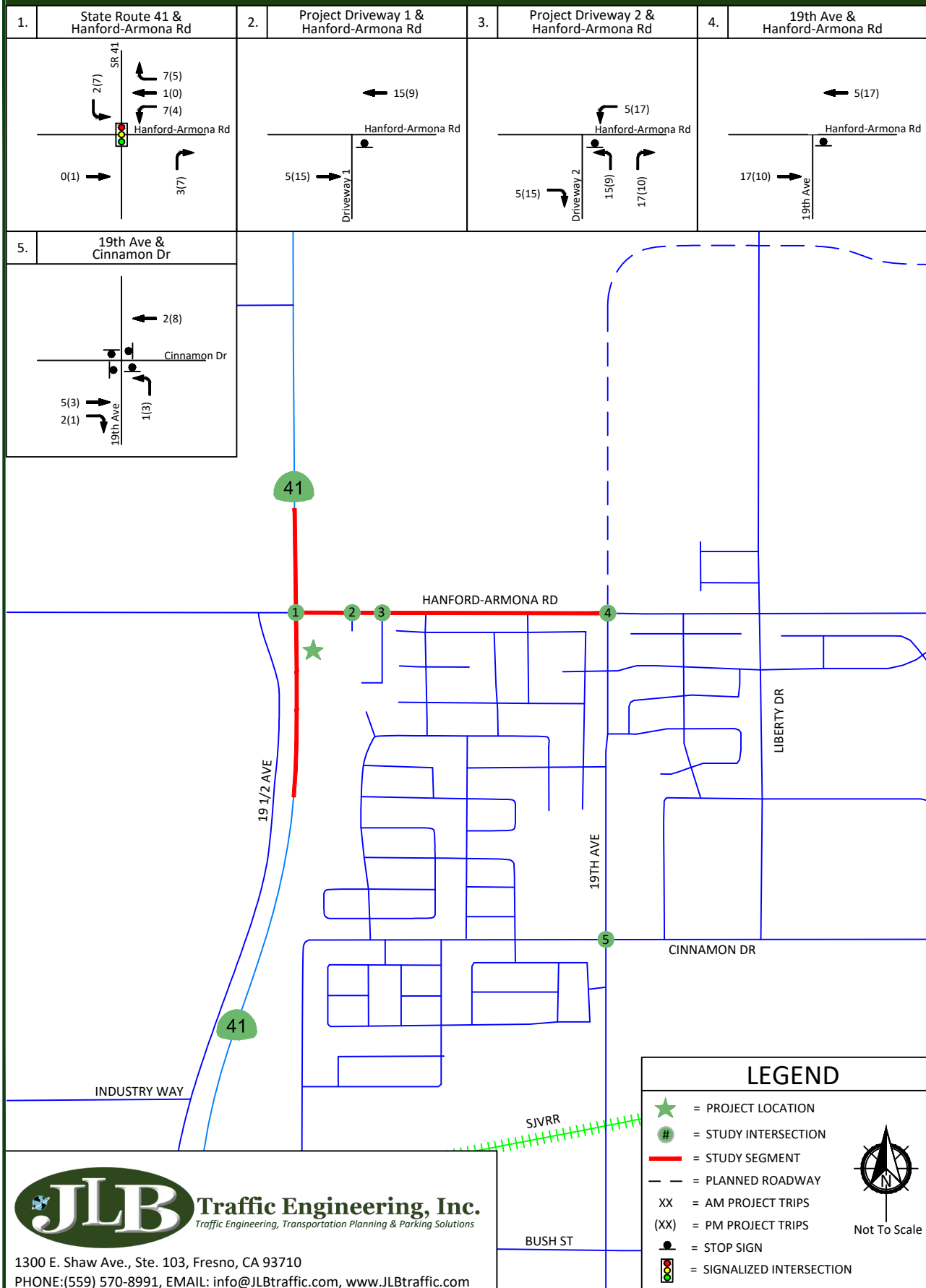
# City of Lemoore - Hanford-Armona Road Mixed-Use Development Multifamily Housing Percent Distribution

Figure 4



# City of Lemoore - Hanford-Armona Road Mixed-Use Development Phase 1 - Project Only Trips

Figure 5



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## Results of Existing plus Project Phase 1 Level of Service Analysis

The Existing plus Project Phase 1 Traffic Conditions scenario assumes that the existing roadway geometrics and traffic controls will remain in place. Figure 6 illustrates the Existing plus Project Phase 1 turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Existing plus Project Traffic Conditions scenario are provided in Appendix E. Table V presents a summary of the Existing plus Project Phase 1 peak hour LOS at the study intersections, Table VI presents a summary of the Existing plus Project Phase 1 LOS for the arterial study segments, and Table VII presents a summary of the Existing plus Project Phase 1 LOS for the highway study segments.

Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to continue operating below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. Phase 1 of the Project is projected to add 3.3 and 1.1 seconds of average delay during the AM and PM peaks respectively. Also, the addition of an average delay of less than five (5) seconds is often not considered a significant impact. Therefore, since the Phase 1 of the Project maintains the existing MOE's and it adds less than five (5) seconds of average delay to existing operations, this impact would not be considered significant. However, if improvements were made to improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.

- State Route 41 and Hanford-Armona Road
  - Option 1
    - Modify the westbound left-through-right lane to a left-through lane;
    - Add a westbound right-turn lane; and
    - Modify the traffic signal to accommodate the added lanes while maintaining the east-west split phasing.
  - Option 2
    - Modify the westbound left-through-right lane to a left-turn lane;
    - Add a westbound through-right lane; and
    - Modify the traffic signal to accommodate the added lanes while maintaining the east-west split phasing.

Under this scenario, all arterial and highway segments are projected to operate at an acceptable LOS.



**Table V: Existing plus Project Phase 1 Intersection LOS Results**

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	State Route 41 / Hanford-Armona Road	Signalized	45.4	D	37.3	D
		Signalized (Mitigated Option 1)	31.8	C	31.2	C
		Signalized (Mitigated Option 2)	29.7	C	31.0	C
2	Project Driveway 1 / Hanford-Armona Road	Does Not Exist	N/A	N/A	N/A	N/A
3	Project Driveway 2 / Hanford-Armona Road	One-Way Stop	11.8	B	13.0	B
4	19th Avenue / Hanford-Armona Road	All-Way Stop	12.2	B	12.9	B
5	19th Avenue / Cinnamon Drive	All-Way Stop	21.3	C	12.2	B

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls  
LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

**Table VI: Existing plus Project Phase 1 Arterial Segment LOS Results**

ID	Segment	Limits	Lanes	24-hour Volume	LOS
1	Hanford-Armona Road	State Route 41 and Project Driveway 2	2	7,705	C
2	Hanford-Armona Road	Project Driveway 2 and 19th Avenue	2	7,725	C

Note: LOS = Level of Service per the Florida Roadway Segment LOS Tables

**Table VII: Existing plus Project Phase 1 Highway Segment LOS Results**

ID	Segment	Limits	Lanes	AM			PM		
				Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
1	State Route 41	Glendale Avenue and Hanford-Armona Road (Northbound)	2	635	6.41	A	767	7.74	A
2	State Route 41	Glendale Avenue and Hanford-Armona Road (Southbound)	2	677	6.83	A	761	7.68	A
3	State Route 41	Hanford-Armona Road and Bush Street (Northbound)	2	498	5.03	A	821	8.29	A
4	State Route 41	Hanford-Armona Road and Bush Street (Southbound)	2	673	6.79	A	570	5.75	A

Note: LOS = Level of Service pursuant to Exhibit 11-5 and 14-2 of HCM 6

## Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Existing plus Project Phase 1 Traffic Conditions scenario. These warrants are found in Appendix I. The effects of right-turning traffic from the minor approach onto the major approach were taken into account using engineering judgement pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, none of the unsignalized intersections satisfy the peak hour signal warrant.



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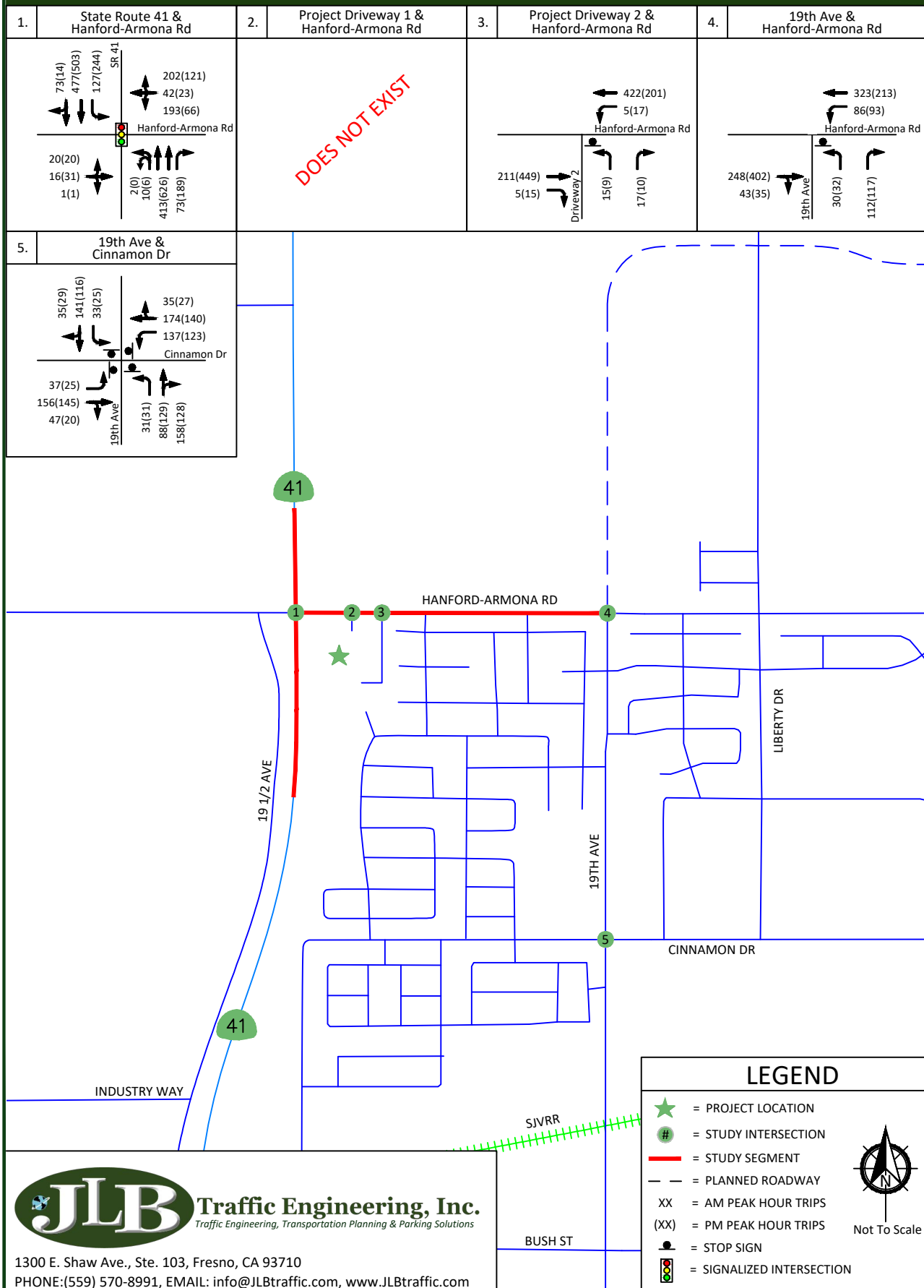
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Page | 20

# City of Lemoore - Hanford-Armona Road Mixed-Use Development Existing plus Project Phase 1 - Traffic Volumes, Geometrics and Controls

Figure 6



## Existing plus Project Buildout Traffic Conditions

### Project Buildout Description

The Project at Buildout proposes to develop a 16.19-acre site with 176 multi-family residential units (apartments), a gasoline/service station (8 fueling positions) with convenience market, a 90-room hotel, 6,000 square feet of fast-food restaurant with drive-through window, and 7,040 square feet of general shopping center. Based on information provided to JLB, the Project will undergo a General Plan Amendment and a Zoning Map Amendment to change the proposed residential area to High-Density Residential and RHD zoning and the proposed commercial area to Neighborhood Commercial and NC zoning through the City of Lemoore. Figure 3 illustrates the latest Project Site Plan.

### Project Buildout Access

Based on the latest Project Site Plan, access to and from the Project site at buildout will be from a total of three (3) points. Two (2) of the proposed access points are located along the south side of Hanford-Armona Road. The first access driveway (Project Driveway 1) along Hanford-Armona Road is located at a point approximately 500 feet east of State Route 41 and is proposed to provide right-in, right-out, and left-in access. The second access driveway (Project Driveway 2) along Hanford-Armona Road is located at a point approximately 700 feet east of State Route 41 and is proposed as a full access. The final access driveway is located on the northwest corner of the intersection of Persimmon Street and Dogwood Avenue and is proposed to have full access.

JLB analyzed the location of the proposed access points relative to the existing local roads and driveways in the Project's vicinity. Based on the current traffic controls at the intersection of State Route 41 and Hanford-Armona-Road coupled with the proposed dedicated eastbound right-turn lanes, a review of the proposed placement of the Project driveways indicates that they are located at points that minimize the traffic operational impacts to the existing roadway network. However, further analysis of this layout is provided within the Stopping Sight Distance Analysis.

JLB also analyzed the conceptual roadways within an earlier version of the Project Site Plan. Based on this review, it was recommended that the Project consider relocating the gasoline/service station (Shop A) and fast-food restaurant (Pad A) located near the northwest corner of the Project Site Plan further east and relocating the hotel in their place. The gasoline/service station and fast-food restaurant are estimated to attract higher volumes than those estimated to be generated by the hotel. Based on these comments, the Project site plan was revised to relocate the proposed Hotel and gasoline/service station as recommended by JLB. To further minimize traffic impacts, the latest Project site plan also included a reduction on the number of driveways to Hanford-Armona Road. By incorporating these modifications to the Project Site Plan, on-site and off-site traffic operations and circulation have been improved.

## Project Buildout Trip Generation

Trip generation rates for the proposed Project Buildout were obtained from the 10th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table VIII presents the trip generation for the proposed Project with trip generation rates for Multifamily Housing, Gasoline/Service Station with Convenience Market, Hotel, Fast-Food Restaurant with Drive-Through Window and General Shopping Center. At buildout, the proposed Project is estimated to generate a maximum of 6,775 daily trips, 471 AM peak hour trips and 488 PM peak hour trips. However, assuming that the proposed Project were developed entirely consistent with the City's General Plan, the anticipated trip generation could be slightly higher. Table IX presents the trip generation for the proposed Project with trip generation rates for the same land uses, but with a modified size to be consistent with the City of Lemoore 2030 General Plan. Based on this, the Project Site under the current General Plan has the potential to generate a maximum of 7,199 daily trips, 472 AM peak hour trips and 536 PM peak hour trips. Compared to the land use consistent with the 2030 General Plan, the proposed Project is estimated to generate less traffic by 424 daily trips, 1 AM peak hour trip and 48 PM peak hour trips. It should be noted that the trip generation analyzed within this TIA is that which is presented on Table VIII. The difference in trip generation is summarized in Table X.

**Table VIII: Proposed Project Buildout Trip Generation (General Plan Amendment)**

Land Use (ITE Code)	Size	Unit	Daily		AM Peak Hour						PM Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Multifamily Housing (Low-Rise) (220)	176	d.u.	7.32	1,288	0.46	23	77	19	62	81	0.56	63	37	62	37	99
Gasoline/Service Station with Convenience Market (945)	8	f.p.	205.36	1,643	12.47	51	49	51	49	100	13.99	51	49	57	55	112
Hotel (310)	90	o.r.	8.36	752	0.47	59	41	25	17	42	0.60	51	49	28	26	54
Fast-Food Restaurant with Drive-Through Window (934)	6.000	k.s.f.	470.95	2,826	40.19	51	49	123	118	241	32.67	52	48	102	94	196
Shopping Center (820)	7.040	k.s.f.	37.75	266	0.94	62	38	4	3	7	3.81	48	52	13	14	27
Total Project Trips				6,775				222	249	471				262	226	488

Note: d.u. = Dwelling Units  
f.p. = Fueling Positions  
o.r. = Occupied Rooms  
k.s.f. = Thousand Square Feet



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Page | 23

**Table IX: Project Site Trip Generation (Consistent with the 2030 General Plan)**

Land Use (ITE Code)	Size	Unit	Daily		AM Peak Hour						PM Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Multifamily Housing (Low-Rise) (220)	144	d.u.	7.32	1,054	0.46	23	77	15	51	66	0.56	63	37	51	30	81
Gasoline/Service Station with Convenience Market (945)	8	f.p.	205.36	1,643	12.47	51	49	51	49	100	13.99	51	49	57	55	112
Hotel (310)	90	o.r.	8.36	752	0.47	59	41	25	17	42	0.60	51	49	28	26	54
Fast-Food Restaurant with Drive-Through Window (934)	6,000	k.s.f.	470.95	2,826	40.19	51	49	123	118	241	32.67	52	48	102	94	196
Shopping Center (820)	24.464	k.s.f.	37.75	924	0.94	62	38	14	9	23	3.81	48	52	45	48	93
Total Project Trips				7,199				228	244	472				283	253	536

Note: d.u. = Dwelling Units  
f.p. = Fueling Positions  
o.r. = Occupied Rooms  
k.s.f. = Thousand Square Feet

**Table X: Difference in Trip Generation**

	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project Trip Generation (General Plan Amendment)	6,775	222	249	471	262	226	488
Proposed Project Trip Generation (Consistent with the 2030 General Plan)	7,199	228	244	472	283	253	536
<b>Change in Trip Generation</b>	<b>-424</b>	<b>-6</b>	<b>5</b>	<b>-1</b>	<b>-21</b>	<b>-27</b>	<b>-48</b>

## Project Buildout Trip Distribution

The trip distribution assumptions were developed based on existing travel patterns, data provided by the developer, knowledge of the study area and the City's General Plan. The Project Buildout trip distribution percentages for each of the proposed Project's land uses were submitted to the City for review and approval. The trip distribution percentages that were utilized to distribute Project Only Trips to the study intersections are provided in Figures 7A-D. Figure 8 illustrates the Buildout Project Only Trips to the study intersections.

## Bikeways

Currently, bike lanes exist in the vicinity of the proposed Project site along Hanford-Armona Road, 19th Avenue and Cinnamon Drive. The City of Lemoore 2030 General Plan recommends that Class II Bike Lanes be implemented on: 1) Hanford-Armona Road east of State Route 41, 2) 19th Avenue north and south of Hanford-Armona Road, and 3) Cinnamon Drive east of 19th ½ Avenue. Therefore, it is recommended that the Project implement Class II bike lanes along its frontage to Hanford-Armona Road.



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## Transit

Kings Area Rural Transit (KART), the transit operator in the City of Lemoore, provides fixed-route and demand-response (Dial-A-Ride) service. At present, there are no KART fixed routes that operate in the vicinity of the proposed Project. The closest is KART Route 30, which runs on Hanford-Armona Road, approximately 0.50 miles to the east of the proposed Project. KART Dial-A-Ride services are offered each weekday within the communities of Hanford, Lemoore, Armona and Avenal and meet the needs of the disabled community who might not be able to access the fixed route services. Dial-A-Ride service is used for rides to the Lemoore Senior Center, medical appointments, and shopping. Retention of the existing and expansion of future transit routes is dependent on transit ridership demand and available funding.

The Hanford-Armona-Lemoore Route runs in the vicinity of the proposed Project via Hanford-Armona Road. This Route provides a direct connection to the cities of Hanford, Armona and Lemoore. The closest stop is located on Hanford-Armona Road, approximately 0.56 miles to the east of the proposed Project.

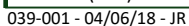
The City of Lemoore has indicated that the Project should accommodate a bus turnout on the south side of Hanford-Armona Road at a location that provides a direction walkway connection to the proposed residential development. Based on this concern, it is recommended that the Project coordinate with KART to determine the best location for the bus turnout.

## Stopping Sight Distance

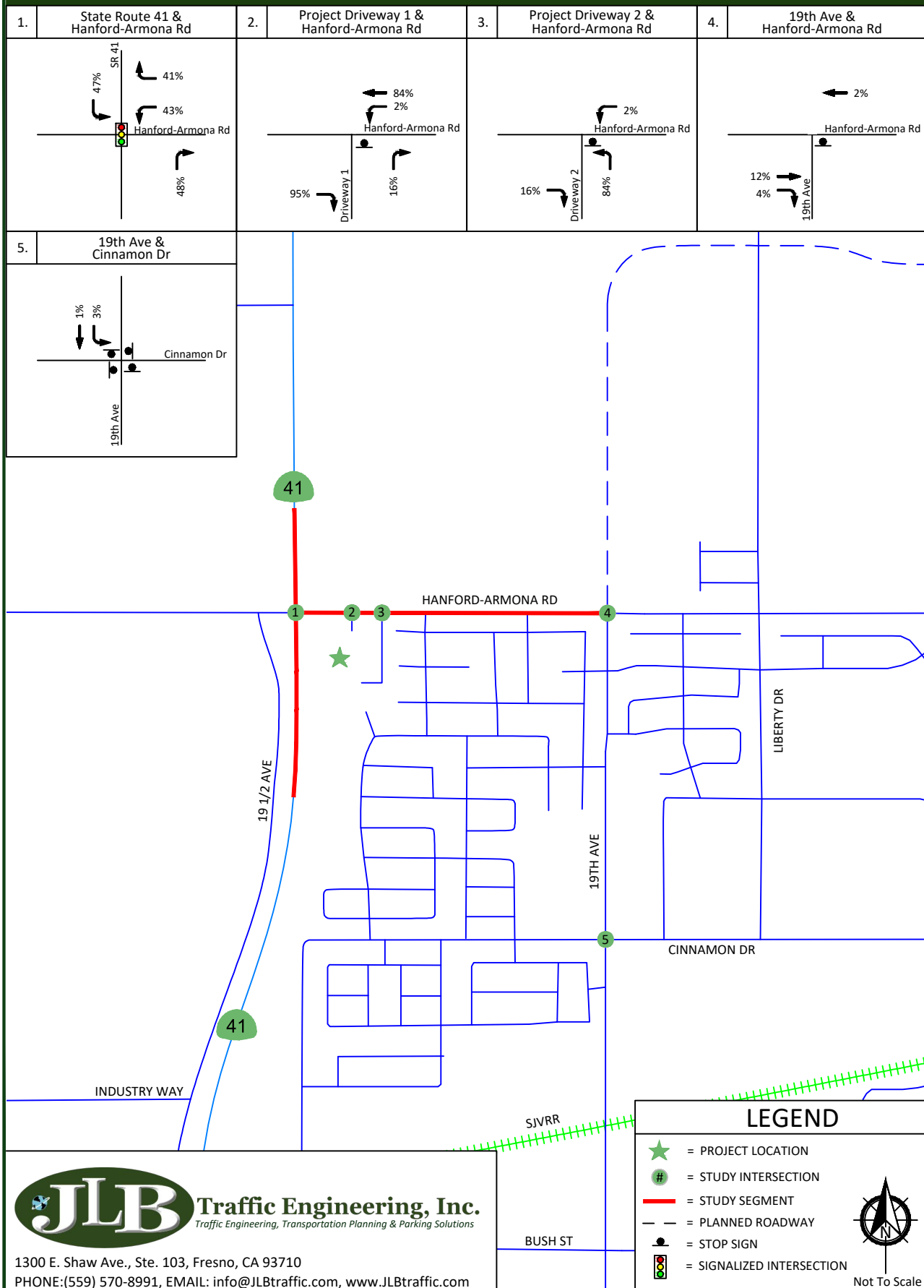
JLB conducted a planning level Stopping Sight Distance evaluation per the Caltrans Highway Design Manual Topic 201 for eastbound through traffic towards each of the proposed Project driveways. The purpose of the stopping sight distance evaluation is to determine if the proposed location of the Project driveways meet the standard stopping sight distance given the speed of traffic on Hanford-Armona Road. At present, since the speed limit for Hanford-Armona Road is 45 MPH and there are no dedicated right-turn lanes, the appropriate stopping sight distance would be 360 feet. For this Project, however, in an effort to minimize a deterioration of traffic operations, dedicated right-turn lanes are planned to be part of Project Driveways 1 and 2. Per AASHTO's *A Policy on Geometric Design of Highways and Streets*, "vehicles interfere little with through traffic when making right turns from an arterial." Moreover, the inclusion of a right-turn lane on an arterial reduces the potential interference of right-turning traffic with the through traffic. Also, the inclusion of right-turn lanes would provide for a comfortable deceleration of up to 10 MPH. With this in mind, the critical speed for the determination of the necessary stopping sight distance can be based on 35 MPH, or 250 feet. Therefore, based on the assumption that the Project is planning the inclusion of the dedicated right-turn lanes, the proposed Project driveways will provide the necessary stopping sight distance of 250 feet.



## Figure 7A



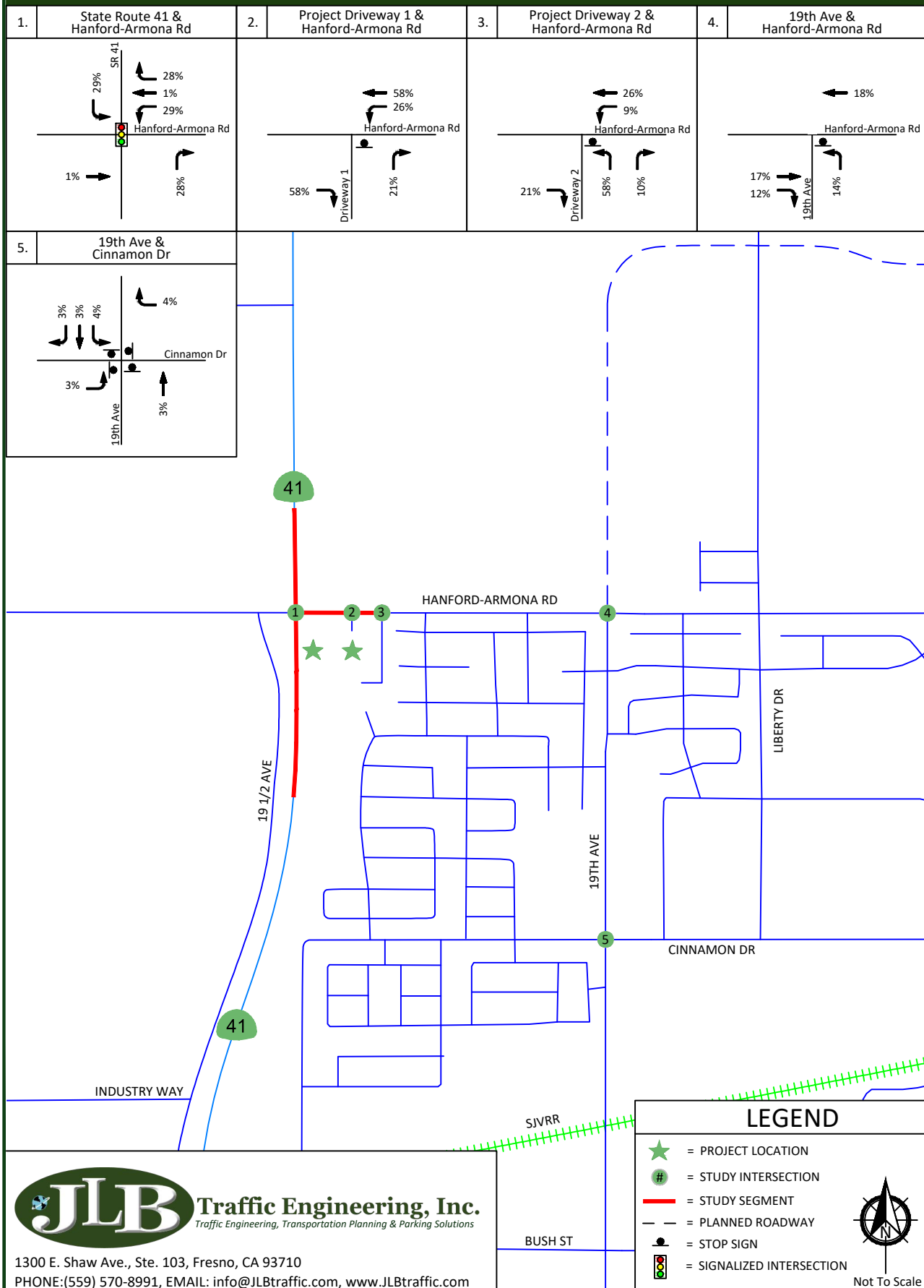




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# City of Lemoore - Hanford-Armona Road Mixed-Use Development Fast-Food Restaurant with Drive-Through Window Percent Distribution

Figure 7C

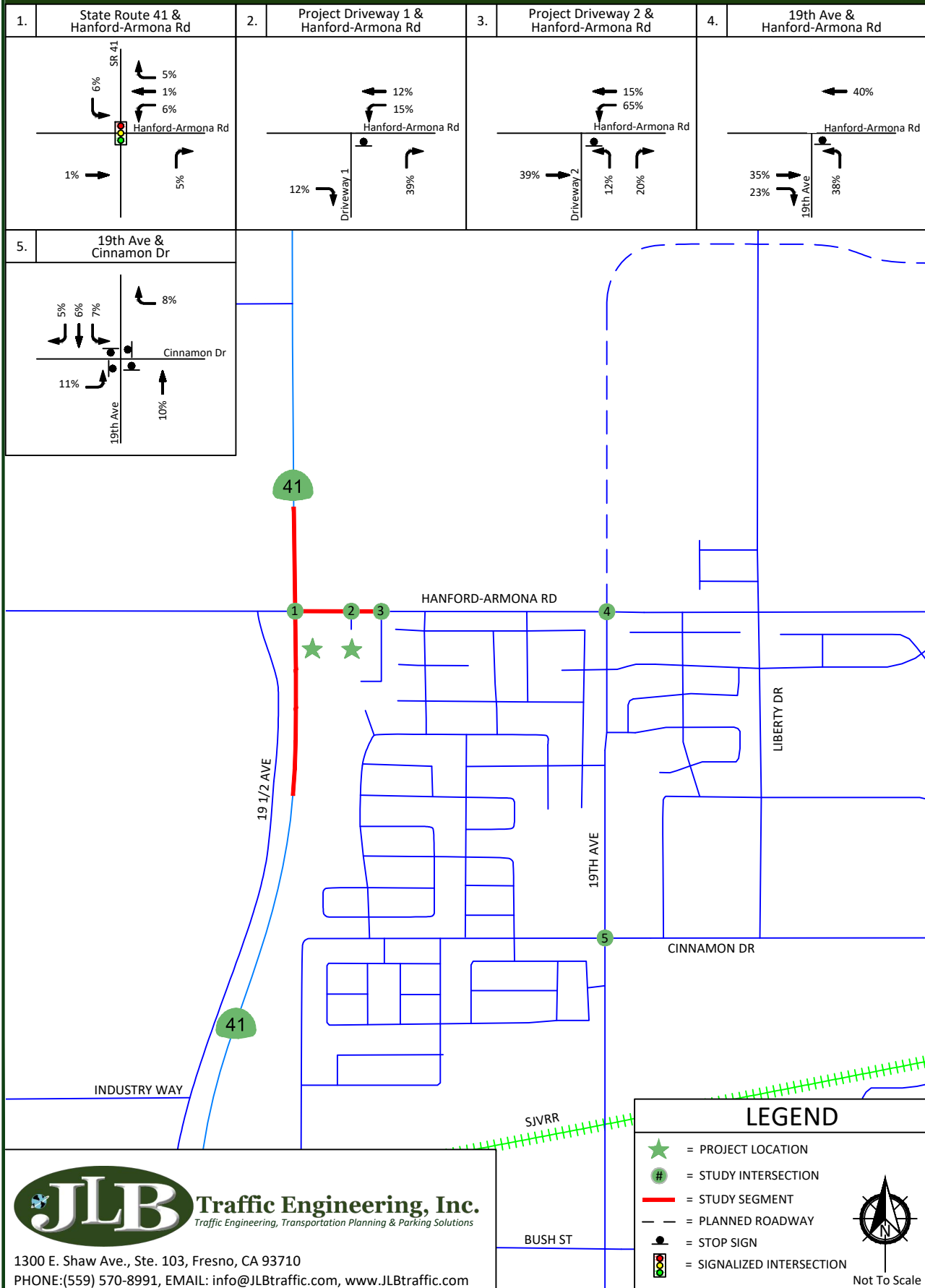


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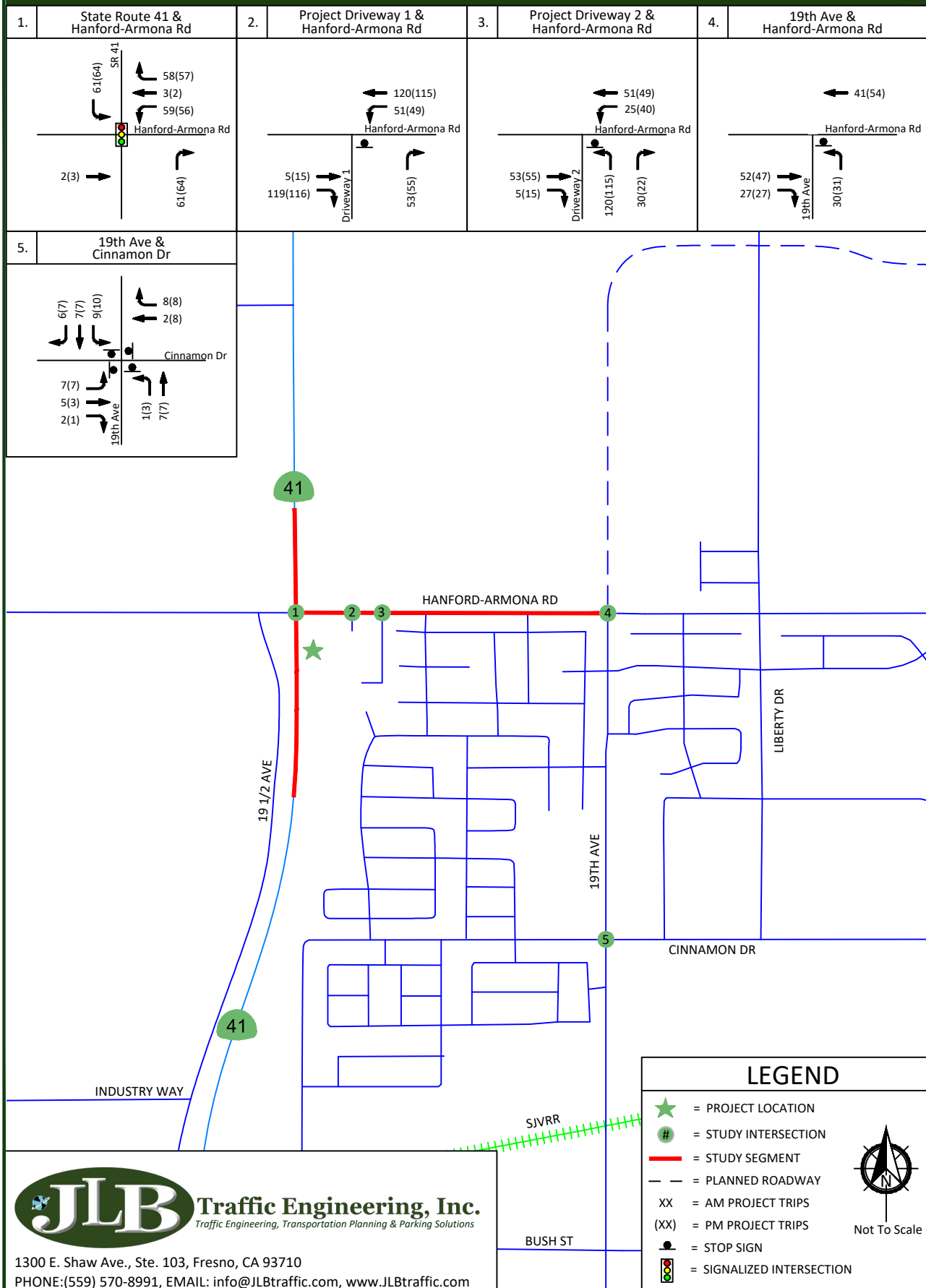
# City of Lemoore - Hanford-Armona Road Mixed-Use Development Shopping Center Percent Distribution

Figure 7D



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## Results of Existing plus Project Buildout Level of Service Analysis

The Existing plus Project Buildout Traffic Conditions scenario assumes that the existing roadway geometrics and traffic controls will remain in place. Figure 9 illustrates the Existing plus Project Buildout turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Existing plus Project Buildout Traffic Conditions scenario are provided in Appendix F. Table XI presents a summary of the Existing plus Project Buildout peak hour LOS at the study intersections, Table XII presents a summary of the Existing plus Project Buildout LOS for the arterial study segments, and Table XIII presents a summary of the Existing plus Project Buildout LOS for the highway study segments.

Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to operate below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. To improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.

- State Route 41 and Hanford-Armona Road
  - Add a westbound left-turn lane;
  - Modify the westbound left-through-right lane to a through lane;
  - Add a westbound right-turn lane; and
  - Modify the traffic signal to accommodate the added lanes while maintaining the east-west split phasing.

Under this scenario, all arterial and highway segments are projected to operate at an acceptable LOS.

**Table XI: Existing plus Project Buildout Intersection LOS Results**

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	State Route 41 / Hanford-Armona Road	Signalized	57.4	E	52.1	D
		Signalized (Mitigated)	34.1	C	34.4	C
2	Project Driveway 1 / Hanford-Armona Road	One-Way Stop	10.1	B	12.5	B
3	Project Driveway 2 / Hanford-Armona Road	One-Way Stop	21.0	C	23.9	C
4	19th Avenue / Hanford-Armona Road	All-Way Stop	14.1	B	14.4	B
5	19th Avenue / Cinnamon Drive	All-Way Stop	23.2	C	12.7	B

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls  
LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

**Table XII: Existing plus Project Buildout Arterial Segment LOS Results**

ID	Segment	Limits	Lanes	24-hour Volume	LOS
1	Hanford-Armona Road	State Route 41 and Project Driveway 2	2	9,925	C
2	Hanford-Armona Road	Project Driveway 2 and 19th Avenue	2	9,125	C

Note: LOS = Level of Service per the Florida Roadway Segment LOS Tables



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Page | 31

**Table XIII: Existing plus Project Buildout Highway Segment LOS Results**

ID	Segment	Limits	Lanes	AM			PM		
				Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
1	State Route 41	Glendale Avenue and Hanford-Armona Road (Northbound)	2	686	6.92	A	819	8.27	A
2	State Route 41	Glendale Avenue and Hanford-Armona Road (Southbound)	2	736	7.43	A	818	8.26	A
3	State Route 41	Hanford-Armona Road and Bush Street (Northbound)	2	556	5.61	A	878	8.86	A
4	State Route 41	Hanford-Armona Road and Bush Street (Southbound)	2	725	7.32	A	622	6.28	A

Note: LOS = Level of Service pursuant to Exhibit 11-5 and 14-2 of HCM 6

## Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Existing plus Project Buildout Traffic Conditions scenario. These warrants are found in Appendix I. The effects of right-turning traffic from the minor approach onto the major approach were taken into account using engineering judgement pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, the intersections of Project Driveway 2 and Hanford-Armona Road and 19th Avenue and Hanford-Armona Road satisfy the peak hour signal warrant during both peak periods. Based on the signal warrants and engineering judgement, signalization of these intersections is not recommended, especially since both intersections are projected to operate at an acceptable LOS during both peak periods. It is worth noting that the CA MUTCD states that "satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic signal." Therefore, it is recommended that prior to the installation of a traffic signal, investigation of CA MUTCD warrants 1, 4 and 7, as applicable, be conducted for these intersections.



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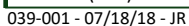
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Page | 32

### Figure 9



## Cumulative Year 2040 plus Project Traffic Conditions

### Description of Approved and Pipeline Projects

Approved and Pipeline Projects consist of developments that are either under construction, built but not fully occupied, are not built but have final site development review (SDR) approval, or for which the lead agency or responsible agencies have knowledge of. The City of Lemoore, County of Kings and Caltrans staff were consulted throughout the preparation of this TIA regarding approved and/or known projects that could potentially impact the study intersections. JLB staff conducted a reconnaissance of the surrounding area to confirm the Cumulative Projects. Subsequently, it was agreed that the projects listed in Table XIV were approved, near approval, or in the pipeline within the proximity of the proposed Project.

The trip generation listed in Table XIV is that which is anticipated to be added to the streets and highways by these projects between the time of the preparation of this report and 20 years after buildout of the proposed Project. As shown in Table XIV, the total trip generation for the Cumulative Projects is 2,122 daily trips, 133 AM peak hour trips and 197 PM peak hour trips. Figure 10 illustrates the location of the approved, near approval, or pipeline projects and their combined trip assignment to the study intersections and segments under the Cumulative Year 2040 plus Project Traffic Conditions scenario. These Cumulative Project trips were included as part of the Cumulative Year 2040 plus Project traffic volumes.

**Table XIV: Cumulative Projects' Trip Generation**

<b>Approved Project Location</b>	<b>Approved or Pipeline Project Name</b>	<b>Daily Trips</b>	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>
A	Silvia Estates Patio Homes <sup>1</sup>	220	14	17
B	Parkview Estates <sup>1</sup>	831	65	87
C	Park Meadows <sup>1</sup>	189	15	20
D	Oleander Terrace <sup>1</sup>	483	30	37
E	Dollar General <sup>1</sup>	399	9	36
<b>Total Approved and Pipeline Project Trips</b>		<b>2,122</b>	<b>133</b>	<b>197</b>

Note: <sup>1</sup> = Trip Generation prepared by JLB Traffic Engineering, Inc. based on readily available information



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

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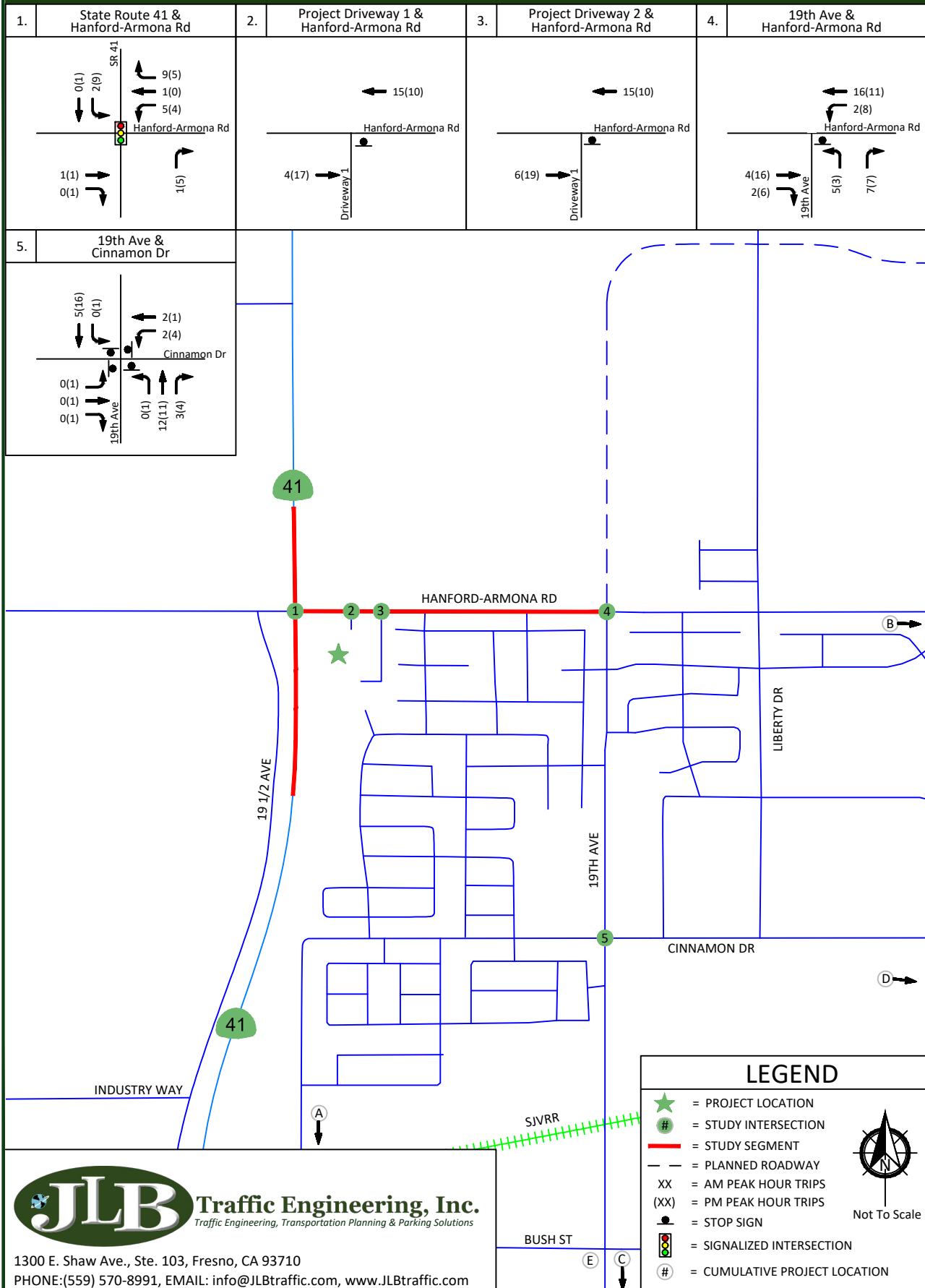
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Page | 34



# City of Lemoore - Hanford-Armona Road Mixed-Use Development Cumulative Projects' Trip Assignment

Figure 10



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## Results of Cumulative Year 2040 plus Project Level of Service Analysis

The Cumulative Year 2040 plus Project Traffic Conditions scenario assumes that the existing roadway geometrics and traffic controls will remain in place. Figure 11 illustrates the Cumulative Year 2040 plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Cumulative Year 2040 plus Project Traffic Conditions scenario are provided in Appendix G. Table XV presents a summary of the Cumulative Year 2040 plus Project peak hour LOS at the study intersections, Table XVI presents a summary of the Cumulative Year 2040 plus Project LOS for the arterial study segments, and Table XVII presents a summary of the Cumulative Year 2040 plus Project LOS for the highway study segments.

Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to operate below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. To improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.

- State Route 41 and Hanford-Armona Road
  - Add an eastbound left-turn lane;
  - Modify the eastbound left-through-right lane to a through-right lane;
  - Add two westbound left-turn lanes;
  - Modify the westbound left-through-right lane to a through lane;
  - Add a westbound right-turn lane;
  - Add a second southbound left-turn lane;
  - Implement overlap phasing of the westbound right-turn with the southbound left-turn phase;
  - Implement overlap phasing of the northbound right-turn with the westbound left-turn phase;
  - Implement protective left-turn phasing in all directions; and
  - Modify the traffic signal to accommodate the added lanes.

Under this scenario, the intersections of Project Driveway 2 and Hanford-Armona Road and 19th Avenue and Cinnamon Drive are projected to exceed their LOS threshold during both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.

- Project Driveway 2 and Hanford-Armona Road
  - Modify the eastbound right turn lane to a through-right lane;
  - Signalize the intersection with protective left-turn phasing in all directions; and
  - Modify the intersection to accommodate the modified lane geometrics.
- 19th Avenue and Cinnamon Drive
  - Signalize the intersection with protective left-turn phasing in all directions.

Under this scenario, the arterial segment of Hanford-Armona Road between State Route 41 and Project Driveway 2 is projected to exceed its LOS threshold. To improve its LOS, it is recommended that this segment of Hanford-Armona Road be widened to accommodate two lanes in each direction and be divided by a raised median island or a continuous two-way left-turn lane.



Under this scenario, all highway segments are projected to operate at an acceptable LOS.

**Table XV: Cumulative Year 2040 plus Project Intersection LOS Results**

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	State Route 41 / Hanford-Armona Road	Signalized	121.9	F	101.9	F
		Signalized (Mitigated)	27.8	C	34.0	C
2	Project Driveway 1 / Hanford-Armona Road	One-Way Stop	11.1	B	16.3	C
3	Project Driveway 2 / Hanford-Armona Road	One-Way Stop	49.2	E	62.3	F
		Signalized (Mitigated)	8.8	A	20.0	B
4	19th Avenue / Hanford-Armona Road	All-Way Stop	17.9	C	23.4	C
5	19th Avenue / Cinnamon Drive	All-Way Stop	53.2	F	33.4	D
		Signalized (Mitigated)	34.0	C	26.1	C

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls  
LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

**Table XVI: Cumulative Year 2040 plus Project Arterial Segment LOS Results**

ID	Segment	Limits	Lanes	24-hour Volume	LOS
1	Hanford-Armona Road	State Route 41 and Project Driveway 2	2	12,590	E
			4 (Mitigated)		C
2	Hanford-Armona Road	Project Driveway 2 and 19th Avenue	2	11,880	D

Note: LOS = Level of Service per the Florida Roadway Segment LOS Tables

**Table XVII: Cumulative Year 2040 plus Project Highway Segment LOS Results**

ID	Segment	Limits	Lanes	AM			PM		
				Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
1	State Route 41	Glendale Avenue and Hanford-Armona Road (Northbound)	2	1,037	10.47	A	1,244	12.56	B
2	State Route 41	Glendale Avenue and Hanford-Armona Road (Southbound)	2	1,114	11.24	B	1,239	12.50	B
3	State Route 41	Hanford-Armona Road and Bush Street (Northbound)	2	833	8.41	A	1,333	13.45	B
4	State Route 41	Hanford-Armona Road and Bush Street (Southbound)	2	1,098	11.08	B	939	9.48	A

Note: LOS = Level of Service pursuant to Exhibit 11-5 and 14-2 of HCM 6



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

www.JLBtraffic.com

info@JLBtraffic.com

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Page | 37

## Traffic Signal Warrants

Peak hour traffic signal warrants, as appropriate, were prepared for the unsignalized intersections in the Cumulative Year 2040 plus Project Traffic Conditions scenario. These warrants are found in Appendix I. The effects of right-turning traffic from the minor approach onto the major approach were taken into account using engineering judgement pursuant to the CA MUTCD guidelines for the preparation of traffic signal warrants. Under this scenario, the intersections of Project Driveway 2 and Hanford-Armona Road, 19th Avenue and Hanford-Armona Road, and 19th Avenue and Cinnamon Drive satisfy the peak hour signal warrant during both peak periods. Based on the signal warrants and engineering judgement, signalization of the intersections of Project Driveway 2 and Hanford-Armona Road and 19th Avenue and Cinnamon Drive is recommended, while signalization of the intersection of 19th Avenue and Hanford-Armona Road is not recommended, especially since it is projected to operate at an acceptable LOS during both peak periods. It is worth noting that the CA MUTCD states that "satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic signal." Therefore, it is recommended that prior to the installation of a traffic signal, investigation of CA MUTCD warrants 1, 4, and 7, as applicable, be conducted for the intersection of 19th Avenue and Hanford-Armona Road.



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*Traffic Engineering, Transportation Planning, & Parking Solutions*

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[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

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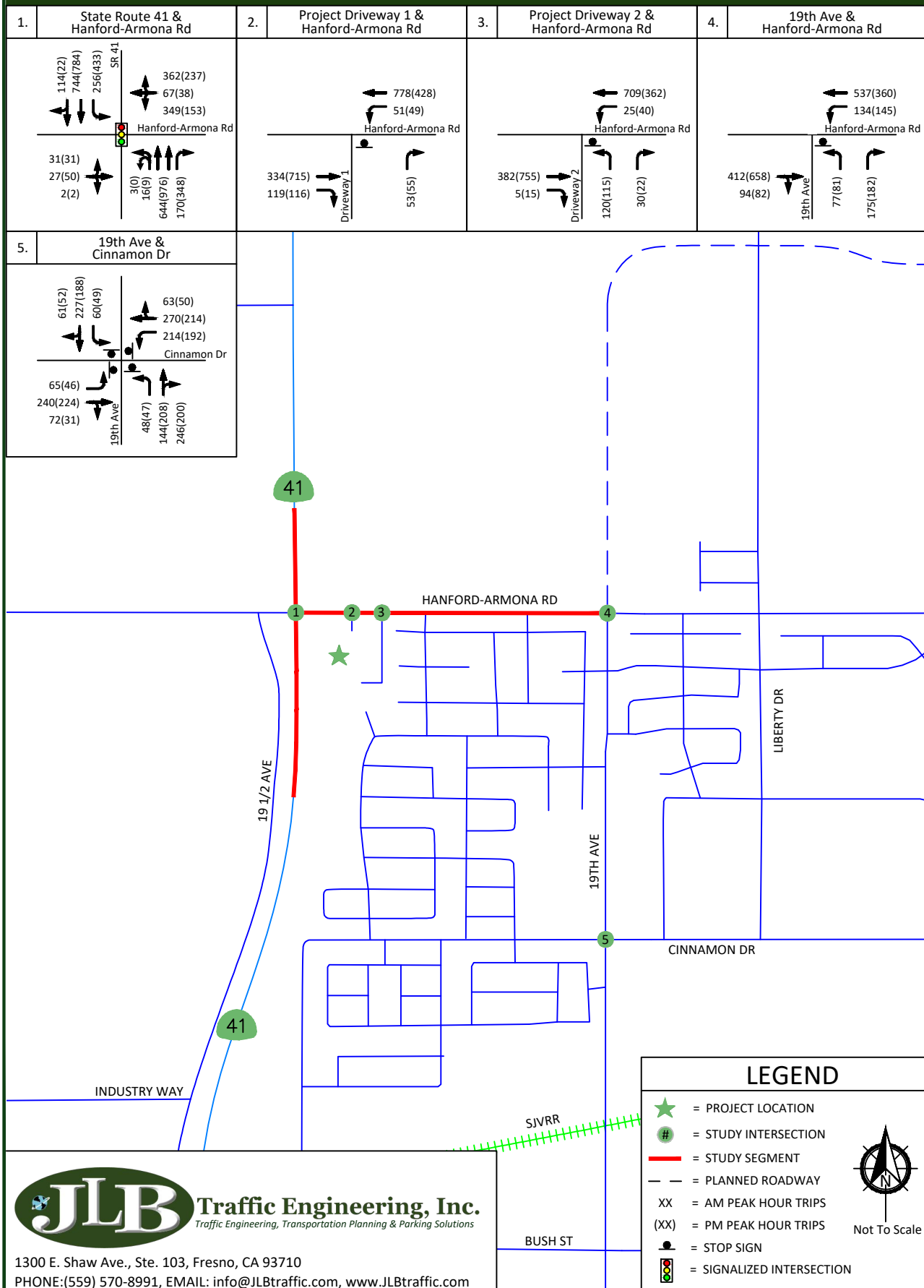
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*Page | 38*

# City of Lemoore - Hanford-Armona Road Mixed-Use Development Cumulative Year 2040 plus Project - Traffic Volumes, Geometrics and Controls

Figure 11



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## Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions

The Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions scenario assumes that the existing roadway geometrics and traffic controls will remain in place with one exception. For purposes of this TIA, it was assumed that the State Route 41 and Hanford-Armona Road at-grade highway intersection has been removed and replaced with a partial Type L-9 interchange.

## Results of Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Level of Service Analysis

The Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions scenario assumes that the State Route 41 and Hanford-Armona Road at-grade highway intersection is modified to accommodate a partial Type L-9 interchange. Figure 12 illustrates the Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions scenario are provided in Appendix H. Table XVIII presents a summary of the Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange peak hour LOS at the study intersections, Table XIX presents a summary of the Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange LOS for the arterial study segments, Table XX presents a summary of the Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange LOS for the highway study segments, and Table XXI presents a summary of the Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange LOS for the ramp study segment.

Under this scenario, the intersections of Project Driveway 2 and Hanford-Armona Road and 19th Avenue and Cinnamon Drive are projected to exceed their LOS threshold during both peak periods. To improve the LOS at the intersections projected to exceed their LOS threshold, it is recommended that the following improvements be implemented.

- Project Driveway 2 and Hanford-Armona Road
  - Modify the eastbound right turn lane to an eastbound through-right lane;
  - Signalize the intersection with protective left-turn phasing in all directions; and
  - Modify the intersection to accommodate the modified lane geometrics.
- 19th Avenue and Cinnamon Drive
  - Signalize the intersection with protective left-turn phasing in all directions.

Under this scenario, the arterial segment of Hanford-Armona Road between State Route 41 and Project Driveway 2 is projected to exceed its LOS threshold. To improve its LOS, it is recommended that this segment of Hanford-Armona Road be widened to accommodate two lanes in each direction and be divided by a raised median island or a continuous two-way left-turn lane.

Under this scenario, all highway segments and the ramp segment are projected to operate at an acceptable LOS.

**Table XVIII: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Intersection LOS Results**

ID	Intersection	Intersection Control	AM Peak Hour		PM Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
6	SR 41 SB Ramps / Hanford-Armona Road	Signalized	8.0	A	10.3	B
7	SR 41 NB Ramps / Hanford-Armona Road	Signalized	12.4	B	15.5	B
2	Project Driveway 1 / Hanford-Armona Road	One-Way Stop	9.9	A	11.9	B
3	Project Driveway 2 / Hanford-Armona Road	One-Way Stop	<b>58.0</b>	<b>F</b>	<b>76.6</b>	<b>F</b>
		Signalized (Mitigated)	9.6	A	6.3	A
4	19th Avenue / Hanford-Armona Road	All-Way Stop	20.2	C	25.1	D
5	19th Avenue / Cinnamon Drive	All-Way Stop	<b>53.2</b>	<b>F</b>	<b>33.2</b>	<b>D</b>
		Signalized (Mitigated)	40.7	D	25.9	C

Note: LOS = Level of Service based on average delay on signalized intersections and All-Way STOP Controls  
LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

**Table XIX: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Arterial Segment LOS Results**

ID	Segment	Limits	Lanes	24-hour Volume	LOS
1	Hanford-Armona Road	State Route 41 and Project Driveway 2	2	12,590	E
			4 (Mitigated)		C
2	Hanford-Armona Road	Project Driveway 2 and 19th Avenue	2	11,880	D

Note: LOS = Level of Service per the Florida Roadway Segment LOS Tables

**Table XX: Cumulative Year 2040 plus Project plus Partial L-9 Interchange Highway Segment LOS Results**

ID	Segment	Limits	Lanes	AM			PM		
				Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
1	State Route 41	Glendale Avenue and Hanford-Armona Road (Northbound)	2	1,037	10.47	A	1,244	12.56	B
2	State Route 41	Glendale Avenue and Hanford-Armona Road (Southbound)	2	1,114	11.24	B	1,239	12.50	B
3	State Route 41	Hanford-Armona Road and Bush Street (Northbound)	2	833	8.41	A	1,333	13.45	B
4	State Route 41	Hanford-Armona Road and Bush Street (Southbound)	2	1,098	11.08	B	939	9.48	A

Note: LOS = Level of Service pursuant to Exhibit 11-5 and 14-2 of HCM 6



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

www.JLBtraffic.com

info@JLBtraffic.com

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Page | 41

**Table XXI: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Ramp Segment LOS Results**

ID	Limits	Lanes	AM			PM		
			Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
1	State Route 41 NB Ramps to Hanford-Armona Road	1	189	19.7	B	357	22.5	B

Note: LOS = Level of Service pursuant to Exhibit 11-5 and 14-2 of HCM 6



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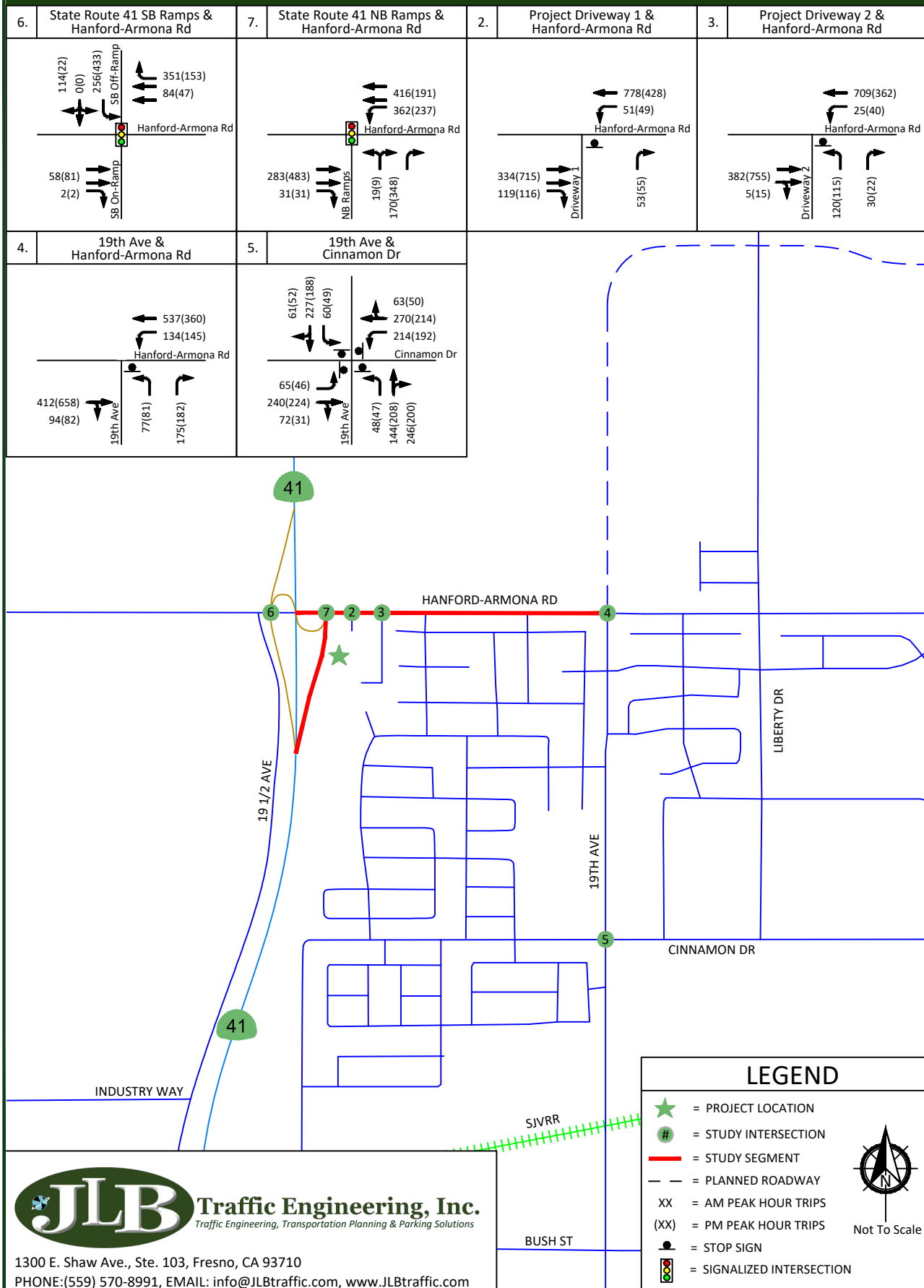
Page | 42



# City of Lemoore - Hanford-Armona Road Mixed-Use Development

## Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange - Traffic Volumes, Geometrics and Controls

Figure 12



039-001 - 04/06/18 - JR

## Queuing Analysis

Table XXII provides a queue length summary for left-turn and right-turn lanes at the study intersections under all study scenarios. The queuing analyses for the study intersections are contained in the LOS worksheets for the respective scenarios. Appendix C contains the methodologies used to evaluate these intersections.

Queuing analyses were completed using Sim Traffic output information. Synchro provides both 50th and 95th percentile maximum queue lengths (in feet). According to the Synchro manual, “the 50th percentile maximum queue is the maximum back of queue on a typical cycle and the 95th percentile queue is the maximum back of queue with 95th percentile volumes.” The queues shown on Table XXII are the 95th percentile queue lengths for the respective lane movements.

The Highway Design Manual (HDM) provides guidance for determining deceleration lengths for the left-turn and right-turn lanes based on design speeds. Per the HDM criteria, “tapers for right-turn lanes are usually un-necessary since the main line traffic need not be shifted laterally to provide space for the right-turn lane. If, in some rare instances, a lateral shift were needed, the approach taper would use the same formula as for a left-turn lane.” Therefore, a bay taper length pursuant to the Caltrans HDM would need to be added, as necessary, to the recommended storage lengths presented in Table XXII.

Based on the SimTraffic output files and engineering judgement, it is recommended that the storage capacity for the following be considered for the Cumulative Year 2040 plus Project Traffic Conditions scenario.

- State Route 41 and Hanford-Armona Road
  - Consider setting the storage capacity of the eastbound left-turn lane to 100 feet.
  - Consider setting the storage capacity of the dual westbound left-turn lanes to 200 feet.
  - Consider setting the storage capacity of the westbound right-turn lane to 175 feet.
  - Consider setting the storage capacity of the dual southbound left-turn lanes to 200 feet.
- Project Driveway 1 and Hanford-Armona Road
  - Consider setting the storage capacity of the eastbound right-turn lane to 75 feet.
  - Consider setting the storage capacity of the westbound left-turn lane to 100 feet.
  - In an effort to improve on-site and off-site circulation, it is recommended that Project Driveway 1 have a minimum throat depth of 50 feet before any vehicular openings to the east.
- Project Driveway 2 and Hanford-Armona Road
  - Consider setting the storage capacity of the westbound left-turn lane to 150 feet.
  - Consider setting the storage capacity of the northbound left-turn lane to 125 feet.
  - Consider setting the storage capacity of the northbound right-turn lane to 125 feet.
- 19th Avenue and Cinnamon Drive
  - Consider increasing the storage capacity of the eastbound left-turn lane to 150 feet.
  - Consider increasing the storage capacity of the westbound left-turn lane to 200 feet.
  - Consider setting the storage capacity of the northbound left-turn lane to 125 feet.
  - Consider setting the storage capacity of the southbound left-turn lane to 125 feet.



**Table XXII: Queuing Analysis**

ID	Intersection	Existing Queue Storage Length (ft.)		Existing		Existing plus Project Phase 1		Existing plus Project Buildout		Cumulative Year 2040 plus Project		Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange	
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	State Route 41 / Hanford-Armona Road	EB Left	*	*	*	*	*	*	*	75	88	*	*
		WB Left	*	*	*	*	*	267	118	*	*	*	*
		WB Dual Lefts	*	*	*	*	*	*	*	183	86	*	*
		WB Right	*	92	84	101	83	138	95	169	151	*	*
		NB Left	845	12	18	42	10	43	10	37	27	*	*
		NB Right	500	47	89	65	77	79	92	69	152	*	*
		SB Left	855	131	259	153	308	212	423	*	*	*	*
		SB Dual Lefts	855	*	*	*	*	*	*	135	193	*	*
2	Project Driveway 1 / Hanford-Armona Road	EB Right	*	*	*	*	*	25	13	7	10	10	0
		WB Left	*	*	*	*	*	42	46	39	55	54	49
		NB Right	*	*	*	*	*	59	53	32	50	39	45
3	Project Driveway 2 / Hanford-Armona Road	WB Left	*	*	*	9	18	26	41	58	66	45	67
		NB Left	*	*	*	31	22	82	80	121	89	103	118
		NB Right	*	*	*	29	34	36	36	62	44	46	61
4	19th Avenue / Hanford-Armona Road	WB Left	245	59	61	44	62	54	68	63	125	88	94
		NB Left	245	52	49	64	46	72	70	94	85	73	113
		NB Right	>300	63	59	62	61	66	67	79	91	91	95
5	19th Avenue / Cinnamon Drive	EB Left	100	53	47	48	39	53	47	122	84	138	131
		WB Left	100	81	73	68	86	73	71	243	186	200	193
		NB Left	95	44	39	43	45	47	46	81	100	118	103
		SB Left	80	48	41	41	49	58	50	102	63	113	74
6	Hanford Armona Road / State Route 41 SB Ramps	EB Right	*	*	*	*	*	*	*	*	*	15	0
		WB Right	*	*	*	*	*	*	*	*	*	86	93
		SB Left	*	*	*	*	*	*	*	*	*	97	100
7	Hanford Armona Road / State Route 41 NB Ramp	EB Right	*	*	*	*	*	*	*	*	*	42	47
		WB Left	*	*	*	*	*	*	*	*	*	175	173
		NB Right	*	*	*	*	*	*	*	*	*	59	137

Note: \* = Does not exist or is not projected to exist



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

www.JLBtraffic.com

info@JLBtraffic.com

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

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Page | 45

## Project's Pro-Rata Fair Share of Future Transportation Improvements

The Project's fair share percentage impact to study intersections projected to fall below their LOS threshold and that are not covered by an existing impact fee program is provided in Table XXIII. The Project's fair share percentage impacts were calculated pursuant to the Caltrans Guide for the Preparation of Traffic Impact Studies. The Project's pro-rata fair shares were calculated utilizing the Existing volumes, Project Only Trips and Cumulative Year 2040 plus Project volumes. Figure 2 illustrates the Existing traffic volumes, Figure 8 illustrates the Buildout Project Only Trips, and Figure 11 illustrates the Cumulative Year 2040 plus Project traffic volumes. Since the critical peak period for the study facilities was determined to be during the PM peak, the PM peak volumes are utilized to determine the Project's pro-rata fair share.

It is recommended that the Project contribute its equitable fair share as listed in Table XXIII for the future improvements necessary to maintain an acceptable LOS. However, fair share contributions should only be made for those facilities or portion thereof currently not funded by the responsible agencies roadway impact fee program(s), as appropriate. For those improvements not presently covered by local and regional roadway impact fee programs, it is recommended that the Project contribute its equitable fair share. Payment of the Project's equitable fair share in addition to the local and regional impact fee programs would satisfy the Project's traffic mitigation measures.

This study does not provide construction costs for the recommended mitigation measures; therefore, if the recommended mitigation measures are implemented, it is recommended that the developer work with the City of Lemoore to develop the estimated construction cost.

**Table XXIII: Project's Fair Share of Future Roadway Improvements**

<i>ID</i>	<i>Intersection</i>	<i>Existing Traffic Volumes (PM Peak)</i>	<i>Cumulative Year 2040 plus Project Traffic Volumes (PM Peak)</i>	<i>Project Only Trips (PM Peak)</i>	<i>Project's Fair Share (%)</i>
1	State Route 41 / Hanford-Armona Road	1,820	3,083	246	19.48%
4	Project Driveway 2 / Hanford-Armona Road	650	1,309	296	44.92%
6	19th Avenue / Cinnamon Drive	923	1,501	61	10.55%
<i>ID</i>	<i>Hanford-Armona Road between:</i>	<i>Existing Traffic Volumes (Daily)</i>	<i>Cumulative Year 2040 plus Project Traffic Volumes (Daily)</i>	<i>Project Only Trips (Daily)</i>	<i>Project's Fair Share (%)</i>
1	State Route 41 and Project Driveway 2	7,465	12,590	2,460	48.00%

Note: Project Fair Share = ((Buildout Project Only Trips) / (Cumulative Year 2040 plus Project Traffic Volumes - Existing Traffic Volumes)) x 100



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info@JLBtraffic.com

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Fresno, CA 93710

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Page | 46

## Conclusions and Recommendations

Conclusions and recommendations regarding the proposed Project are presented below.

### *Existing Traffic Conditions*

- At present, the intersection of State Route 41 and Hanford-Armona Road operates below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. However, to improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be considered.
  - State Route 41 and Hanford-Armona Road
    - Modify the westbound left-through-right lane to a left-through lane;
    - Add a westbound right-turn lane; and
    - Modify the traffic signal to accommodate the added lane.
- At present, all arterial and highway segments operate at an acceptable LOS.

### *Existing plus Project Phase 1 Traffic Conditions*

- Phase 1 of the proposed Project is estimated to generate a maximum of 1,288 daily trips, 81 AM peak hour trips and 99 PM peak hour trips.
- Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to continue operating below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. Phase 1 of the Project is projected to add a maximum of 3.3 and 1.1 seconds of average delay during the AM and PM peaks respectively. Also, the addition of an average delay of less than five (5) seconds is often not considered a significant impact. Therefore, since the Phase 1 of the Project maintains the existing measures of effectiveness and it adds less than five (5) seconds of delay to existing operations, this impact would not be considered significant. However, if improvements were made to improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.
  - State Route 41 and Hanford-Armona Road
    - Add a westbound left-turn lane;
    - Modify the westbound left-through-right lane to a through lane;
    - Add a westbound right-turn lane; and
    - Modify the traffic signal to accommodate the added lanes while maintaining the east-west split phasing.
- Under this scenario, all arterial and highway segments are projected to operate at an acceptable LOS.



### *Existing plus Project Buildout Traffic Conditions*

- JLB analyzed the conceptual roadways within an earlier version of the Project site plan. Based on this review, it was recommended that the Project consider relocating the gasoline/service station (Shop A) and fast-food restaurant (Pad A) located near the northwest corner of the Project Site Plan further east and relocating the hotel in their place. The gasoline/service station and fast-food restaurant are estimated to attract higher volumes than those estimated to be generated by the hotel. Based on these comments, the Project site plan was revised to relocate the proposed Hotel and gasoline/service station as recommended by JLB. To further minimize traffic impacts, the latest Project site plan also included a reduction on the number of driveways to Hanford-Armona Road. By incorporating these modifications to the Project Site Plan, on-site and off-site traffic operations and circulation have been improved.
- It is recommended that the Project coordinate with KART to determine the best location for the placement of a bus turnout along the Project's frontage to Hanford-Armona Road.
- It is recommended that the Project implement Class II bike lanes along its frontage to Hanford-Armona Road.
- At buildout, the proposed Project is estimated to generate a maximum of 6,775 daily trips, 471 AM peak hour trips and 488 PM peak hour trips.
- Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to operate below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. To improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.
  - State Route 41 and Hanford-Armona Road
    - Add a westbound left-turn lane;
    - Modify the westbound left-through-right lane to a through lane;
    - Add a westbound right-turn lane; and
    - Modify the traffic signal to accommodate the added lanes while maintaining the east-west split phasing.
- Under this scenario, all arterial and highway segments are projected to operate at an acceptable LOS.



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Page | 48

*Cumulative Year 2040 plus Project Traffic Conditions*

- Under this scenario, the intersection of State Route 41 and Hanford-Armona Road is projected to operate below its respective LOS threshold (LOS C) during both peak periods. For the intersections that currently operate below the Caltrans target LOS C threshold, the existing LOS operations would be the existing MOEs that would need to be maintained. To improve the LOS at the intersection of State Route 41 and Hanford-Armona Road, it is recommended that the following improvements be implemented.
  - State Route 41 and Hanford-Armona Road
    - Add an eastbound left-turn lane;
    - Modify the eastbound left-through-right lane to a through-right lane;
    - Add two westbound left-turn lanes;
    - Modify the westbound left-through-right lane to a through lane;
    - Add a westbound right-turn lane;
    - Add a second southbound left-turn lane;
    - Implement overlap phasing of the westbound right-turn with the southbound left-turn phase;
    - Implement overlap phasing of the northbound right-turn with the westbound left-turn phase;
    - Implement protective left-turn phasing in all directions; and
    - Modify the traffic signal to accommodate the added lanes.
- Under this scenario, the intersections of Project Driveway 2 and Hanford-Armona Road and 19th Avenue and Cinnamon Drive are projected to exceed their LOS threshold during both peak periods. To improve the LOS at these intersections, it is recommended that the following improvements be implemented.
  - Project Driveway 2 and Hanford-Armona Road
    - Modify the eastbound right turn lane to an eastbound through-right lane;
    - Signalize the intersection with protective left-turn phasing in all directions; and
    - Modify the intersection to accommodate the modified lane geometrics.
  - 19th Avenue and Cinnamon Drive
    - Signalize the intersection with protective left-turn phasing in all directions.
- Under this scenario, the arterial segment of Hanford-Armona Road between State Route 41 and Project Driveway 2 is anticipated to exceed its LOS threshold. To improve its LOS, it is recommended that this segment of Hanford-Armona Road be widened to accommodate two lanes in each direction and be divided by a raised median island or a continuous two-way left-turn lane.
- Under this scenario, all highway segments are projected to operate at an acceptable LOS.



***Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions***

- Under this scenario, the intersections of Project Driveway 2 and Hanford-Armona Road and 19th Avenue and Cinnamon Drive are projected to exceed their LOS threshold during both peak periods. To improve the LOS at the intersections projected to exceed their LOS threshold, it is recommended that the following improvements be implemented.
  - Project Driveway 2 and Hanford-Armona Road
    - Modify the eastbound right turn lane to an eastbound through-right lane;
    - Signalize the intersection with protective left-turn phasing in all directions; and
    - Modify the intersection to accommodate the modified lane geometrics.
  - 19th Avenue and Cinnamon Drive
    - Signalize the intersection with protective left-turn phasing in all directions.
- Under this scenario, the arterial segment of Hanford-Armona Road between State Route 41 and Project Driveway 2 is anticipated to exceed its LOS threshold. To improve its LOS, it is recommended that this segment of Hanford-Armona Road be widened to accommodate two lanes in each direction and be divided by a raised median island or a continuous two-way left-turn lane.
- Under this scenario, all highway segments and the ramp segment are projected to operate at an acceptable LOS.

***Queuing Analysis***

- It is recommended that the City consider left- and right-turn lane storage lengths as indicated in the Queuing Analysis.

***Project's Equitable Fair Share***

- It is recommended that the Project contribute its equitable Fair Share as presented in Table XXIII.





## Study Participants

### JLB Traffic Engineering, Inc. Personnel:

Jose Luis Benavides, PE, TE	Project Manager
Susana Maciel, EIT	Engineer I/II
Alan Miao, EIT	Engineer I/II
Javier Rios	Engineer I/II
Jove Alcazar	Engineer I/II
Dennis Wynn	Sr. Engineering Technician

### Persons Consulted:

Steve Brandt	City of Lemoore
Dominic Tyburski, PE	County of Kings
Michael Navarro	Caltrans
Brett Fugman	CVIF II, LLC.

## References

1. City of Lemoore, *2030 General Plan*.
2. *A Policy on Geometric Design of Highways and Streets*. 4th ed., American Association of State Highway and Transportation Officials, 2011.
3. *Guide for the Preparation of Traffic Impact Studies*, Caltrans, dated December 2002.
4. *Trip Generation*, 10th Edition, Washington D.C., Institute of Transportation Engineers, 2017.
5. *2014 California Manual on Uniform Traffic Control Devices*, Caltrans, November 7, 2014.



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

(559) 570-8991

Page | 51

## Appendix A: Scope of Work



**Traffic Engineering, Inc.**

*Traffic Engineering, Transportation Planning, & Parking Solutions*

<http://www.JLBtraffic.com>

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

*(559) 570-8991*

*Page / A*

January 30, 2017

Steve Brandt  
City Planner  
City of Lemoore  
711 West Cinnamon Drive  
Lemoore, CA 93245

Via Email Only: [sbrandt@lemoore.com](mailto:sbrandt@lemoore.com)

**Subject:     *Proposed Draft Scope of Work for the Preparation of a Traffic Impact Analysis for a Project at the Southeast Corner of the Hanford-Armona Road and State Route 41 in the City of Lemoore (JLB Project 039-001)***

Dear Mr. Brandt,

JLB Traffic Engineering, Inc. (JLB) hereby submits this Draft Scope of Work for the preparation of a Traffic Impact Analysis (TIA) for the Project described below. The Project proposes to develop a 16.19-acre site on the southeast corner of Hanford-Armona Road and State Route 41 in the City of Lemoore. The Project will construct 176 multi-family residential units (apartments), a gasoline/service station (8 fueling positions) with convenience market, a 90-room hotel, 6,000 square feet of fast-food restaurant with drive-through window, and a 7,040 square-foot general shopping center. Per information provided to JLB, the Project will undergo a General Plan Amendment through the City of Lemoore. An aerial of the Project vicinity is shown in Exhibit A, while the Project Site Plan is shown in Exhibit B.

The purpose of this TIA is to evaluate the potential on- and off-site traffic impacts, identify short-term roadway and circulation needs, determine potential mitigation measures, and identify any critical traffic issues that should be addressed in the on-going planning process. In order to evaluate the onsite and offsite traffic impacts of the proposed Project, JLB proposes the following draft scope of work.

### ***Scope of Work***

- To arrive at the future year forecast volumes, JLB proposes to utilize an annual growth rate for State Route 41. Based on a review of the Annual Average Daily Traffic (AADT) volumes obtained from Caltrans, the twenty-year average growth rate of State Route 41 is 2.04 percent. Therefore, JLB will utilize an annual growth rate of 2.04 percent to expand the existing traffic volumes by 17 years to arrive at the Cumulative Year 2035 plus Project scenario.
- JLB will evaluate existing and forecast levels of service (LOS) at the study intersection(s). JLB will use HCM 2010 methodologies within Synchro to perform this analysis for the AM and PM peak hours. JLB will identify the causes of poor LOS.
- Evaluate on-site circulation and provide recommendations as necessary to improve circulation to the site and within the Project site.
- JLB will qualitatively analyze existing and planned transit routes in the Project's vicinity.
- JLB will qualitatively analyze existing and planned bikeways in the Project's vicinity.



Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

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Page | 1

- JLB will conduct a corner sight-distance from the Project driveways to the intersection of Hanford-Armona Road and State Route 41 pursuant to HDM Topic 405.1(2a).
- As necessary, obtain recent (less than two years) or schedule and conduct new traffic counts at the study facility(ies).
- Perform a site visit to observe existing traffic conditions, especially during the AM and PM peak hours. Existing roadway conditions, including geometrics and traffic controls, will be verified.
- Forecast trip distribution based on turn count information and knowledge of the existing and planned circulation network in the vicinity of the Project.
- Prepare California Manual on Uniform Traffic Control Devices (CA MUTCD) peak hour signal warrants for un-signalized study intersections.

**Study Scenarios:**

1. Existing Traffic Conditions with proposed improvement measures (if any)
2. Existing plus Project Traffic Conditions with proposed mitigation measures (if any)
3. Cumulative Year 2035 plus Project Traffic Conditions with proposed mitigation measures (if any)
4. Cumulative Year 2035 plus Project plus Partial Type L-9 Interchange with proposed mitigation measures (if any)

**Weekday peak hours to be analyzed (Tuesday through Thursday only):**

1. 7-9 AM peak period
2. 4-6 PM peak period

**Study Intersections:**

1. Hanford-Armona Road / State Route 41
2. Hanford-Armona Road / Project Driveway 1
3. Hanford-Armona Road / Project Driveway 2
4. Hanford-Armona Road / Project Driveway 3
5. Hanford-Armona Road / 19th Avenue
6. Cinnamon Drive / 19th Avenue

Queuing analysis is included in the proposed scope of work for the study intersections listed above under all study scenarios. This analysis will be utilized to recommend minimum storage lengths for left-turn and right-turn lanes at all study intersections.

**Study Segments:**

1. Hanford-Armona Road between State Route 41 and 19th Avenue

**Project Only Trip Assignment to the Following State Facilities:**

1. None

**Trip Generation**

The trip generation rates for the Proposed Project and Existing General Plan Land Use designations were obtained from the 10th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table I presents the trip generation for the proposed Project with trip generation rates for Multifamily Housing, Gasoline/Service Station with Convenience Market, Hotel, Fast-Food Restaurant with Drive-Through Window and General Shopping Center. The proposed Project is estimated to generate a maximum of 6,775 daily trips, 471 AM peak hour trips and 488 PM peak hour



trips. Table II presents the trip generation for the Existing Land Use with trip generation rates for Multifamily Housing, Gasoline/Service Station with Convenience Market, Hotel, Fast-Food Restaurant with Drive-Through Window and General Shopping Center. The Existing General Plan Land Use is anticipated to generate a maximum of 7,199 daily trips, 472 AM peak hour trips and 536 PM peak hour trips. Compared to the Existing General Plan Land Use, the proposed Project is estimated to reduce traffic generation by 424 Daily, 1 AM peak hour and 48 PM peak hour trips. The difference in trip generation is summarized in Table III.

**Table I: Proposed Project Land Use Trip Generation**

Land Use (ITE Code)	Size	Unit	Daily		AM Peak Hour						PM Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%	%									
Multifamily Housing (Low-Rise) (220)	176	d.u.	7.32	1,288	0.46	23	77	19	62	81	0.56	63	37	62	37	99
Gasoline/Service Station with Convenience Market (945)	8	f.p.	205.36	1,643	12.47	51	49	51	49	100	13.99	51	49	57	55	112
Hotel (310)	90	o.r.	8.36	752	0.47	59	41	25	17	42	0.60	51	49	28	26	54
Fast-Food Restaurant with Drive-Through Window (934)	6.000	k.s.f.	470.95	2,826	40.19	51	49	123	118	241	32.67	52	48	102	94	196
Shopping Center (820)	7.040	k.s.f.	37.75	266	0.94	62	38	4	3	7	3.81	48	52	13	14	27
Total Project Trips				6,775				222	249	471				262	226	488

Note: d.u. = Dwelling Units  
f.p. = Fueling Positions  
o.r. = Occupied Rooms  
k.s.f. = Thousand Square Feet

**Table II: Existing General Plan Land Use Trip Generation**

Land Use (ITE Code)	Size	Unit	Daily		AM Peak Hour						PM Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Multifamily Housing (Low-Rise) (220)	144	d.u.	7.32	1,054	0.46	23	77	15	51	66	0.56	63	37	51	30	81
Gasoline/Service Station with Convenience Market (945)	8	f.p.	205.36	1,643	12.47	51	49	51	49	100	13.99	51	49	57	55	112
Hotel (310)	90	o.r.	8.36	752	0.47	59	41	25	17	42	0.60	51	49	28	26	54
Fast-Food Restaurant with Drive-Through Window (934)	6,000	k.s.f.	470.95	2,826	40.19	51	49	123	118	241	32.67	52	48	102	94	196
Shopping Center (820)	24,464	k.s.f.	37.75	924	0.94	62	38	14	9	23	3.81	48	52	45	48	93
Total Project Trips				7,199				228	244	472				283	253	536

Note: d.u. = Dwelling Units  
f.p. = Fueling Positions  
o.r. = Occupied Rooms  
k.s.f. = Thousand Square Feet

**Table III: Difference in Trip Generation**

	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project Land Use Trip Generation	6,775	222	249	471	262	226	488
Existing General Plan Land Use Trip Generation	7,199	228	244	472	283	253	536
<b>Change in Trip Generation</b>	<b>-424</b>	<b>-6</b>	<b>5</b>	<b>-1</b>	<b>-21</b>	<b>-27</b>	<b>-48</b>



**JLB Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

www.JLBtraffic.com

info@JLBtraffic.com

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Page | 3

### ***Access to the Project***

Access to and from the Project site is from four (4) points. Three (3) of the proposed access points are located along the south side of Hanford-Armona Road. The first access driveway located on the south side of Hanford-Armona Road is located at a point approximately 275 feet east of State Route 41 and is proposed as a right-in, right-out access. The second access driveway located on the south side of Hanford-Armona Road is located at a point approximately 520 feet east of State Route 41 and is proposed as a right-in, right-out access. The third access driveway located on the south side of Hanford-Armona Road is located at a point approximately 725 feet east of State Route 41 and is proposed as a right-in, right-out access. The final access driveway is located on the northwest corner of the intersection of Persimmon Street and Dogwood Avenue and is proposed as a full access.

### ***Near Term Projects to be Included***

JLB is unaware of other projects in the vicinity of the proposed Project that have the ability to impact traffic operations in the Cumulative Year plus Project scenario. However, JLB will include in the Cumulative Year plus Project scenario near term projects provided to us by other responsible agencies. These would include Near Term Projects the City of Lemoore, County of Kings or Caltrans has knowledge of and for which it is anticipated that said project(s) is/are projected to be whole or partially built by the Near Term Project Year, and for which the City of Lemoore, County of Kings or Caltrans, as appropriate, provides JLB with near term project details. Near term project details include project description, location, proposed land uses with breakdowns and type of residential units and amount of square footages for non-residential uses.

The above scope of work is based on our understanding of this Project and our experience with similar Traffic Impact Analysis Projects. In the absence of comments by February 20, 2018, it will be assumed that the above scope of work is acceptable to the agency(ies) that have not submitted any comments to the proposed TIA Scope of Work.

If you have any questions or require additional information, please do not hesitate to contact me. I can be reached by phone at (559) 570-8991 or by e-mail at [smaciel@JLBtraffic.com](mailto:smaciel@JLBtraffic.com).

Sincerely,



Susana Maciel, EIT  
Engineer I/II

cc: Dominic Tyburski, County of Kings  
Michael Navarro, Caltrans  
Jose Luis Benavides, JLB Traffic Engineering, Inc.

Z:\01 Projects\039 Lemoore\039-001 Hanford Armona Road TIA\Scope of Work\L01302018 Draft Scope of Work.docx



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[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

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Fresno, CA 93710

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## Exhibit A – Aerial



**Traffic Engineering, Inc.**

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[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

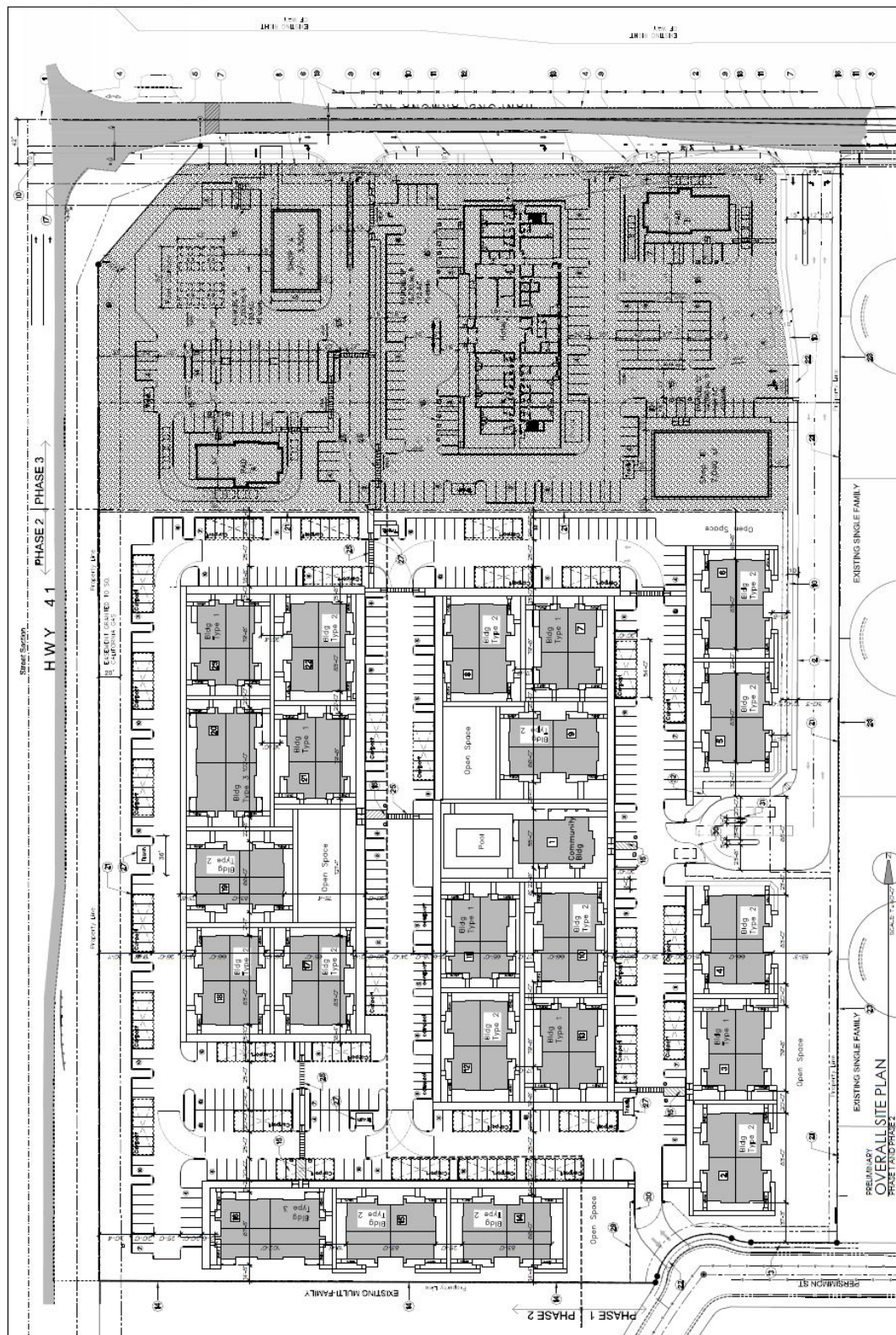
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Page | 5

## Exhibit B – Site Plan



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[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

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Page | 6



**DEPARTMENT OF TRANSPORTATION****DISTRICT 6**

1352 WEST OLIVE AVENUE

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06-KIN-41-R42.15  
Mixed-use Development  
Scope of Work

Mr. Steven Brandt  
City of Lemoore  
711 W. Cinnamon Drive  
Lemoore, CA 93245

Dear Mr. Brandt:

Thank you for the opportunity to review the Scope of Work and Site Plan for a proposal to develop a 16.19-acre site. The project will include 176 multi-family residential units, a gasoline/service station with convenience market, a 6,000 square-foot (SF) fast-food restaurant with drive-through window, a 7,040 SF general shopping center, and a 90-room hotel. The project is located at the southeast corner of State Route (SR) 41 and Hanford Armona Road in the City of Lemoore.

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

Based on the information provided, Caltrans has the *following comments* consistent with the State's smart mobility goals that support a vibrant economy and sustainable communities:

1. The SR 41 and Hanford-Armona Road intersection has been identified in the City of Lemoore Freeway Agreement with Caltrans as a location of a future interchange. The planning concept design for this interchange is a partial L-9 configuration with proposed northbound ramps and a structure on Hanford Armona Road crossing over SR 41, all of which will impact the proposed development. The TIS should also evaluate the need for the future interchange at this location.
2. Based on the site plan provided, Caltrans has the following concerns:
  - a. The proposed carports, "Pad A", and "Fuel Canopy" appear to be situated inside the future proposed northbound ramps. Caltrans recommends no structures be built within the footprint of the future proposed northbound

ramps. According to Caltrans Transportation Concept Report (TCR), the ultimate configuration for the mainline of this segment of SR 41 is a 6-lane freeway requiring 305 feet of right-of-way (ROW). Caltrans ROW maps show this segment existing at 166 feet. An irrevocable offer of dedication to Caltrans will be needed to accommodate the ultimate mainline configuration of SR 41.

- b. The two proposed western driveways appear to be within the footprint of the northbound ramps. In addition, the elevation differences between the future proposed Hanford Armona Road overcrossing and the existing elevation of the proposed development will make construction of the two western driveways difficult to achieve. Please also be advised that it is unlikely these proposed driveways meet the stopping sight distance (SSD) specified in Topic 201 of the Caltrans Highway Design Manual (HDM). It appears the speed limit at this location is 45-55 miles per hour (MPH). There is a posted speed limit of 45 MPH on Hanford Armona Road, east of the project location near Apricot Avenue. Assuming the speed is currently 45 MPH, the minimum required SSD would be 360 feet per Topic 201 of the HDM.
  - c. The eastern driveway may be too close to the future ramp intersection and may affect traffic operations. In addition to corner sight distance, a queue analysis will be required to ensure that queueing from the proposed driveway to the intersection does not occur.
3. The Scope of Work does not indicate when traffic/turning counts will be collected. Please ensure that they are done in a month where schools are in session. A peak month factor may need to be applied. Please use PM peak hours of 3:00-6:00 PM for the traffic/turning counts on SR 41 at Hanford Armona Road.
4. Page 1, first bullet, last sentence: Please be advised that Caltrans projects typically use 20 years after construction (or build-out year). The proposed Cumulative Year 2035 does not satisfy standard practice future analysis for this project. Please use Cumulative year 2040 (or the 2040 model year). The proposed annual growth rate of 2.04 percent is acceptable.
5. Page 2, under 'Study Scenarios': Please use Cumulative Year 2040 or 20 years after the construction year.
6. Page 3, Tables I-III: Caltrans disagrees with the methodology used in these Tables. Please be advised that there is currently no development and no traffic generated from this location. Therefore, taking the trip differences from Tables I and II to result in Table III is not typical engineering practice in project development.
7. The draft Scope of Work does not include any fair share calculation or mitigation as is typical in a TIS.

8. There is an existing Class II bicycle lane on Hanford Armona Road near the east side of the proposed project. Locals will likely request for the Class II bicycle lane to continue within the project location on Hanford Armona Road. Please show this on the revised site plan.

If you have any questions, please feel free to contact Kevin Lum, Transportation Planner, at (559) 488-4260.

Sincerely,



Michael Navarro, Acting Chief  
Transportation Planning - South

**DEPARTMENT OF TRANSPORTATION**  
**CENTRAL REGION SOUTHEAST SURVEYS**  
RELINQUISHMENTS, VACATIONS, and DEDICATIONS  
855 "M" STREET  
SUITE 200  
FRESNO, CA. 93721  
ATTN: Kuldeep Brar  
PHONE (559) 445-6573  
FAX (559) 445-6560  
E-mail: kuldeep\_brar@dot.ca.gov



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## **CALTRANS DISTRICT 6**

### **CENTRAL REGION SOUTHEAST SURVEYS OFFICE**

### **REQUIRED INFORMATION FOR R/W DEDICATIONS**

1. A Copy of the vesting deed(s) for the subject property (or a copy of the Title Report, if you have one).
2. Copy of the Assessor's Map.
3. Assessor's Parcel Number (APN) of the property.
4. State whether the property is within city limits or in an unincorporated area.
5. If the property is a lot of a Tract or a parcel of a Parcel Map, provide a copy of the recorded map(s).
6. Provide copies of any record map or deed cited in the documents provided.
7. A Legal description of the dedication parcel signed and sealed by a Licensed Professional Land Surveyor or a Civil Engineer registered prior to 1982 on 8 1/2" X 11" paper. Label EXHIBIT "A" at the top of the legal description (see attached sample legal).
8. A Plat showing pertinent survey data, such as basis of bearings, bearings, distances, and curve data, where applicable, and the area of the dedication parcel on 8 1/2" X 11" or 11" X 17" paper. If the parcel is located in unsubdivided land, show ties to the nearest two section corners and/or quarter-section corners (see attached sample plat).
9. A Copy of the traverse calculations for the dedication parcel to include error of closure and area.

(continued)

10. A Copy of the **CONDITIONS OF APPROVAL** by the local agency (City/County) for the Parcel Map, Tract Map, or development plans describing the location and amount of right-of-way to be dedicated.
11. Any requirements from **CALTRANS PERMITS** or **CALTRANS PLANNING** describing the location and amount of right-of-way to be dedicated.

**NOTE:**

**If any of the above listed items are not submitted, it will either cause a delay or halt in the Dedication process.**

If there are any questions, please contact Kuldeep Brar, Caltrans Surveys Department, at 559-445-6573.

Mail packet of information to:

DEPARTMENT OF TRANSPORTATION  
CENTRAL REGION SOUTHEAST SURVEYS  
855 "M" STREET  
SUITE 200  
FRESNO, CA. 93721

ATTN: Kuldeep Brar

Rev. 1/25/11

## Jose Benavides

---

**From:** Tyburski, Dominic <Dominic.Tyburski@co.kings.ca.us>  
**Sent:** Thursday, February 22, 2018 4:22 PM  
**To:** Jose Benavides; sbrandt@leemoore.com  
**Cc:** Kinney, Chuck; Susana Maciel  
**Subject:** RE: Mixed-Use Development (Hanford-Armona Road and State Route 41) TIA - Draft Scope of Work

Hi Jose,

I have reviewed your proposed draft scope of work for the subject project TIA, Public Works does not have any comment at this point. Please submit a copy of your report to us for review upon completion of the draft, thank you.

**Dominic Tyburski, P.E.**  
**Chief Engineer | Division of Engineering**

County of Kings | Public Works Department  
1400 W. Lacey Blvd. | Hanford, CA 93230

Direct 559-852-2698 | Fax 559-582-2506  
[Dominic.Tyburski@co.kings.ca.us](mailto:Dominic.Tyburski@co.kings.ca.us) | [www.countyofkings.com](http://www.countyofkings.com)



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**From:** Jose Benavides [mailto:jbenavides@jlbtraffic.com]  
**Sent:** Thursday, February 22, 2018 4:18 PM  
**To:** sbrandt@leemoore.com; Tyburski, Dominic  
**Cc:** Kinney, Chuck; Susana Maciel  
**Subject:** FW: Mixed-Use Development (Hanford-Armona Road and State Route 41) TIA - Draft Scope of Work

Good afternoon Steve and Dominic,

I am following up with the two of you to check once more if either the City of Lemoore or the County of Kings have any comments to the proposed TIA scope of work?

We have already received comments from Caltrans, and would like to move forward with the analysis.

Thank you for reviewing this item, and we look forward to your input. However, if you have no comment, let us know as well.

Sincerely,

Jose Luis Benavides, P.E., T.E.  
President



*Traffic Engineering, Transportation Planning and Parking Solutions*  
**Certified Disadvantaged Business Enterprise (DBE) and Small Business Enterprise (SBE)**

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Fresno, CA 93710  
Office: (559) 570-8991  
Cell: (559) 694-6000  
[www.JLBtraffic.com](http://www.JLBtraffic.com)

---

**From:** Susana Maciel  
**Sent:** Tuesday, January 30, 2018 2:56 PM  
**To:** [sbrandt@lemoore.com](mailto:sbrandt@lemoore.com)  
**Cc:** dominic.tyburski ([dominic.tyburski@co.kings.ca.us](mailto:dominic.tyburski@co.kings.ca.us)) <[dominic.tyburski@co.kings.ca.us](mailto:dominic.tyburski@co.kings.ca.us)>; [michael.navarro@dot.ca.gov](mailto:michael.navarro@dot.ca.gov); Jose Benavides <[jbenavides@jlbtraffic.com](mailto:jbenavides@jlbtraffic.com)>  
**Subject:** Mixed-Use Development (Hanford-Armona Road and State Route 41) TIA - Draft Scope of Work

Good afternoon Mr. Brandt,

Attached you will find a Draft Scope of Work for the preparation of a Traffic Impact Analysis for a Project in the City of Lemoore.

I kindly ask that you take a moment to review and comment on the proposed Scope of Work. In the absence of comments by February 20, 2018, it will be assumed that the proposed Scope of Work is acceptable to the agency(ies) that have not submitted any comments.

Please do not hesitate to contact me if you have any questions or require any additional information. I can be reached by phone at 559.570.8991 or by e-mail at [smaciel@JLBtraffic.com](mailto:smaciel@JLBtraffic.com). I sincerely appreciate your time and attention to this matter and look forward to hearing from you soon.

Best,

Susana Maciel, EIT  
Engineer I/II  
JLB Traffic Engineering, Inc.  
1300 E. Shaw Ave., Ste. 103  
Fresno, CA 93710  
Office: 559.570.8991  
Cell: 559.232.9474  
E-mail: [SMaciel@JLBtraffic.com](mailto:SMaciel@JLBtraffic.com)  
Web: [www.JLBtraffic.com](http://www.JLBtraffic.com)

## Susana Maciel

---

**From:** Steve Brandt <Steve.Brandt@qkinc.com>  
**Sent:** Friday, February 23, 2018 12:10 PM  
**To:** Susana Maciel  
**Cc:** jholwell@lemoore.com; Joel R. Joyner  
**Subject:** FW: SR 41 & Hanford Armona Dev. Scope of Work comments  
**Attachments:** KIN-41-R42.1 (Scope of Work comments).pdf; ROW Dedication Requirements.pdf

Hello Susana,

Thanks for the reminder. I meant to get these to you this week. The City of Lemoore has reviewed the scope and has no comments at this time. We would like you to submit to the City staff for our review and acceptance your estimated trip distribution percentages for each of the ingress/egress points. Once you submit it, we should be able to get a response back to you in a few days.

I have also included the letter response we received from Caltrans, in case you did not receive a similar letter directly.

*Steve*

(559) 733-0440 Office  
(559) 259-1466 Cell



---

**From:** Steve Brandt [mailto:sbrandt@lemoore.com]  
**Sent:** Friday, February 16, 2018 2:59 PM  
**To:** Steve Brandt <Steve.Brandt@qkinc.com>  
**Subject:** FW: SR 41 & Hanford Armona Dev. Scope of Work comments

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**From:** Lum, Kevin@DOT  
**Sent:** Friday, February 16, 2018 2:58:59 PM (UTC-08:00) Pacific Time (US & Canada)  
**To:** Steve Brandt  
**Cc:** [smaciel@jlbtraffic.com](mailto:smaciel@jlbtraffic.com); Navarro, Michael@DOT; Boucher, Beverly J@DOT  
**Subject:** SR 41 & Hanford Armona Dev. Scope of Work comments

Good afternoon Steve,

Thank you for the opportunity to review the Scope of Work for the SR 41 & Hanford Armona Mixed-use Development. Attached are Caltrans' comments. A hard copy will follow by mail.

Please feel free to contact me if you have any questions or concerns.

Sincerely,

Kevin Lum

Caltrans District 6  
Planning South Branch  
1352 W. Olive Avenue  
Fresno, CA 93728



Desk: (559)488-4260

## Appendix B: Traffic Counts



**Traffic Engineering, Inc.**

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[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

*(559) 570-8991*

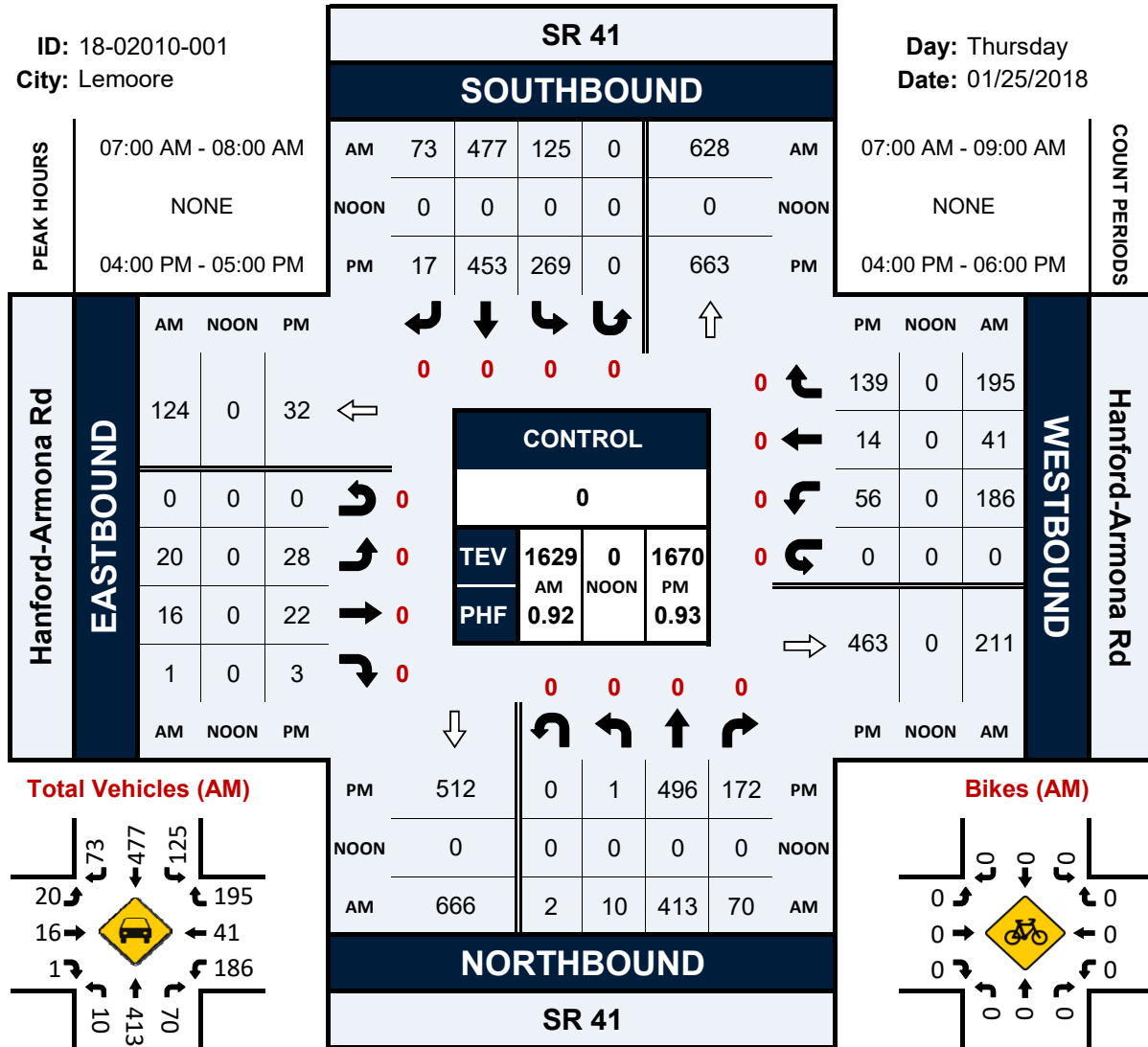
*Page | B*

## SR 41 &amp; Hanford-Armona Rd

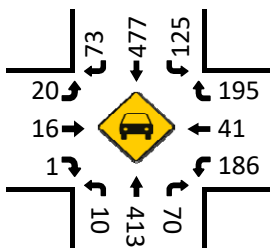
## Peak Hour Turning Movement Count

ID: 18-02010-001  
City: Lemoore

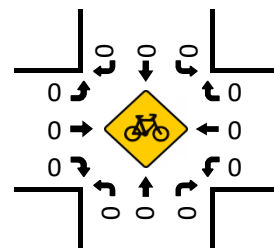
Day: Thursday  
Date: 01/25/2018



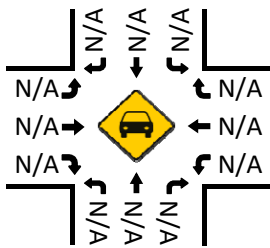
Total Vehicles (AM)



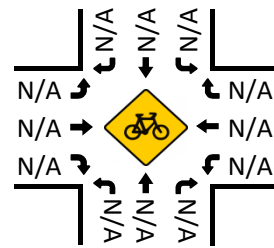
Bikes (AM)



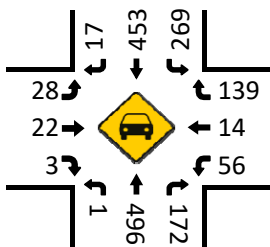
Total Vehicles (Noon)



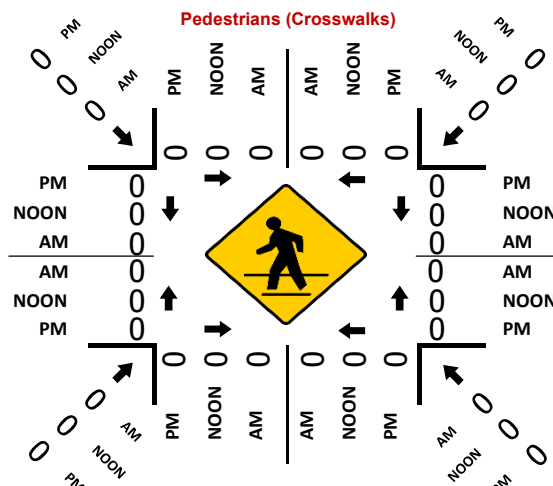
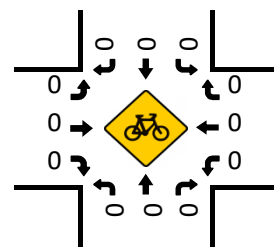
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



# National Data & Surveying Services Intersection Turning Movement Count

**Location:** SR 41 & Hanford-Armona Rd  
**City:** Lemoore  
**Control:**

**Project ID:** 18-02010-001  
**Date:** 1/25/2018

## Total

NS/EW Streets:	SR 41				SR 41				Hanford-Armona Rd				Hanford-Armona Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	110	6	0	19	94	6	0	7	3	0	0	38	0	57	0	340
7:15 AM	0	91	15	1	31	140	11	0	3	3	0	0	50	4	58	0	407
7:30 AM	0	119	19	0	35	117	15	0	7	5	1	0	67	14	41	0	440
7:45 AM	10	93	30	1	40	126	41	0	3	5	0	0	31	23	39	0	442
8:00 AM	1	86	15	0	38	106	1	0	9	7	0	0	24	5	32	0	324
8:15 AM	0	85	14	0	18	87	3	0	3	2	0	0	25	4	26	0	267
8:30 AM	0	66	8	0	16	104	2	0	6	4	1	0	11	4	27	0	249
8:45 AM	1	67	11	0	31	106	4	0	1	0	2	0	20	3	11	0	257
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	1.41%	84.45%	13.90%	0.24%	19.14%	73.89%	6.97%	0.00%	54.17%	40.28%	5.56%	0.00%	43.32%	9.28%	47.39%	0.00%	2726
<b>PEAK HR :</b>	07:00 AM - 08:00 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	10	413	70	2	125	477	73	0	20	16	1	0	186	41	195	0	1629
<b>PEAK HR FACTOR :</b>	0.250	0.868	0.583	0.500	0.781	0.852	0.445	0.000	0.714	0.800	0.250	0.000	0.694	0.446	0.841	0.000	0.921
				0.897				0.815				0.712				0.865	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	0	139	42	0	59	117	5	0	4	5	1	0	15	4	39	0	430
4:15 PM	0	119	47	0	59	98	5	0	9	5	0	0	13	3	27	0	385
4:30 PM	0	118	45	0	87	121	4	0	6	8	1	0	14	3	41	0	448
4:45 PM	1	120	38	0	64	117	3	0	9	4	1	0	14	4	32	0	407
5:00 PM	0	135	36	0	56	103	2	0	2	1	2	0	11	2	32	0	382
5:15 PM	2	111	41	0	53	90	3	0	4	6	0	0	17	4	31	0	362
5:30 PM	2	95	28	0	54	93	3	0	6	7	2	0	14	4	34	0	342
5:45 PM	0	132	36	0	59	68	2	0	3	2	0	0	12	5	36	0	355
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	0.39%	75.29%	24.32%	0.00%	37.06%	60.91%	2.04%	0.00%	48.86%	43.18%	7.95%	0.00%	26.76%	7.06%	66.18%	0.00%	3111
<b>PEAK HR :</b>	04:00 PM - 05:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	1	496	172	0	269	453	17	0	28	22	3	0	56	14	139	0	1670
<b>PEAK HR FACTOR :</b>	0.250	0.892	0.915	0.000	0.773	0.936	0.850	0.000	0.778	0.688	0.750	0.000	0.933	0.875	0.848	0.000	0.932
				0.924				0.871				0.883				0.901	

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** SR 41 & Hanford-Armona Rd  
**City:** Lemoore

**Project ID:** 18-02010-001  
**Date:** 1/25/2018

## Pedestrians (Crosswalks)

NS/EW Streets:	SR 41		SR 41		Hanford-Armona Rd		Hanford-Armona Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	7:00 AM	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	EB 0	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 0
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	4:00 PM	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	EB 0	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 0
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

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File Name : SR 41 at Hanford Armona Rd

Site Code : 00000000

Start Date : 3/8/2018

Page No : 1

## Groups Printed- Unshifted

Start Time	SR 41 Southbound					HANFORD ARMONA RD Westbound					SR 41 Northbound					HANFORD ARMONA RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	78	108	10	0	196	19	4	30	0	53	2	128	30	0	160	9	4	0	0	13	422
03:15 PM	48	89	4	0	141	15	5	29	0	49	0	155	28	0	183	6	1	0	0	7	380
03:30 PM	43	97	4	0	144	16	7	35	0	58	1	169	34	0	204	7	16	0	0	23	429
03:45 PM	64	111	4	0	179	17	7	26	0	50	4	149	44	0	197	3	6	0	0	9	435
Total	233	405	22	0	660	67	23	120	0	210	7	601	136	0	744	25	27	0	0	52	1666
04:00 PM	62	140	7	0	209	12	5	33	0	50	1	165	33	0	199	5	10	1	0	16	474
04:15 PM	55	120	2	0	177	21	4	24	0	49	1	138	53	0	192	4	8	0	0	12	430
04:30 PM	56	132	1	0	189	12	7	33	0	52	0	174	52	0	226	8	6	0	0	14	481
04:45 PM	77	121	5	0	203	15	6	26	0	47	3	132	33	0	168	1	5	1	0	7	425
Total	250	513	15	0	778	60	22	116	0	198	5	609	171	0	785	18	29	2	0	49	1810
Grand Total	483	918	37	0	1438	127	45	236	0	408	12	1210	307	0	1529	43	56	2	0	101	3476
Apprch %	33.6	63.8	2.6	0		31.1	11	57.8	0		0.8	79.1	20.1	0		42.6	55.4	2	0		
Total %	13.9	26.4	1.1	0	41.4	3.7	1.3	6.8	0	11.7	0.3	34.8	8.8	0	44	1.2	1.6	0.1	0	2.9	

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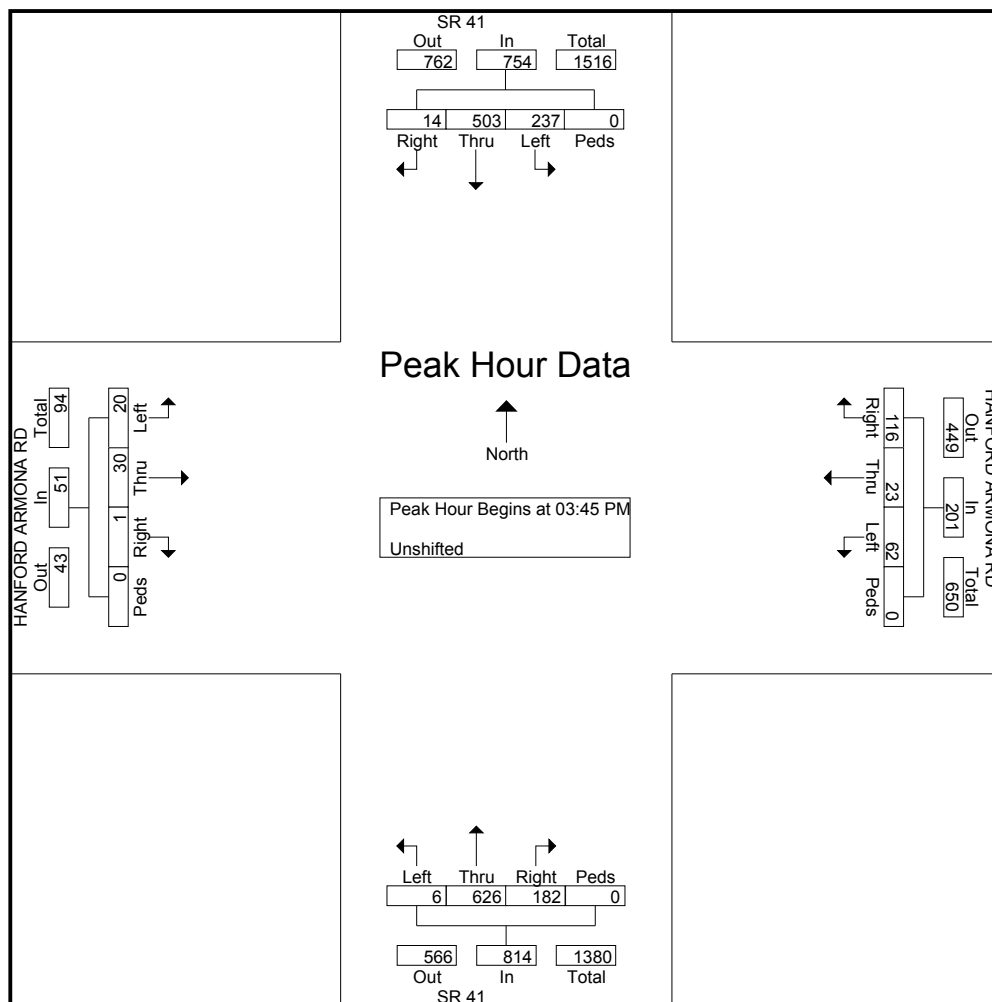
File Name : SR 41 at Hanford Armona Rd

Site Code : 00000000

Start Date : 3/8/2018

Page No : 2

	SR 41 Southbound					HANFORD ARMONA RD Westbound					SR 41 Northbound					HANFORD ARMONA RD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:45 PM																					
03:45 PM	64	111	4	0	179	17	7	26	0	50	4	149	44	0	197	3	6	0	0	9	435
04:00 PM	62	140	7	0	209	12	5	33	0	50	1	165	33	0	199	5	10	1	0	16	474
04:15 PM	55	120	2	0	177	21	4	24	0	49	1	138	53	0	192	4	8	0	0	12	430
04:30 PM	56	132	1	0	189	12	7	33	0	52	0	174	52	0	226	8	6	0	0	14	481
Total Volume	237	503	14	0	754	62	23	116	0	201	6	626	182	0	814	20	30	1	0	51	1820
% App. Total	31.4	66.7	1.9	0		30.8	11.4	57.7	0		0.7	76.9	22.4	0		39.2	58.8	2	0		
PHF	.926	.898	.500	.000	.902	.738	.821	.879	.000	.966	.375	.899	.858	.000	.900	.625	.750	.250	.000	.797	.946

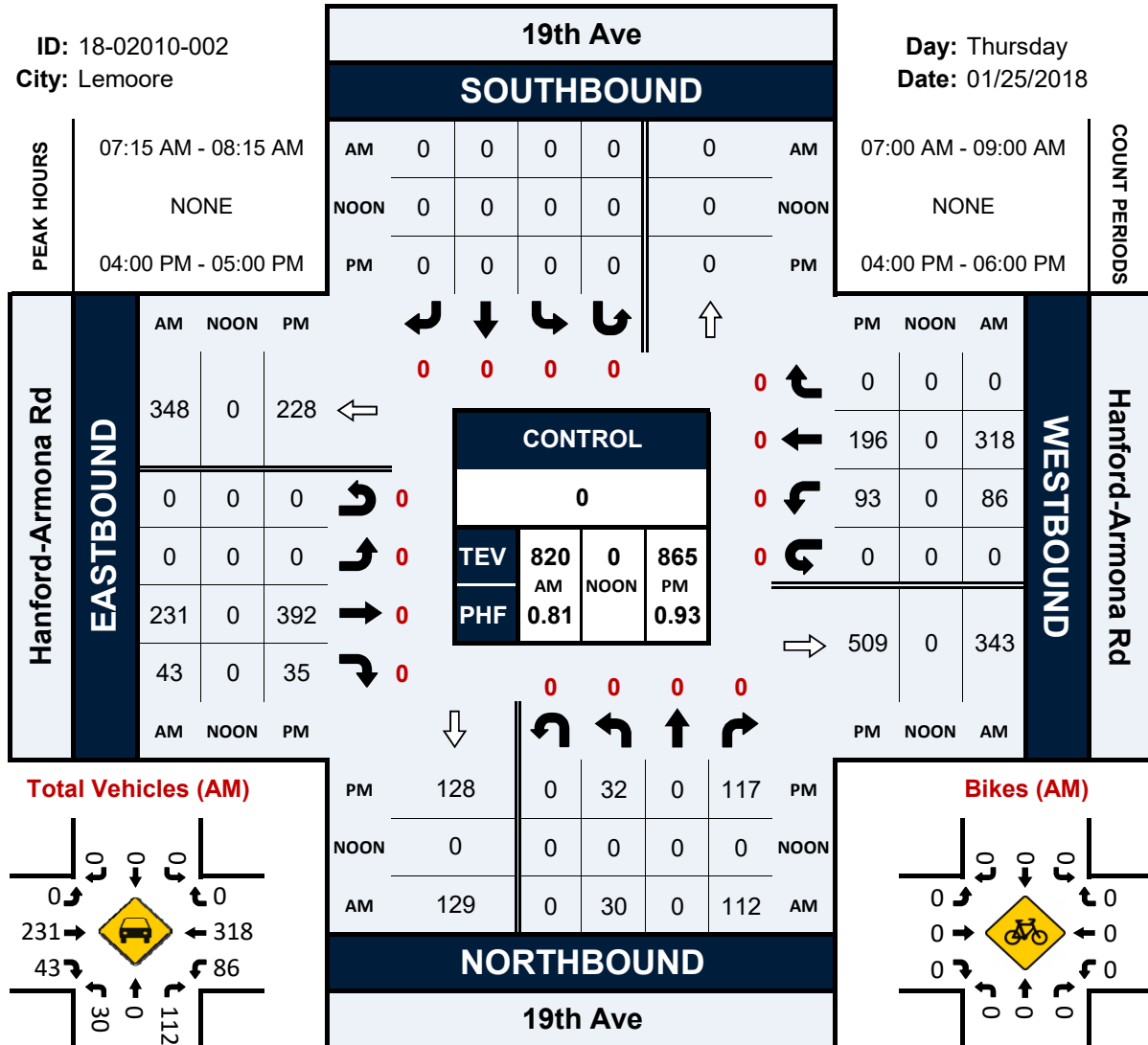


## 19th Ave &amp; Hanford-Armona Rd

## Peak Hour Turning Movement Count

ID: 18-02010-002  
City: Lemoore

Day: Thursday  
Date: 01/25/2018





# National Data & Surveying Services Intersection Turning Movement Count

**Location:** 19th Ave & Hanford-Armona Rd  
**City:** Lemoore  
**Control:**

**Project ID:** 18-02010-002  
**Date:** 1/25/2018

## Total

NS/EW Streets:	19th Ave				19th Ave				Hanford-Armona Rd				Hanford-Armona Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	14	0	14	0	0	0	0	0	0	26	8	0	10	61	0	0	133
7:15 AM	11	0	22	0	0	0	0	0	0	35	8	0	13	94	0	0	183
7:30 AM	8	0	23	0	0	0	0	0	0	66	9	0	17	97	0	0	220
7:45 AM	7	0	40	0	0	0	0	0	0	82	12	0	34	77	0	0	252
8:00 AM	4	0	27	0	0	0	0	0	0	48	14	0	22	50	0	0	165
8:15 AM	7	0	21	0	0	0	0	0	0	25	4	0	13	50	0	0	120
8:30 AM	6	0	15	0	1	0	0	0	1	27	6	0	12	29	0	0	97
8:45 AM	4	0	13	0	0	0	0	0	0	37	7	0	14	32	0	0	107
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	25.85%	0.00%	74.15%	0.00%	100.00%	0.00%	0.00%	0.00%	0.24%	83.37%	16.39%	0.00%	21.60%	78.40%	0.00%	0.00%	1277
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	30	0	112	0	0	0	0	0	0	231	43	0	86	318	0	0	820
<b>PEAK HR FACTOR :</b>	0.682	0.000	0.700	0.000	0.000	0.000	0.000	0.000	0.000	0.704	0.768	0.000	0.632	0.820	0.000	0.000	0.813
	0.755								0.729				0.886				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	8	0	35	0	0	0	0	0	0	92	5	0	21	50	0	0	211
4:15 PM	6	0	23	0	0	0	0	0	0	94	11	0	26	44	0	0	204
4:30 PM	10	0	32	0	0	0	0	0	0	109	6	0	20	56	0	0	233
4:45 PM	8	0	27	0	0	0	0	0	0	97	13	0	26	46	0	0	217
5:00 PM	8	0	26	0	0	0	0	0	0	84	3	0	27	51	0	0	199
5:15 PM	6	0	37	0	0	0	0	0	0	90	3	0	26	47	0	0	209
5:30 PM	6	0	24	0	0	0	0	0	0	67	10	0	30	54	1	0	192
5:45 PM	10	0	32	0	0	0	0	0	0	81	14	0	38	51	0	0	226
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	20.81%	0.00%	79.19%	0.00%	0	0	0	0	0.00%	91.66%	8.34%	0.00%	34.85%	64.98%	0.16%	0.00%	1691
<b>PEAK HR :</b>	04:00 PM - 05:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	32	0	117	0	0	0	0	0	0	392	35	0	93	196	0	0	865
<b>PEAK HR FACTOR :</b>	0.800	0.000	0.836	0.000	0.000	0.000	0.000	0.000	0.000	0.899	0.673	0.000	0.894	0.875	0.000	0.000	0.928
	0.866								0.928				0.951				

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** 19th Ave & Hanford-Armona Rd  
**City:** Lemoore

**Project ID:** 18-02010-002  
**Date:** 1/25/2018

## Pedestrians (Crosswalks)

NS/EW Streets:	19th Ave		19th Ave		Hanford-Armona Rd		Hanford-Armona Rd	
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB 0	WB 0	EB 1	WB 0	NB 0	SB 0	NB 0	SB 0
<b>APPROACH %'s :</b>			100.00%	0.00%				
<b>PEAK HR :</b>	07:15 AM - 08:15 AM							
<b>PEAK HR VOL :</b>	0	0	1	0	0	0	0	0
<b>PEAK HR FACTOR :</b>			0.250	0.250				
								TOTAL 1 0.250

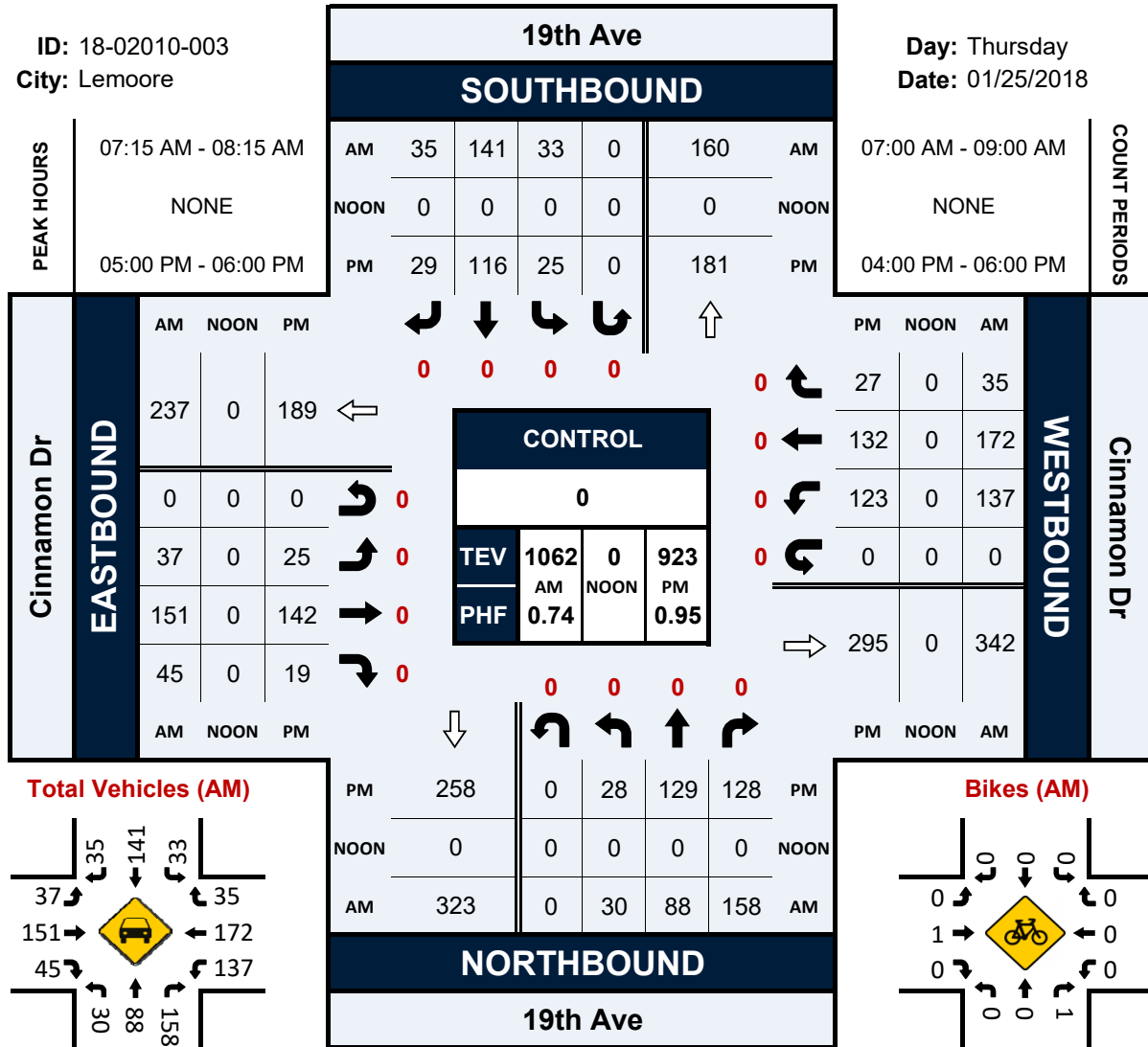
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	3	1	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB 0	WB 0	EB 5	WB 2	NB 0	SB 0	NB 0	SB 0
<b>APPROACH %'s :</b>			71.43%	28.57%				
<b>PEAK HR :</b>	04:00 PM - 05:00 PM							
<b>PEAK HR VOL :</b>	0	0	1	1	0	0	0	0
<b>PEAK HR FACTOR :</b>			0.250	0.250				
				0.500				TOTAL 2 0.500

## 19th Ave &amp; Cinnamon Dr

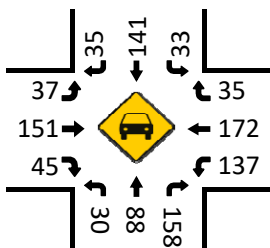
## Peak Hour Turning Movement Count

ID: 18-02010-003  
City: Lemoore

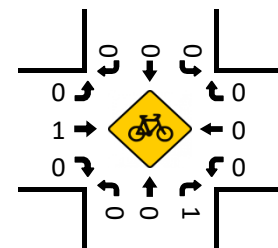
Day: Thursday  
Date: 01/25/2018



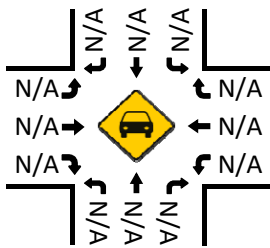
Total Vehicles (AM)



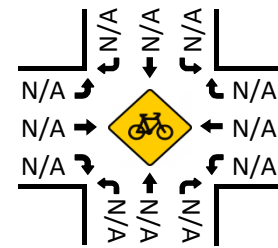
Bikes (AM)



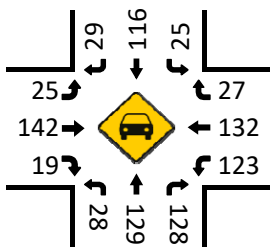
Total Vehicles (Noon)



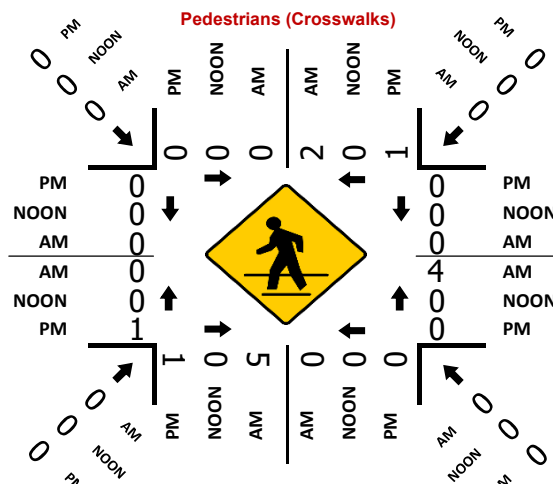
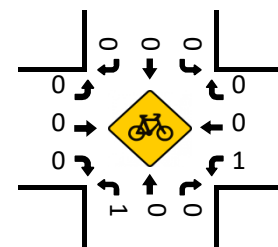
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



# National Data & Surveying Services Intersection Turning Movement Count

**Location:** 19th Ave & Cinnamon Dr  
**City:** Lemoore  
**Control:**

**Project ID:** 18-02010-003  
**Date:** 1/25/2018

## Total

NS/EW Streets:	19th Ave				19th Ave				Cinnamon Dr				Cinnamon Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	2	9	13	0	3	17	4	0	3	10	3	0	9	25	10	0	108
7:15 AM	4	16	22	0	4	24	5	0	8	22	8	0	24	31	6	0	174
7:30 AM	7	20	54	0	14	39	11	0	5	38	19	0	34	53	5	0	299
7:45 AM	6	29	48	0	12	48	13	0	16	53	12	0	54	59	10	0	360
8:00 AM	13	23	34	0	3	30	6	0	8	38	6	0	25	29	14	0	229
8:15 AM	3	17	17	0	6	17	3	0	7	17	8	0	18	27	5	0	145
8:30 AM	1	10	13	0	4	14	4	0	5	16	5	0	11	21	5	0	109
8:45 AM	6	9	18	0	4	14	8	0	4	17	4	0	16	26	1	0	127
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	42	133	219	0	50	203	54	0	56	211	65	0	191	271	56	0	1551
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	30	88	158	0	33	141	35	0	37	151	45	0	137	172	35	0	1062
<b>PEAK HR FACTOR :</b>	0.577	0.759	0.731	0.000	0.589	0.734	0.673	0.000	0.578	0.712	0.592	0.000	0.634	0.729	0.625	0.000	0.738
	0.831				0.716				0.719				0.699				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	6	35	33	0	2	14	7	0	4	37	5	0	19	30	12	0	204
4:15 PM	1	27	31	0	1	25	6	0	6	44	6	0	35	34	11	0	227
4:30 PM	7	30	22	0	8	25	6	0	10	29	16	0	18	35	2	0	208
4:45 PM	8	29	28	0	3	28	8	0	6	28	4	0	34	25	8	0	209
5:00 PM	8	30	32	0	6	18	8	0	5	34	5	0	29	27	5	0	207
5:15 PM	6	36	31	0	4	21	2	0	8	43	5	0	36	38	2	0	232
5:30 PM	9	35	28	0	8	39	10	0	8	33	3	0	28	32	8	0	241
5:45 PM	5	28	37	0	7	38	9	0	4	32	6	0	30	35	12	0	243
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	50	250	242	0	39	208	56	0	51	280	50	0	229	256	60	0	1771
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	28	129	128	0	25	116	29	0	25	142	19	0	123	132	27	0	923
<b>PEAK HR FACTOR :</b>	0.778	0.896	0.865	0.000	0.781	0.744	0.725	0.000	0.781	0.826	0.792	0.000	0.854	0.868	0.563	0.000	0.950
	0.976				0.746				0.830				0.916				

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** 19th Ave & Cinnamon Dr  
**City:** Lemoore

**Project ID:** 18-02010-003  
**Date:** 1/25/2018

## Pedestrians (Crosswalks)

NS/EW Streets:	19th Ave		19th Ave		Cinnamon Dr		Cinnamon Dr	
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	0
7:15 AM	0	0	3	0	2	0	0	0
7:30 AM	0	0	1	0	2	0	0	0
7:45 AM	0	2	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB 1	WB 2	EB 5	WB 1	NB 4	SB 0	NB 0	SB 0
<b>APPROACH %'s :</b>	33.33%	66.67%	83.33%	16.67%	100.00%	0.00%		
<b>PEAK HR :</b>	07:15 AM - 08:15 AM							
<b>PEAK HR VOL :</b>	0	2	5	0	4	0	0	0
<b>PEAK HR FACTOR :</b>		0.250	0.417		0.500			
		0.250		0.417		0.500		
								<b>TOTAL</b> 13
								<b>TOTAL</b> 11
								0.550

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	2	0	0	0	0
4:15 PM	0	1	0	1	0	0	0	0
4:30 PM	0	0	0	0	1	1	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	1	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB 1	WB 2	EB 1	WB 3	NB 1	SB 1	NB 1	SB 0
<b>APPROACH %'s :</b>	33.33%	66.67%	25.00%	75.00%	50.00%	50.00%	100.00%	0.00%
<b>PEAK HR :</b>	05:00 PM - 06:00 PM							
<b>PEAK HR VOL :</b>	0	1	1	0	0	0	1	0
<b>PEAK HR FACTOR :</b>		0.250	0.250				0.250	
		0.250		0.250				0.250
								<b>TOTAL</b> 3
								0.375

**CLASSIFICATION**

Hanford-Armona Rd Bet. SR 41 &amp; 19th Ave

Day: Thursday

City: Lemoore

Date: 1/25/2018

Project #: CA18\_2011\_001

**Summary**

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	35	7	0	3	0	0	0	0	0	0	0	0	45
01:00	0	44	4	0	5	0	0	0	0	0	0	0	0	53
02:00	0	18	3	0	3	1	0	0	0	0	0	0	0	25
03:00	0	37	4	0	2	0	0	0	0	0	0	0	0	43
04:00	0	58	14	0	5	0	0	0	1	0	0	0	0	78
05:00	0	199	42	0	39	0	0	2	0	0	0	0	0	282
06:00	0	313	42	3	44	1	0	1	1	0	0	0	0	405
07:00	1	493	72	3	61	2	0	3	3	0	0	0	0	638
08:00	1	280	41	2	37	0	0	1	1	0	0	0	0	363
09:00	0	223	33	2	28	2	0	1	3	0	0	0	0	292
10:00	0	234	31	2	33	0	0	1	2	0	0	0	0	303
11:00	0	283	46	0	40	0	0	0	2	0	0	0	0	371
12:00 PM	2	306	51	1	43	0	0	1	6	0	0	0	0	410
13:00	1	309	45	1	40	0	0	0	2	0	0	0	0	398
14:00	0	394	48	1	41	0	0	2	7	0	0	0	0	493
15:00	0	493	49	1	69	0	0	3	4	0	0	0	0	619
16:00	1	528	86	2	54	0	0	2	5	0	0	0	0	678
17:00	0	459	71	1	50	0	0	2	4	0	0	0	0	587
18:00	0	364	54	0	34	0	0	1	3	0	0	0	0	456
19:00	1	223	24	0	24	0	0	0	4	0	0	0	0	276
20:00	2	147	15	0	14	0	0	0	2	0	0	0	0	180
21:00	0	182	18	0	13	1	0	0	1	0	0	0	0	215
22:00	1	115	15	0	14	0	0	1	0	0	0	0	0	146
23:00	0	89	8	2	10	0	0	0	0	0	0	0	0	109
<b>Totals</b>	<b>10</b>	<b>5826</b>	<b>823</b>	<b>21</b>	<b>706</b>	<b>7</b>		<b>21</b>	<b>51</b>					<b>7465</b>
% of Totals	0%	78%	11%	0%	9%	0%		0%	1%					100%

<b>M Volumes</b>	2	2217	339	12	300	6	0	9	13	0	0	0	0	2898
<b>% AM</b>	0%	30%	5%	0%	4%	0%		0%	0%					39%
<b>Peak Hour</b>	07:00	07:00	07:00	06:00	07:00	07:00		07:00	07:00					07:00
<b>Volume</b>	1	493	72	3	61	2		3	3					638
<b>M Volumes</b>	8	3609	484	9	406	1	0	12	38	0	0	0	0	4567
<b>% PM</b>	0%	48%	6%	0%	5%	0%		0%	1%					61%
<b>Peak Hour</b>	12:00	16:00	16:00	16:00	15:00	21:00		15:00	14:00					16:00
<b>Volume</b>	2	528	86	2	69	1		3	7					678

Peak Periods		AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
All Classes		Volume	%	Volume	%	Volume	%	Volume	%
		1001	↔ 13%	808	↔ 11%	1265	↔ 17%	4391	↔ 59%

**Classification Definitions**

1 Motorcycles	4 Buses	7 >=4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

# VOLUME

Hanford-Armona Rd Bet. SR 41 & 19th Ave

Day: Thursday  
Date: 1/25/2018

City: Lemoore  
Project #: CA18\_2011\_001

DAILY TOTALS						NB	SB	EB						WB	Total
						0	0	####						####	7,465
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL				
00:00	0	0	14	4	18	12:00	0	0	57	57	114				
00:15	0	0	5	3	8	12:15	0	0	47	47	94				
00:30	0	0	6	1	7	12:30	0	0	40	45	85				
00:45	0	0	9	34	3 11	12:45	0	0	57	201	60 209				
01:00	0	0	9	6	15	13:00	0	0	42	52	94				
01:15	0	0	11	5	16	13:15	0	0	48	56	104				
01:30	0	0	8	3	11	13:30	0	0	50	47	97				
01:45	0	0	6	34	5 19	13:45	0	0	52	192	51 206				
02:00	0	0	3	2	5	14:00	0	0	47	65	112				
02:15	0	0	4	0	4	14:15	0	0	67	61	128				
02:30	0	0	6	3	9	14:30	0	0	66	51	117				
02:45	0	0	2	15	5 10	14:45	0	0	91	271	45 222				
03:00	0	0	2	4	6	15:00	0	0	119	58	177				
03:15	0	0	6	8	14	15:15	0	0	74	51	125				
03:30	0	0	0	10	10	15:30	0	0	92	65	157				
03:45	0	0	5	13	8 30	15:45	0	0	106	391	54 228				
04:00	0	0	5	10	15	16:00	0	0	101	54	155				
04:15	0	0	6	14	20	16:15	0	0	122	48	170				
04:30	0	0	3	10	13	16:30	0	0	131	56	187				
04:45	0	0	6	20	24 58	16:45	0	0	117	471	49 207				
05:00	0	0	9	43	52	17:00	0	0	98	49	147				
05:15	0	0	8	57	65	17:15	0	0	93	46	139				
05:30	0	0	14	67	81	17:30	0	0	81	53	134				
05:45	0	0	16	47	68 235	17:45	0	0	116	388	51 199				
06:00	0	0	14	76	90	18:00	0	0	71	53	124				
06:15	0	0	29	67	96	18:15	0	0	71	40	111				
06:30	0	0	24	83	107	18:30	0	0	54	53	107				
06:45	0	0	40	107	72 298	18:45	0	0	64	260	50 196				
07:00	0	0	28	96	124	19:00	0	0	46	31	77				
07:15	0	0	42	110	152	19:15	0	0	47	32	79				
07:30	0	0	70	123	193	19:30	0	0	34	26	60				
07:45	0	0	78	218	91 420	19:45	0	0	38	165	22 111				
08:00	0	0	61	54	115	20:00	0	0	25	24	49				
08:15	0	0	38	57	95	20:15	0	0	22	23	45				
08:30	0	0	29	40	69	20:30	0	0	22	18	40				
08:45	0	0	46	174	38 189	20:45	0	0	28	97	18 83				
09:00	0	0	28	38	66	21:00	0	0	37	24	61				
09:15	0	0	33	48	81	21:15	0	0	25	25	50				
09:30	0	0	30	38	68	21:30	0	0	22	32	54				
09:45	0	0	38	129	39 163	21:45	0	0	29	113	21 102				
10:00	0	0	31	29	60	22:00	0	0	19	15	34				
10:15	0	0	35	39	74	22:15	0	0	21	13	34				
10:30	0	0	32	37	69	22:30	0	0	40	8	48				
10:45	0	0	68	166	32 137	22:45	0	0	24	104	6 42				
11:00	0	0	55	51	106	23:00	0	0	20	5	25				
11:15	0	0	62	41	103	23:15	0	0	24	12	36				
11:30	0	0	49	35	84	23:30	0	0	20	3	23				
11:45	0	0	35	201	43 170	23:45	0	0	19	83	6 26				
TOTALS	1158 1740				2898	TOTALS	2736 1831				4567				
SPLIT %	40.0% 60.0%				38.8%	SPLIT %	59.9% 40.1%				61.2%				

DAILY TOTALS			NB	SB	EBWB				Total		
			0	0					####	####	7,465
AM Peak Hour			07:15	07:00	07:00	PM Peak Hour			16:00	13:45	16:00
AM Pk Volume			251	420	638	PM Pk Volume			471	228	678
Pk Hr Factor			0.804	0.854	0.826	Pk Hr Factor			0.899	0.877	0.906
7 - 9 Volume	0	0	392	609	1001	4 - 6 Volume	0	0	859	406	1265
7 - 9 Peak Hour			07:15	07:00	07:00	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	251	420	638	4 - 6 Pk Volume	0	0	471	207	678
Pk Hr Factor	0.000	0.000	0.804	0.854	0.826	Pk Hr Factor	0.000	0.000	0.899	0.924	0.906

## Appendix C: Methodology



**Traffic Engineering, Inc.**

*Traffic Engineering, Transportation Planning, & Parking Solutions*

<http://www.JLBtraffic.com>

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

*(559) 570-8991*

*Page | C*



## Levels of Service Methodology

The description and procedures for calculating capacity and level of service (LOS) are found in the Transportation Research Board, Highway Capacity Manual (HCM). The HCM 2010 represents the research on capacity and quality of service for transportation facilities.

Quality of service requires quantitative measures to characterize operational conditions within a traffic stream. Level of service is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

Six levels of service are defined for each type of facility that has analysis procedures available. Letters designate each level of service (LOS), from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each LOS represents a range of operating conditions and the driver's perception of these conditions. Safety is not included in the measures that establish a LOS.

## Urban Streets (Automobile Mode)

The term "urban streets" refers to urban arterials and collectors, including those in downtown areas. Arterial streets are roads that primarily serve longer through trips. However, providing access to abutting commercial and residential land uses is also an important function of arterials. Collector streets provide both land access and traffic circulation within residential, commercial and industrial areas. Their access function is more important than that of arterials, and unlike arterials their operation is not always dominated by traffic signals. Downtown streets are signalized facilities that often resemble arterials. They not only move through traffic but also provide access to local businesses for passenger cars, transit buses, and trucks. Pedestrian conflicts and lane obstructions created by stopping or standing taxicabs, buses, trucks and parking vehicles that cause turbulence in the traffic flow are typical of downtown streets.

## Flow Characteristics

The speed of vehicles on urban streets is influenced by three main factors, street environment, interaction among vehicles and traffic control.

The street environment includes the geometric characteristics of the facility, the character of roadside activity, and adjacent land uses. Thus, the environment reflects the number and width of lanes, type of median, driveway/access point density, spacing between signalized intersections, existence of parking, level of pedestrian and bicyclist activity and speed limit.

The interaction among vehicles is determined by traffic density, the proportion of trucks and buses, and turning movements. This interaction affects the operation of vehicles at intersections and, to a lesser extent, between signals.

Traffic controls (including signals and signs) forces a portion of all vehicles to slow or stop. The delays and speed changes caused by traffic control devices reduce vehicle speeds; however, such controls are needed to establish right-of-way.



Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

(559) 570-8991

Page | C-1

## Levels of Service (automobile Mode)

The average travel speed for through vehicles along an urban street is the determinant of the operating level of service (LOS). The travel speed along a segment, section or entire length of an urban street is dependent on the running speed between signalized intersections and the amount of control delay incurred at signalized intersections.

**LOS A** describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal. Travel speeds exceed 85 of the base free flow speed (FFS).

**LOS B** describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67 and 85 percent of the base FFS.

**LOS C** describes stable operations. The ability to maneuver and change lanes in midblock location may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50 and 67 percent of the base FFS.

**LOS D** indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volumes, inappropriate signal timing, at the boundary intersections. The travel speed is between 40 and 50 percent of the base FFS.

**LOS E** is characterized unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30 and 40 percent of the base FFS.

**LOS F** is characterized by street flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30 percent or less of the base FFS.

**Table A-1: Urban Street Levels of Service (Automobile Mode)**

Travel Speed as a Percentage of Base Free-Flow Speed (%)	LOS by Critical Volume-to-Capacity Ratio <sup>a</sup>	
	≤1.0	>1.0
>85	A	F
>67 to 85	B	F
>50 to 67	C	F
>40 to 50	D	F
>30 to 40	E	F
≤30	F	F

*a = The Critical volume-to-capacity ratio is based on consideration of the through movement-to-capacity ratio at each boundary intersection in the subject direction of travel. The critical volume-to-capacity ratio is the largest ratio of those considered.*

*Source: Highway Capacity Manual 2010, Exhibit 16-4. Urban Street LOS Criteria (Automobile Mode)*



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

(559) 570-8991

Page | C-2

## Intersection Levels of Service

One of the more important elements limiting, and often interrupting the flow of traffic on a highway is the intersection. Flow on an interrupted facility is usually dominated by points of fixed operation such as traffic signals, stop and yield signs.

## Signalized Intersections – Performance Measures

For signalized intersections the performance measures include automobile volume-to-capacity ratio, automobile delay, queue storage length, ratio of pedestrian delay, pedestrian circulation area, pedestrian perception score, bicycle delay, and bicycle perception score. LOS is also considered a performance measure. For the automobile mode average control delay per vehicle per approach is determined for the peak hour. A weighted average of control delay per vehicle is then determined for the intersection. A LOS designation is given to the weighted average control delay to better describe the level of operation. A description of LOS for signalized intersections is found in Table A-2.

**Table A-2: Signalized Intersection Level of Service Description (Automobile Mode)**

Level of Service	Description	Average Control Delay (seconds per vehicle)
A	Operations with a control delay of 10 seconds/vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when volume-to-capacity ratio is and either progression is exceptionally favorable or the cycle length is very short. If it's due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Operations with control delay between 10.1 to 20.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.	>10.0 to 20.0
C	Operations with average control delays between 20.1 to 35.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 to 35
D	Operations with control delay between 35.1 to 55.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop, and individual cycle failures are noticeable.	>35 to 55
E	Operations with control delay between 55.1 to 80.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.	>55 to 80
F	Operations with unacceptable control delay exceeding 80.0 seconds/vehicle and a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80

Source: Highway Capacity Manual 2010

## Unsignalized Intersections

The HCM 2010 procedures use control delay as a measure of effectiveness to determine level of service. Delay is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, i. e., in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Control delay is the increased time of travel for a vehicle approaching and passing through an unsignalized intersection, compared with a free-flow vehicle if it were not required to slow or stop at the intersection.



**Traffic Engineering, Inc.**

Traffic Engineering, Transportation Planning, & Parking Solutions

[www.JLBtraffic.com](http://www.JLBtraffic.com)

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

(559) 570-8991

Page | C-4

### **All-Way Stop Controlled Intersections**

All-way stop controlled intersections is a form of traffic controls in which all approaches to an intersection are required to stop. Similar to signalized intersections, at all-way stop controlled intersections the average control delay per vehicle per approach is determined for the peak hour. A weighted average of control delay per vehicle is then determined for the intersection as a whole. In other words the delay measured for all-way stop controlled intersections is a measure of the average delay for all vehicles passing through the intersection during the peak hour. A LOS designation is given to the weighted average control delay to better describe the level of operation.

### **Two-Way Stop Controlled Intersections**

Two-way stop controlled (TWSC) intersections in which stop signs are used to assign the right-of-way, are the most prevalent type of intersection in the United States. At TWSC intersections the stop-controlled approaches are referred as the minor street approaches and can be either public streets or private driveways. The approaches that are not controlled by stop signs are referred to as the major street approaches.

The capacity of movements subject to delay are determined using the "critical gap" method of capacity analysis. Expected average control delay based on movement volume and movement capacity is calculated. A LOS for TWSC intersection is determined by the computed or measured control delay for each minor movement. LOS is not defined for the intersection as a whole for three main reasons: (a) major-street through vehicles are assumed to experience zero delay; (b) the disproportionate number of major-street through vehicles at the typical TWSC intersection skews the weighted average of all movements, resulting in a very low overall average delay from all vehicles; and (c) the resulting low delay can mask important LOS deficiencies for minor movements. Table A-3 provides a description of LOS at unsignalized intersections.

**Table A-3: Unsignalized Intersection Level of Service Description (Automobile Mode)**

Control Delay (seconds per vehicle)	LOS by Volume-to-Capacity Ratio	
	$v/c \leq 1.0$	$v/c > 1.0$
$\leq 10$	A	F
>10 to 15	B	F
>15 to 25	C	F
>25 to 35	D	F
>35 to 50	E	F
>50	F	F

Source: HCM 2010 Exhibit 19-1.

## Appendix D: Existing Traffic Conditions



**Traffic Engineering, Inc.**

*Traffic Engineering, Transportation Planning, & Parking Solutions*

<http://www.JLBtraffic.com>

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

*(559) 570-8991*

*Page | D*

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road/Hanford Armona Road

Existing AM

03/28/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔			↔			↔	↕	↕	↕	↕
Traffic Volume (vph)	20	16	1	186	41	195	2	10	413	70	125	477
Future Volume (vph)	20	16	1	186	41	195	2	10	413	70	125	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0			5.7	7.9	7.9	5.4	7.9
Lane Util. Factor		1.00			1.00			1.00	0.95	1.00	1.00	0.95
Frt		1.00			0.94			1.00	1.00	0.85	1.00	0.98
Flt Protected		0.97			0.98			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1660			1570			1619	3195	1429	1597	3131
Flt Permitted		0.97			0.98			0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1660			1570			1619	3195	1429	1597	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	17	1	202	45	212	2	11	449	76	136	518
RTOR Reduction (vph)	0	1	0	0	33	0	0	0	0	61	0	12
Lane Group Flow (vph)	0	39	0	0	426	0	0	13	449	15	136	585
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	Prot	NA	Perm	Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases										2		
Actuated Green, G (s)		4.8			27.0			1.2	17.3	17.3	9.8	25.6
Effective Green, g (s)		4.8			27.0			1.2	17.3	17.3	9.8	25.6
Actuated g/C Ratio		0.05			0.30			0.01	0.19	0.19	0.11	0.28
Clearance Time (s)		8.8			9.0			5.7	7.9	7.9	5.4	7.9
Vehicle Extension (s)		3.0			3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		88			471			21	614	274	173	890
v/s Ratio Prot		c0.02			c0.27			0.01	0.14		c0.09	c0.19
v/s Ratio Perm										0.01		
v/c Ratio		0.44			0.90			0.62	0.73	0.05	0.79	0.66
Uniform Delay, d1		41.3			30.3			44.2	34.2	29.7	39.1	28.3
Progression Factor		1.00			1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		3.5			20.6			43.9	7.5	0.4	20.5	3.8
Delay (s)		44.8			50.8			88.1	41.7	30.0	59.6	32.1
Level of Service		D			D			F	D	C	E	C
Approach Delay (s)		44.8			50.8				41.2			37.2
Approach LOS		D			D				D			D
<b>Intersection Summary</b>												
HCM 2000 Control Delay			42.1			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			67.5%			ICU Level of Service				C		
Analysis Period (min)			15									
c Critical Lane Group												

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road/Hanford Armona Road






Existing AM  
03/28/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	73
Future Volume (vph)	73
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	79
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	



Intersection

Int Delay, s/veh 3









Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	231	43	86	318	30	112
Future Vol, veh/h	231	43	86	318	30	112
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	285	53	106	393	37	138

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	339
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1215
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1215
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	387	724	-	-	1215	-
HCM Lane V/C Ratio	0.096	0.191	-	-	0.087	-
HCM Control Delay (s)	15.3	11.1	-	-	8.2	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.7	-	-	0.3	-

Intersection	
Intersection Delay, s/veh	20.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	151	45	137	172	35	30	88	158	33	141	35
Future Vol, veh/h	37	151	45	137	172	35	30	88	158	33	141	35
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	50	204	61	185	232	47	41	119	214	45	191	47
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	19.6	19.3	23.8	18.3
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	36%	0%	77%	0%	83%	0%	80%
Vol Right, %	0%	64%	0%	23%	0%	17%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	246	37	196	137	207	33	176
LT Vol	30	0	37	0	137	0	33	0
Through Vol	0	88	0	151	0	172	0	141
RT Vol	0	158	0	45	0	35	0	35
Lane Flow Rate	41	332	50	265	185	280	45	238
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.095	0.687	0.118	0.576	0.424	0.591	0.107	0.527
Departure Headway (Hd)	8.42	7.441	8.514	7.832	8.245	7.608	8.634	7.973
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	424	482	419	458	435	473	413	450
Service Time	6.21	5.23	6.313	5.629	6.042	5.404	6.431	5.769
HCM Lane V/C Ratio	0.097	0.689	0.119	0.579	0.425	0.592	0.109	0.529
HCM Control Delay	12.1	25.2	12.5	20.9	17	20.9	12.5	19.4
HCM Lane LOS	B	D	B	C	C	C	B	C
HCM 95th-tile Q	0.3	5.2	0.4	3.6	2.1	3.7	0.4	3

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road






Existing PM

03/28/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↕	↕	↕	↕	↕
Traffic Volume (vph)	20	30	1	62	23	116	6	626	182	237	503	14
Future Volume (vph)	20	30	1	62	23	116	6	626	182	237	503	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0		5.7	7.9	7.9	5.4	7.9	
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	
Frt		1.00			0.92		1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1660			1540		1597	3195	1429	1597	3181	
Flt Permitted		0.98			0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1660			1540		1597	3195	1429	1597	3181	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	32	1	65	24	122	6	659	192	249	529	15
RTOR Reduction (vph)	0	1	0	0	55	0	0	0	137	0	2	0
Lane Group Flow (vph)	0	53	0	0	156	0	6	659	55	249	542	0
Heavy Vehicles (%)	12%	12%	12%	12%	12%	12%	13%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		6.4			10.2		1.2	25.7	25.7	16.6	40.8	
Effective Green, g (s)		6.4			10.2		1.2	25.7	25.7	16.6	40.8	
Actuated g/C Ratio		0.07			0.11		0.01	0.29	0.29	0.18	0.45	
Clearance Time (s)		8.8			9.0		5.7	7.9	7.9	5.4	7.9	
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		118			174		21	912	408	294	1442	
v/s Ratio Prot		c0.03			c0.10		0.00	c0.21		c0.16	0.17	
v/s Ratio Perm									0.04			
v/c Ratio		0.45			0.90		0.29	0.72	0.13	0.85	0.38	
Uniform Delay, d1		40.1			39.4		44.0	28.9	23.9	35.5	16.2	
Progression Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.7			39.8		7.4	4.9	0.7	19.6	0.7	
Delay (s)		42.8			79.2		51.3	33.9	24.6	55.1	17.0	
Level of Service		D			E		D	C	C	E	B	
Approach Delay (s)		42.8			79.2			31.9			28.9	
Approach LOS		D			E			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			36.2			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			63.1%			ICU Level of Service				B		
Analysis Period (min)			15									
c Critical Lane Group												

Intersection

Int Delay, s/veh 3.1









Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	392	35	93	196	32	117
Future Vol, veh/h	392	35	93	196	32	117
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	12	3	3	12	3	3
Mvmt Flow	422	38	100	211	34	126

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	461
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1095
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1095
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	420	612	-	-	1095	-
HCM Lane V/C Ratio	0.082	0.206	-	-	0.091	-
HCM Control Delay (s)	14.3	12.4	-	-	8.6	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.8	-	-	0.3	-

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	142	19	123	132	27	28	129	128	25	116	29
Future Vol, veh/h	25	142	19	123	132	27	28	129	128	25	116	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	26	149	20	129	139	28	29	136	135	26	122	31
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11.8	11.6	13.2	11.3
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	50%	0%	88%	0%	83%	0%	80%
Vol Right, %	0%	50%	0%	12%	0%	17%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	28	257	25	161	123	159	25	145
LT Vol	28	0	25	0	123	0	25	0
Through Vol	0	129	0	142	0	132	0	116
RT Vol	0	128	0	19	0	27	0	29
Lane Flow Rate	29	271	26	169	129	167	26	153
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.056	0.45	0.051	0.302	0.246	0.289	0.052	0.271
Departure Headway (Hd)	6.852	5.99	7.013	6.42	6.843	6.215	7.046	6.395
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	521	598	509	558	523	576	506	559
Service Time	4.613	3.751	4.779	4.187	4.604	3.975	4.815	4.163
HCM Lane V/C Ratio	0.056	0.453	0.051	0.303	0.247	0.29	0.051	0.274
HCM Control Delay	10	13.6	10.2	12	11.8	11.5	10.2	11.5
HCM Lane LOS	A	B	B	B	B	B	B	B
HCM 95th-tile Q	0.2	2.3	0.2	1.3	1	1.2	0.2	1.1

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road/Hanford Armona Road

Existing AM  
03/30/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔			↔	↔			↔	↔	↔	↔
Traffic Volume (vph)	20	16	1	186	41	195	2	10	413	70	125	477
Future Volume (vph)	20	16	1	186	41	195	2	10	413	70	125	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0	9.0		5.7	7.9	7.9	5.4	7.9
Lane Util. Factor		1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95
Frt		1.00			1.00	0.85		1.00	1.00	0.85	1.00	0.98
Flt Protected		0.97			0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1660			1644	1455		1619	3195	1429	1597	3131
Flt Permitted		0.97			0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1660			1644	1455		1619	3195	1429	1597	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	17	1	202	45	212	2	11	449	76	136	518
RTOR Reduction (vph)	0	1	0	0	0	169	0	0	0	55	0	11
Lane Group Flow (vph)	0	39	0	0	247	43	0	13	449	21	136	586
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA	Perm	Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases						3				2		
Actuated Green, G (s)		4.8			18.4	18.4		1.2	24.3	24.3	11.4	34.2
Effective Green, g (s)		4.8			18.4	18.4		1.2	24.3	24.3	11.4	34.2
Actuated g/C Ratio		0.05			0.20	0.20		0.01	0.27	0.27	0.13	0.38
Clearance Time (s)		8.8			9.0	9.0		5.7	7.9	7.9	5.4	7.9
Vehicle Extension (s)		3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		88			336	297		21	862	385	202	1189
v/s Ratio Prot		c0.02			c0.15			0.01	0.14		c0.09	c0.19
v/s Ratio Perm						0.03				0.01		
v/c Ratio		0.44			0.74	0.15		0.62	0.52	0.05	0.67	0.49
Uniform Delay, d1		41.3			33.5	29.4		44.2	27.9	24.3	37.5	21.3
Progression Factor		1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		3.5			8.1	0.2		43.9	2.2	0.3	8.5	1.5
Delay (s)		44.8			41.6	29.6		88.1	30.2	24.6	46.1	22.8
Level of Service		D			D	C		F	C	C	D	C
Approach Delay (s)		44.8			36.1				30.8			27.1
Approach LOS		D			D				C			C
<b>Intersection Summary</b>												
HCM 2000 Control Delay			30.9				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)		31.4			
Intersection Capacity Utilization			57.8%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road/Hanford Armona Road


Existing AM  
03/30/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	73
Future Volume (vph)	73
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	79
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing PM  
03/30/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	20	30	1	62	23	116	6	626	182	237	503	14
Future Volume (vph)	20	30	1	62	23	116	6	626	182	237	503	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0	9.0	5.7	7.9	7.9	5.4	7.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		1.00			1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.98			0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1660			1637	1442	1597	3195	1429	1597	3181	
Flt Permitted		0.98			0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1660			1637	1442	1597	3195	1429	1597	3181	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	32	1	65	24	122	6	659	192	249	529	15
RTOR Reduction (vph)	0	1	0	0	0	109	0	0	135	0	2	0
Lane Group Flow (vph)	0	53	0	0	89	13	6	659	57	249	542	0
Heavy Vehicles (%)	12%	12%	12%	12%	12%	12%	13%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3			2			
Actuated Green, G (s)		6.4			9.3	9.3	1.2	26.6	26.6	16.6	41.7	
Effective Green, g (s)		6.4			9.3	9.3	1.2	26.6	26.6	16.6	41.7	
Actuated g/C Ratio		0.07			0.10	0.10	0.01	0.30	0.30	0.18	0.46	
Clearance Time (s)		8.8			9.0	9.0	5.7	7.9	7.9	5.4	7.9	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		118			169	149	21	944	422	294	1473	
v/s Ratio Prot		c0.03			c0.05		0.00	c0.21		c0.16	0.17	
v/s Ratio Perm						0.01			0.04			
v/c Ratio		0.45			0.53	0.08	0.29	0.70	0.13	0.85	0.37	
Uniform Delay, d1		40.1			38.3	36.5	44.0	28.1	23.3	35.5	15.6	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.7			2.9	0.2	7.4	4.3	0.7	19.6	0.7	
Delay (s)		42.8			41.2	36.7	51.3	32.4	23.9	55.1	16.3	
Level of Service		D			D	D	D	C	C	E	B	
Approach Delay (s)		42.8			38.6			30.6			28.5	
Approach LOS		D			D			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			31.0									
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			90.0									
Intersection Capacity Utilization			58.3%									
Analysis Period (min)			15									
c Critical Lane Group												



Intersection: 1: SR 41 & Hanford-Armona Road/Hanford Armona Road

Movement	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LT	R	UL	T	T	R	L	T	TR
Maximum Queue (ft)	89	371	129	20	192	179	82	157	127	145
Average Queue (ft)	29	157	49	3	83	70	17	76	63	53
95th Queue (ft)	81	268	92	12	145	140	47	131	109	106
Link Distance (ft)	5170	2602			3824	3824			2651	2651
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250	845			500	855		
Storage Blk Time (%)		2								
Queuing Penalty (veh)		5								

Intersection: 5: 19th Avenue & Hanford Armona Road

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	92	76	71
Average Queue (ft)	22	27	38
95th Queue (ft)	59	52	63
Link Distance (ft)		1729	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	245	245	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	55	128	107	96	51	88	52	90
Average Queue (ft)	25	55	48	50	21	50	22	48
95th Queue (ft)	53	86	81	75	44	74	48	77
Link Distance (ft)		2549		3232		1711		981
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)		0	0	0		0		0
Queuing Penalty (veh)		0	1	0		0		0

Zone Summary

Zone wide Queuing Penalty: 6

Intersection: 1: SR 41 & Hanford-Armona Road

Movement	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LT	R	UL	T	T	R	L	T	TR
Maximum Queue (ft)	114	195	88	19	240	247	87	295	112	107
Average Queue (ft)	42	74	43	5	122	121	42	151	50	53
95th Queue (ft)	84	155	84	18	204	210	89	259	109	106
Link Distance (ft)	5170	2598			3824	3824			2651	2651
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250	845			495	855		
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 5: 19th Avenue & Hanford-Armona Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	20	72	52	77
Average Queue (ft)	1	28	25	35
95th Queue (ft)	6	61	49	59
Link Distance (ft)	2598			1725
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		245	245	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	50	120	101	87	30	112	48	94
Average Queue (ft)	18	50	44	48	15	54	17	40
95th Queue (ft)	47	88	73	73	39	93	41	67
Link Distance (ft)		2545		3228		1707		977
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)		0	0	0		0		0
Queuing Penalty (veh)		0	0	0		0		0

Network Summary

Network wide Queuing Penalty: 1



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg NB AM)**

**Scenario: Existing**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	628
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	380.29
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$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 6.34**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg NB PM)**

**Scenario: Existing**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	762
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	461.43
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$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 7.69**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg SB AM)**

**Scenario: Existing**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	675
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	408.75
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 6.81**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg SB PM)**

**Scenario: Existing**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	754
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	456.59
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 7.61**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg NB AM)**

**Scenario: Existing**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	495
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	299.75
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

Density (pc/mi/ln):	5.00
---------------------	------

$$\frac{V_p}{S}$$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg NB PM)**

**Scenario: Existing**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	814
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	492.92
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 8.22**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45





**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg SB AM)**

**Scenario: Existing**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	666
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	403.30
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 6.72**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg SB PM)**

**Scenario: Existing**

Date: 2/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	566
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	342.74
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 5.71**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45

## Appendix E: Existing plus Project Phase 1 Traffic Conditions



**Traffic Engineering, Inc.**

*Traffic Engineering, Transportation Planning, & Parking Solutions*

<http://www.JLBtraffic.com>

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

*(559) 570-8991*




















*Page | E*

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Phase 1 AM

05/29/2018






												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	20	16	1	193	42	202	2	10	413	73	127	477
Future Volume (vph)	20	16	1	193	42	202	2	10	413	73	127	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0			5.7	7.9	7.9	5.4	7.9
Lane Util. Factor		1.00			1.00			1.00	0.95	1.00	1.00	0.95
Frt		1.00			0.94			1.00	1.00	0.85	1.00	0.98
Flt Protected		0.97			0.98			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1660			1570			1619	3195	1429	1597	3131
Flt Permitted		0.97			0.98			0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1660			1570			1619	3195	1429	1597	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	17	1	210	46	220	2	11	449	79	138	518
RTOR Reduction (vph)	0	1	0	0	27	0	0	0	0	59	0	9
Lane Group Flow (vph)	0	39	0	0	449	0	0	13	449	20	138	588
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	Prot	NA	Perm	Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases										2		
Actuated Green, G (s)		6.4			38.1			2.4	30.0	30.0	14.4	41.7
Effective Green, g (s)		6.4			38.1			2.4	30.0	30.0	14.4	41.7
Actuated g/C Ratio		0.05			0.32			0.02	0.25	0.25	0.12	0.35
Clearance Time (s)		8.8			9.0			5.7	7.9	7.9	5.4	7.9
Vehicle Extension (s)		3.0			3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		88			498			32	798	357	191	1088
v/s Ratio Prot		c0.02			c0.29			0.01	0.14		c0.09	c0.19
v/s Ratio Perm										0.01		
v/c Ratio		0.44			0.90			0.41	0.56	0.06	0.72	0.54
Uniform Delay, d1		55.1			39.1			58.1	39.3	34.2	50.9	31.5
Progression Factor		1.00			1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		3.5			19.3			8.2	2.9	0.3	12.7	1.9
Delay (s)		58.6			58.4			66.3	42.1	34.5	63.5	33.4
Level of Service		E			E			E	D	C	E	C
Approach Delay (s)		58.6			58.4				41.6			39.0
Approach LOS		E			E				D			D
<b>Intersection Summary</b>												
HCM 2000 Control Delay			45.4			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			68.5%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	73
Future Volume (vph)	73
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	79
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↖	↗
Traffic Vol, veh/h	211	5	5	422	15	17
Future Vol, veh/h	211	5	5	422	15	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	175	-	90	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	229	5	5	459	16	18
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	229	0	699	229
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	470	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1333	-	405	808
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	627	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1333	-	403	808
Mov Cap-2 Maneuver	-	-	-	-	403	-
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	625	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		11.8	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	403	808	-	-	1333	-
HCM Lane V/C Ratio	0.04	0.023	-	-	0.004	-
HCM Control Delay (s)	14.3	9.6	-	-	7.7	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection

Int Delay, s/veh 2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	248	43	86	323	30	112
Future Vol, veh/h	248	43	86	323	30	112
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	306	53	106	399	37	138









Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	360
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1193
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1193
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	380	705	-	-	1193	-
HCM Lane V/C Ratio	0.097	0.196	-	-	0.089	-
HCM Control Delay (s)	15.5	11.3	-	-	8.3	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.7	-	-	0.3	-

Intersection

Intersection Delay, s/veh	21.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	156	47	137	174	35	31	88	158	33	141	35
Future Vol, veh/h	37	156	47	137	174	35	31	88	158	33	141	35
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	50	211	64	185	235	47	42	119	214	45	191	47
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	20.8	20.1	25	18.8
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	36%	0%	77%	0%	83%	0%	80%
Vol Right, %	0%	64%	0%	23%	0%	17%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	246	37	203	137	209	33	176
LT Vol	31	0	37	0	137	0	33	0
Through Vol	0	88	0	156	0	174	0	141
RT Vol	0	158	0	47	0	35	0	35
Lane Flow Rate	42	332	50	274	185	282	45	238
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.1	0.705	0.12	0.607	0.432	0.609	0.109	0.538
Departure Headway (Hd)	8.612	7.631	8.647	7.962	8.396	7.759	8.799	8.137
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	419	475	415	453	430	466	408	442
Service Time	6.312	5.331	6.398	5.713	6.147	5.51	6.549	5.887
HCM Lane V/C Ratio	0.1	0.699	0.12	0.605	0.43	0.605	0.11	0.538
HCM Control Delay	12.3	26.6	12.6	22.3	17.4	21.9	12.6	20
HCM Lane LOS	B	D	B	C	C	C	B	C
HCM 95th-tile Q	0.3	5.5	0.4	3.9	2.1	4	0.4	3.1




# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Phase 1 PM

05/29/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↕	↕	↕	↕	↕
Traffic Volume (vph)	20	31	1	66	23	121	6	626	189	244	503	14
Future Volume (vph)	20	31	1	66	23	121	6	626	189	244	503	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0		5.7	7.9	7.9	5.4	7.9	
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	
Frt		1.00			0.92		1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1676			1554		1597	3195	1429	1597	3181	
Flt Permitted		0.98			0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1676			1554		1597	3195	1429	1597	3181	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	33	1	69	24	127	6	659	199	257	529	15
RTOR Reduction (vph)	0	1	0	0	54	0	0	0	144	0	2	0
Lane Group Flow (vph)	0	54	0	0	166	0	6	659	55	257	542	0
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	13%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		6.4			10.7		1.2	25.0	25.0	16.8	40.3	
Effective Green, g (s)		6.4			10.7		1.2	25.0	25.0	16.8	40.3	
Actuated g/C Ratio		0.07			0.12		0.01	0.28	0.28	0.19	0.45	
Clearance Time (s)		8.8			9.0		5.7	7.9	7.9	5.4	7.9	
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		119			184		21	887	396	298	1424	
v/s Ratio Prot		c0.03			c0.11		0.00	c0.21		c0.16	0.17	
v/s Ratio Perm									0.04			
v/c Ratio		0.45			0.90		0.29	0.74	0.14	0.86	0.38	
Uniform Delay, d1		40.1			39.1		44.0	29.6	24.4	35.5	16.5	
Progression Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.7			40.0		7.4	5.6	0.7	21.7	0.8	
Delay (s)		42.9			79.2		51.3	35.2	25.2	57.2	17.3	
Level of Service		D			E		D	D	C	E	B	
Approach Delay (s)		42.9			79.2			33.0			30.1	
Approach LOS		D			E			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			37.3			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			64.3%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

Intersection

Int Delay, s/veh 0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	449	15	17	201	9	10
Future Vol, veh/h	449	15	17	201	9	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	175	-	90	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	488	16	18	218	10	11






Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	488
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1070
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1070
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	13
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	375	578	-	-	1070	-
HCM Lane V/C Ratio	0.026	0.019	-	-	0.017	-
HCM Control Delay (s)	14.9	11.3	-	-	8.4	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.1	-

Intersection

Int Delay, s/veh 3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	402	35	93	213	32	117
Future Vol, veh/h	402	35	93	213	32	117
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	432	38	100	229	34	126









Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	471
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1086
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1086
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	412	604	-	-	1086	-
HCM Lane V/C Ratio	0.084	0.208	-	-	0.092	-
HCM Control Delay (s)	14.5	12.5	-	-	8.7	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.8	-	-	0.3	-

Intersection

Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	145	20	123	140	27	31	129	128	25	116	29
Future Vol, veh/h	25	145	20	123	140	27	31	129	128	25	116	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	26	153	21	129	147	28	33	136	135	26	122	31
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11.9	11.8	13.3	11.4
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	50%	0%	88%	0%	84%	0%	80%
Vol Right, %	0%	50%	0%	12%	0%	16%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	257	25	165	123	167	25	145
LT Vol	31	0	25	0	123	0	25	0
Through Vol	0	129	0	145	0	140	0	116
RT Vol	0	128	0	20	0	27	0	29
Lane Flow Rate	33	271	26	174	129	176	26	153
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.063	0.453	0.051	0.311	0.247	0.305	0.052	0.273
Departure Headway (Hd)	6.896	6.034	7.044	6.449	6.868	6.246	7.098	6.446
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	518	595	506	554	522	573	502	554
Service Time	4.658	3.796	4.816	4.22	4.632	4.009	4.87	4.218
HCM Lane V/C Ratio	0.064	0.455	0.051	0.314	0.247	0.307	0.052	0.276
HCM Control Delay	10.1	13.7	10.2	12.1	11.9	11.8	10.3	11.6
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	0.2	2.3	0.2	1.3	1	1.3	0.2	1.1

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Phase 1 AM

05/29/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔			↔	↔		↔	↔	↔	↔	↔
Traffic Volume (vph)	20	16	1	193	42	202	2	10	413	73	127	477
Future Volume (vph)	20	16	1	193	42	202	2	10	413	73	127	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0	9.0		5.7	7.9	7.9	5.4	7.9
Lane Util. Factor		1.00			1.00	1.00		1.00	0.95	1.00	1.00	0.95
Frt		1.00			1.00	0.85		1.00	1.00	0.85	1.00	0.98
Flt Protected		0.97			0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1660			1644	1455		1619	3195	1429	1597	3131
Flt Permitted		0.97			0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1660			1644	1455		1619	3195	1429	1597	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	17	1	210	46	220	2	11	449	79	138	518
RTOR Reduction (vph)	0	1	0	0	0	180	0	0	0	62	0	14
Lane Group Flow (vph)	0	39	0	0	256	40	0	13	449	17	138	583
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA	Perm	Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases						3				2		
Actuated Green, G (s)		4.8			13.7	13.7		1.2	16.5	16.5	8.9	23.9
Effective Green, g (s)		4.8			13.7	13.7		1.2	16.5	16.5	8.9	23.9
Actuated g/C Ratio		0.06			0.18	0.18		0.02	0.22	0.22	0.12	0.32
Clearance Time (s)		8.8			9.0	9.0		5.7	7.9	7.9	5.4	7.9
Vehicle Extension (s)		3.0			3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		106			300	265		25	702	314	189	997
v/s Ratio Prot		c0.02			c0.16			0.01	0.14		c0.09	c0.19
v/s Ratio Perm						0.03				0.01		
v/c Ratio		0.37			0.85	0.15		0.52	0.64	0.06	0.73	0.58
Uniform Delay, d1		33.6			29.7	25.8		36.6	26.6	23.1	31.9	21.4
Progression Factor		1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		2.2			20.3	0.3		18.1	4.4	0.3	13.5	2.5
Delay (s)		35.8			50.0	26.0		54.7	31.0	23.4	45.4	23.9
Level of Service		D			D	C		D	C	C	D	C
Approach Delay (s)		35.8			38.9			30.4				27.9
Approach LOS		D			D			C				C
<b>Intersection Summary</b>												
HCM 2000 Control Delay			31.8				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			75.0				Sum of lost time (s)		31.4			
Intersection Capacity Utilization			58.5%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												





















Movement	SBR
Lane Configurations	
Traffic Volume (vph)	73
Future Volume (vph)	73
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	79
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Phase 1 AM

07/18/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	20	16	1	193	42	202	2	10	413	73	127	477
Future Volume (vph)	20	16	1	193	42	202	2	10	413	73	127	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8		9.0	9.0			5.7	7.9	7.9	5.4	7.9
Lane Util. Factor		1.00		1.00	1.00			1.00	0.95	1.00	1.00	0.95
Frt		1.00		1.00	0.88			1.00	1.00	0.85	1.00	0.98
Flt Protected		0.97		0.95	1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1660		1626	1499			1619	3195	1429	1597	3131
Flt Permitted		0.97		0.95	1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1660		1626	1499			1619	3195	1429	1597	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	17	1	210	46	220	2	11	449	79	138	518
RTOR Reduction (vph)	0	1	0	0	184	0	0	0	0	60	0	14
Lane Group Flow (vph)	0	39	0	210	82	0	0	13	449	19	138	583
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	Prot	NA	Perm	Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases										2		
Actuated Green, G (s)		4.8		12.4	12.4			1.2	17.8	17.8	8.9	25.2
Effective Green, g (s)		4.8		12.4	12.4			1.2	17.8	17.8	8.9	25.2
Actuated g/C Ratio		0.06		0.17	0.17			0.02	0.24	0.24	0.12	0.34
Clearance Time (s)		8.8		9.0	9.0			5.7	7.9	7.9	5.4	7.9
Vehicle Extension (s)		3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		106		268	247			25	758	339	189	1052
v/s Ratio Prot		c0.02		c0.13	0.05			0.01	0.14		c0.09	c0.19
v/s Ratio Perm										0.01		
v/c Ratio		0.37		0.78	0.33			0.52	0.59	0.06	0.73	0.55
Uniform Delay, d1		33.6		30.0	27.6			36.6	25.4	22.1	31.9	20.3
Progression Factor		1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		2.2		13.9	0.8			18.1	3.4	0.3	13.5	2.1
Delay (s)		35.8		43.9	28.4			54.7	28.8	22.4	45.4	22.4
Level of Service		D		D	C			D	C	C	D	C
Approach Delay (s)		35.8			35.3				28.5			26.7
Approach LOS		D			D				C			C
<b>Intersection Summary</b>												
HCM 2000 Control Delay			29.7			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			75.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			58.0%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	73
Future Volume (vph)	73
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	79
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	























# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Phase 1 PM

05/29/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	31	1	66	23	121	6	626	189	244	503	14
Future Volume (vph)	20	31	1	66	23	121	6	626	189	244	503	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0	9.0	5.7	7.9	7.9	5.4	7.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		1.00			1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.98			0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1676			1650	1455	1597	3195	1429	1597	3181	
Flt Permitted		0.98			0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1676			1650	1455	1597	3195	1429	1597	3181	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	33	1	69	24	127	6	659	199	257	529	15
RTOR Reduction (vph)	0	1	0	0	0	114	0	0	147	0	2	0
Lane Group Flow (vph)	0	54	0	0	93	13	6	659	52	257	542	0
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	13%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3			2			
Actuated Green, G (s)		4.8			8.1	8.1	1.2	21.1	21.1	14.9	34.5	
Effective Green, g (s)		4.8			8.1	8.1	1.2	21.1	21.1	14.9	34.5	
Actuated g/C Ratio		0.06			0.10	0.10	0.01	0.26	0.26	0.19	0.43	
Clearance Time (s)		8.8			9.0	9.0	5.7	7.9	7.9	5.4	7.9	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		100			167	147	23	842	376	297	1371	
v/s Ratio Prot		c0.03			c0.06		0.00	c0.21		c0.16	0.17	
v/s Ratio Perm						0.01			0.04			
v/c Ratio		0.54			0.56	0.09	0.26	0.78	0.14	0.87	0.40	
Uniform Delay, d1		36.5			34.2	32.6	39.0	27.3	22.5	31.6	15.6	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		5.9			4.0	0.3	6.0	7.2	0.8	22.1	0.9	
Delay (s)		42.4			38.2	32.9	44.9	34.5	23.3	53.7	16.5	
Level of Service		D			D	C	D	C	C	D	B	
Approach Delay (s)		42.4			35.1			32.0			28.4	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay			31.2		HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			80.0		Sum of lost time (s)					31.4		
Intersection Capacity Utilization			58.7%		ICU Level of Service					B		
Analysis Period (min)			15									
c Critical Lane Group												

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Phase 1 PM

07/18/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	20	31	1	66	23	121	6	626	189	244	503	14
Future Volume (vph)	20	31	1	66	23	121	6	626	189	244	503	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8		9.0	9.0		5.7	7.9	7.9	5.4	7.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frt		1.00		1.00	0.87		1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1676		1626	1496		1597	3195	1429	1597	3181	
Flt Permitted		0.98		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1676		1626	1496		1597	3195	1429	1597	3181	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	33	1	69	24	127	6	659	199	257	529	15
RTOR Reduction (vph)	0	1	0	0	114	0	0	0	146	0	2	0
Lane Group Flow (vph)	0	54	0	69	37	0	6	659	53	257	542	0
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	13%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		4.8		8.0	8.0		1.2	21.2	21.2	14.9	34.6	
Effective Green, g (s)		4.8		8.0	8.0		1.2	21.2	21.2	14.9	34.6	
Actuated g/C Ratio		0.06		0.10	0.10		0.01	0.26	0.26	0.19	0.43	
Clearance Time (s)		8.8		9.0	9.0		5.7	7.9	7.9	5.4	7.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		100		162	149		23	846	378	297	1375	
v/s Ratio Prot		c0.03		c0.04	0.02		0.00	c0.21		c0.16	0.17	
v/s Ratio Perm									0.04			
v/c Ratio		0.54		0.43	0.25		0.26	0.78	0.14	0.87	0.39	
Uniform Delay, d1		36.5		33.8	33.2		39.0	27.2	22.4	31.6	15.5	
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		5.9		1.8	0.9		6.0	7.0	0.8	22.1	0.8	
Delay (s)		42.4		35.6	34.1		44.9	34.2	23.2	53.7	16.4	
Level of Service		D		D	C		D	C	C	D	B	
Approach Delay (s)		42.4			34.6			31.8			28.4	
Approach LOS		D			C			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			31.0			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			80.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			68.8%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

Intersection: 1: SR 41 & Hanford-Armona Road

Movement	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LT	R	UL	T	T	R	L	T	TR
Maximum Queue (ft)	96	240	121	72	189	190	89	191	171	130
Average Queue (ft)	36	137	55	12	95	100	29	81	82	66
95th Queue (ft)	82	213	101	42	168	167	65	153	138	121
Link Distance (ft)	5155	666	666		3822	3822			2650	2650
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				845			500	855		
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 3: Driveway 2 & Hanford Armona Road

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	27	26	40
Average Queue (ft)	1	11	10
95th Queue (ft)	9	31	29
Link Distance (ft)			334
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	175	90	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: 19th Avenue & Hanford Armona Road

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	51	100	72
Average Queue (ft)	15	28	40
95th Queue (ft)	44	64	62
Link Distance (ft)			1729
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	245	245	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	55	114	86	93	47	121	30	136
Average Queue (ft)	21	50	43	57	24	58	19	51
95th Queue (ft)	48	85	68	87	43	98	41	92
Link Distance (ft)		2549		3232		1711		981
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)		0	0	0		1		1
Queuing Penalty (veh)		0	0	0		0		0

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: SR 41 & Hanford-Armona Road

Movement	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LT	R	UL	T	T	R	L	T	TR
Maximum Queue (ft)	75	147	133	23	225	220	102	374	114	116
Average Queue (ft)	32	55	40	1	133	118	45	192	49	46
95th Queue (ft)	69	106	83	10	194	194	77	308	104	98
Link Distance (ft)	5155	666	666		3822	3822			2650	2650
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				845			500	855		
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 3: Driveway 2 & Hanford Armona Road

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	28	26	43
Average Queue (ft)	3	5	12
95th Queue (ft)	18	22	34
Link Distance (ft)			334
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	175	90	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: 19th Avenue & Hanford Armona Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	22	96	52	77
Average Queue (ft)	1	25	23	37
95th Queue (ft)	7	62	46	61
Link Distance (ft)	1853			1729
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		245	245	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	32	91	135	148	52	111	73	71
Average Queue (ft)	14	43	44	48	21	54	18	43
95th Queue (ft)	39	72	86	84	45	85	49	67
Link Distance (ft)	2549		3232		1711		981	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)		0	1			0	0	0
Queuing Penalty (veh)		0	2			0	0	0

Network Summary

Network wide Queuing Penalty: 2



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg NB AM)**

**Scenario: Existing Plus Phase I**

Date: 5/31/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	635
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	384.53
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 6.41**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg NB PM)**

**Scenario: Existing Plus Phase I**

Date: 5/31/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	767
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	464.46
--------------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 7.74**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45





**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg SB AM)**

**Scenario: Existing Plus Phase I**

Date: 5/31/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	677
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	409.96
--------------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 6.83**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg SB PM)**

**Scenario: Existing Plus Phase I**

Date: 5/31/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	761
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	460.83
--------------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 7.68**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg NB AM)**

**Scenario: Existing Plus Phase I**

Date: 5/31/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	498
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	301.57
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 5.03**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg NB PM)**

**Scenario: Existing Plus Phase I**

Date: 5/31/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	821
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	497.16
--------------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 8.29**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg SB AM)**

**Scenario: Existing Plus Phase I**

Date: 5/31/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	673
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	407.54
--------------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 6.79**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg SB PM)**

**Scenario: Existing Plus Phase I**

Date: 5/31/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	570
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	345.17
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

Density (pc/mi/ln):	5.75
---------------------	------

$$\frac{V_p}{S}$$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45

## Appendix F: Existing plus Project Buildout Traffic Conditions



**Traffic Engineering, Inc.**

*Traffic Engineering, Transportation Planning, & Parking Solutions*

<http://www.JLBtraffic.com>

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

*(559) 570-8991*


*Page | F*

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Buildout AM

05/25/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔			↔			↔	↔	↔	↔	↔
Traffic Volume (vph)	20	18	1	245	44	253	2	10	413	131	186	477
Future Volume (vph)	20	18	1	245	44	253	2	10	413	131	186	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0			5.7	7.9	7.9	5.4	7.9
Lane Util. Factor		1.00			1.00			1.00	0.95	1.00	1.00	0.95
Frt		1.00			0.94			1.00	1.00	0.85	1.00	0.98
Flt Protected		0.98			0.98			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1664			1568			1619	3195	1429	1597	3131
Flt Permitted		0.98			0.98			0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1664			1568			1619	3195	1429	1597	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	20	1	266	48	275	2	11	449	142	202	518
RTOR Reduction (vph)	0	1	0	0	26	0	0	0	0	116	0	10
Lane Group Flow (vph)	0	42	0	0	563	0	0	13	449	26	202	587
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	Prot	NA	Perm	Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases										2		
Actuated Green, G (s)		6.4			44.1			2.4	21.7	21.7	16.7	35.7
Effective Green, g (s)		6.4			44.1			2.4	21.7	21.7	16.7	35.7
Actuated g/C Ratio		0.05			0.37			0.02	0.18	0.18	0.14	0.30
Clearance Time (s)		8.8			9.0			5.7	7.9	7.9	5.4	7.9
Vehicle Extension (s)		3.0			3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		88			576			32	577	258	222	931
v/s Ratio Prot		c0.03			c0.36			0.01	c0.14		c0.13	0.19
v/s Ratio Perm										0.02		
v/c Ratio		0.48			0.98			0.41	0.78	0.10	0.91	0.63
Uniform Delay, d1		55.2			37.5			58.1	46.9	41.0	50.9	36.4
Progression Factor		1.00			1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		4.0			31.5			8.2	10.0	0.8	36.3	3.2
Delay (s)		59.2			68.9			66.3	56.8	41.8	87.2	39.7
Level of Service		E			E			E	E	D	F	D
Approach Delay (s)		59.2			68.9				53.5			51.7
Approach LOS		E			E				D			D
<b>Intersection Summary</b>												
HCM 2000 Control Delay			57.4			HCM 2000 Level of Service			E			
HCM 2000 Volume to Capacity ratio			0.88									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			77.7%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	73
Future Volume (vph)	73
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	79
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection

Int Delay, s/veh 1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑		↑
Traffic Vol, veh/h	216	119	51	542	0	53
Future Vol, veh/h	216	119	51	542	0	53
Conflicting Peds, #/hr	0	10	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	0	11	0	3
Mvmt Flow	235	129	55	589	0	58

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	245
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.1	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.2	-
Pot Cap-1 Maneuver	-	1333	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1320	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	766	-	-	1320	-
HCM Lane V/C Ratio	0.075	-	-	0.042	-
HCM Control Delay (s)	10.1	-	-	7.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection

Int Delay, s/veh 3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	264	5	25	473	120	30
Future Vol, veh/h	264	5	25	473	120	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	175	-	90	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	287	5	27	514	130	33






Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	287
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1269
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1269
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	21
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	320	750	-	-	1269	-
HCM Lane V/C Ratio	0.408	0.043	-	-	0.021	-
HCM Control Delay (s)	23.8	10	-	-	7.9	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	1.9	0.1	-	-	0.1	-

Intersection

Int Delay, s/veh 3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	283	70	86	359	60	112
Future Vol, veh/h	283	70	86	359	60	112
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	349	86	106	443	74	138









Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	437
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1117
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1117
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	349	652	-	-	1117	-
HCM Lane V/C Ratio	0.212	0.212	-	-	0.095	-
HCM Control Delay (s)	18.1	12	-	-	8.6	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.8	0.8	-	-	0.3	-

Intersection

Intersection Delay, s/veh	23.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	156	47	137	174	43	31	95	158	42	148	41
Future Vol, veh/h	44	156	47	137	174	43	31	95	158	42	148	41
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	59	211	64	185	235	58	42	128	214	57	200	55
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	21.9	22	28	20.6
HCM LOS	C	C	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	38%	0%	77%	0%	80%	0%	78%
Vol Right, %	0%	62%	0%	23%	0%	20%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	253	44	203	137	217	42	189
LT Vol	31	0	44	0	137	0	42	0
Through Vol	0	95	0	156	0	174	0	148
RT Vol	0	158	0	47	0	43	0	41
Lane Flow Rate	42	342	59	274	185	293	57	255
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.102	0.742	0.147	0.626	0.444	0.65	0.142	0.589
Departure Headway (Hd)	8.788	7.818	8.9	8.214	8.642	7.982	8.98	8.304
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	408	462	403	439	417	452	400	434
Service Time	6.535	5.564	6.648	5.961	6.39	5.73	6.729	6.052
HCM Lane V/C Ratio	0.103	0.74	0.146	0.624	0.444	0.648	0.142	0.588
HCM Control Delay	12.5	29.9	13.2	23.8	18.1	24.4	13.2	22.3
HCM Lane LOS	B	D	B	C	C	C	B	C
HCM 95th-tile Q	0.3	6.1	0.5	4.2	2.2	4.5	0.5	3.7

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Buildout PM

05/25/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↑↑	↗	↖	↑↑	
Traffic Volume (vph)	20	33	1	118	25	173	6	626	246	301	503	14
Future Volume (vph)	20	33	1	118	25	173	6	626	246	301	503	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0		5.7	7.9	7.9	5.4	7.9	
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	
Frt		1.00			0.93		1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1677			1556		1597	3195	1429	1597	3181	
Flt Permitted		0.98			0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1677			1556		1597	3195	1429	1597	3181	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	35	1	124	26	182	6	659	259	317	529	15
RTOR Reduction (vph)	0	1	0	0	43	0	0	0	202	0	2	0
Lane Group Flow (vph)	0	56	0	0	289	0	6	659	57	317	542	0
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	13%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		6.4			19.6		1.2	22.0	22.0	20.9	41.4	
Effective Green, g (s)		6.4			19.6		1.2	22.0	22.0	20.9	41.4	
Actuated g/C Ratio		0.06			0.20		0.01	0.22	0.22	0.21	0.41	
Clearance Time (s)		8.8			9.0		5.7	7.9	7.9	5.4	7.9	
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		107			304		19	702	314	333	1316	
v/s Ratio Prot		c0.03			c0.19		0.00	c0.21		c0.20	0.17	
v/s Ratio Perm									0.04			
v/c Ratio		0.52			0.95		0.32	0.94	0.18	0.95	0.41	
Uniform Delay, d1		45.3			39.7		49.0	38.3	31.7	39.1	20.7	
Progression Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		4.6			38.7		9.3	21.9	1.3	36.6	1.0	
Delay (s)		49.9			78.4		58.3	60.2	33.0	75.6	21.7	
Level of Service		D			E		E	E	C	E	C	
Approach Delay (s)		49.9			78.4			52.6			41.5	
Approach LOS		D			E			D			D	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			52.1			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			76.7%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

Intersection

Int Delay, s/veh 1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑		↑
Traffic Vol, veh/h	464	116	49	316	0	55
Future Vol, veh/h	464	116	49	316	0	55
Conflicting Peds, #/hr	0	10	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	0	11	0	3
Mvmt Flow	504	126	53	343	0	60

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	514
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.1	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.2	-
Pot Cap-1 Maneuver	-	1062	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1052	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	541	-	-	1052	-
HCM Lane V/C Ratio	0.111	-	-	0.051	-
HCM Control Delay (s)	12.5	-	-	8.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-

Intersection

Int Delay, s/veh 3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	504	15	40	250	115	22
Future Vol, veh/h	504	15	40	250	115	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	175	-	90	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	548	16	43	272	125	24

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	548
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1016
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1016
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-






Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	23.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	292	534	-	-	1016	-
HCM Lane V/C Ratio	0.428	0.045	-	-	0.043	-
HCM Control Delay (s)	26.2	12.1	-	-	8.7	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	2	0.1	-	-	0.1	-



Intersection

Int Delay, s/veh 3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	439	62	93	250	63	117
Future Vol, veh/h	439	62	93	250	63	117
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	472	67	100	269	68	126









Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	540
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1023
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1023
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	381	563	-	-	1023	-
HCM Lane V/C Ratio	0.178	0.223	-	-	0.098	-
HCM Control Delay (s)	16.5	13.2	-	-	8.9	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.8	-	-	0.3	-

Intersection

Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	145	20	123	140	35	31	136	128	35	123	36
Future Vol, veh/h	32	145	20	123	140	35	31	136	128	35	123	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	34	153	21	129	147	37	33	143	135	37	129	38
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12.2	12.2	14.1	11.8
HCM LOS	B	B	B	B






















Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	52%	0%	88%	0%	80%	0%	77%
Vol Right, %	0%	48%	0%	12%	0%	20%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	264	32	165	123	175	35	159
LT Vol	31	0	32	0	123	0	35	0
Through Vol	0	136	0	145	0	140	0	123
RT Vol	0	128	0	20	0	35	0	36
Lane Flow Rate	33	278	34	174	129	184	37	167
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.064	0.476	0.067	0.318	0.252	0.325	0.074	0.303
Departure Headway (Hd)	7.015	6.162	7.191	6.595	7.009	6.358	7.193	6.522
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	508	581	495	542	510	562	496	547
Service Time	4.788	3.935	4.977	4.38	4.787	4.136	4.975	4.304
HCM Lane V/C Ratio	0.065	0.478	0.069	0.321	0.253	0.327	0.075	0.305
HCM Control Delay	10.3	14.5	10.5	12.5	12.2	12.2	10.6	12.1
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	0.2	2.6	0.2	1.4	1	1.4	0.2	1.3

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Buildout AM

05/25/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	20	18	1	245	44	253	2	10	413	131	186	477
Future Volume (vph)	20	18	1	245	44	253	2	10	413	131	186	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8		9.0	9.0	9.0		5.7	7.9	7.9	5.4	7.9
Lane Util. Factor		1.00		1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95
Frt		1.00		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.98
Flt Protected		0.98		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1664		1626	1712	1455		1619	3195	1429	1597	3131
Flt Permitted		0.98		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1664		1626	1712	1455		1619	3195	1429	1597	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	20	1	266	48	275	2	11	449	142	202	518
RTOR Reduction (vph)	0	1	0	0	0	223	0	0	0	112	0	13
Lane Group Flow (vph)	0	42	0	266	48	52	0	13	449	30	202	584
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA	Perm	Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases						3				2		
Actuated Green, G (s)		4.8		15.2	15.2	15.2		1.2	16.7	16.7	12.2	27.4
Effective Green, g (s)		4.8		15.2	15.2	15.2		1.2	16.7	16.7	12.2	27.4
Actuated g/C Ratio		0.06		0.19	0.19	0.19		0.01	0.21	0.21	0.15	0.34
Clearance Time (s)		8.8		9.0	9.0	9.0		5.7	7.9	7.9	5.4	7.9
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		99		308	325	276		24	666	298	243	1072
v/s Ratio Prot		c0.03		c0.16	0.03			0.01	c0.14		c0.13	0.19
v/s Ratio Perm						0.04				0.02		
v/c Ratio		0.42		0.86	0.15	0.19		0.54	0.67	0.10	0.83	0.54
Uniform Delay, d1		36.3		31.4	27.0	27.2		39.1	29.1	25.6	32.9	21.3
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		2.9		21.3	0.2	0.3		22.7	5.4	0.7	20.8	2.0
Delay (s)		39.2		52.7	27.2	27.6		61.8	34.5	26.2	53.7	23.2
Level of Service		D		D	C	C		E	C	C	D	C
Approach Delay (s)		39.2			38.9				33.2			31.0
Approach LOS		D			D				C			C
<b>Intersection Summary</b>												
HCM 2000 Control Delay			34.1			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			80.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			60.5%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												


Movement	SBR
Lane Configurations	
Traffic Volume (vph)	73
Future Volume (vph)	73
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	79
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Existing + Project Buildout PM

05/25/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↑	↔	↔	↑↑	↔	↔	↑↑	
Traffic Volume (vph)	20	33	1	118	25	173	6	626	246	301	503	14
Future Volume (vph)	20	33	1	118	25	173	6	626	246	301	503	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8		9.0	9.0	9.0	5.7	7.9	7.9	5.4	7.9	
Lane Util. Factor		1.00		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1677		1626	1712	1455	1597	3195	1429	1597	3181	
Flt Permitted		0.98		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1677		1626	1712	1455	1597	3195	1429	1597	3181	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	35	1	124	26	182	6	659	259	317	529	15
RTOR Reduction (vph)	0	1	0	0	0	165	0	0	186	0	2	0
Lane Group Flow (vph)	0	56	0	124	26	17	6	659	73	317	542	0
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	13%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3			2			
Actuated Green, G (s)		4.3		8.2	8.2	8.2	1.1	24.2	24.2	18.1	40.9	
Effective Green, g (s)		4.3		8.2	8.2	8.2	1.1	24.2	24.2	18.1	40.9	
Actuated g/C Ratio		0.05		0.10	0.10	0.10	0.01	0.28	0.28	0.21	0.48	
Clearance Time (s)		8.8		9.0	9.0	9.0	5.7	7.9	7.9	5.4	7.9	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		83		155	163	138	20	900	402	336	1514	
v/s Ratio Prot		c0.03		c0.08	0.02		0.00	c0.21		c0.20	0.17	
v/s Ratio Perm						0.01			0.05			
v/c Ratio		0.68		0.80	0.16	0.13	0.30	0.73	0.18	0.94	0.36	
Uniform Delay, d1		40.1		38.0	35.7	35.6	42.0	27.9	23.4	33.4	14.2	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		19.6		24.8	0.5	0.4	8.3	3.1	0.2	34.4	0.1	
Delay (s)		59.7		62.8	36.1	36.0	50.3	31.0	23.6	67.8	14.4	
Level of Service		E		E	D	D	D	C	C	E	B	
Approach Delay (s)		59.7			46.0			29.1			34.0	
Approach LOS		E			D			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			34.4									
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			85.9									
Intersection Capacity Utilization			65.8%									
Analysis Period (min)			15									
c Critical Lane Group												

Intersection: 1: SR 41 & Hanford-Armona Road

Movement	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	L	T	R	UL	T	T	R	L	T	TR
Maximum Queue (ft)	107	328	63	200	69	220	202	96	231	163	167
Average Queue (ft)	26	156	24	68	16	94	91	39	137	68	74
95th Queue (ft)	66	267	55	138	43	162	156	79	212	127	134
Link Distance (ft)	5154		400			3816	3816			2646	2646
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)		250		250	845			500	855		
Storage Blk Time (%)		1									
Queuing Penalty (veh)		4									

Intersection: 2: Driveway 1 & Hanford Armona Road

Movement	EB	EB	WB	WB	NB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	53	53	73	96	67
Average Queue (ft)	6	3	12	4	30
95th Queue (ft)	32	25	42	34	59
Link Distance (ft)	400	400		218	239
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			150		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Driveway 2 & Hanford Armona Road

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	53	131	44
Average Queue (ft)	5	39	17
95th Queue (ft)	26	82	36
Link Distance (ft)			334
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	175	90	
Storage Blk Time (%)		1	
Queuing Penalty (veh)		0	

Intersection: 4: 19th Avenue & Hanford Armona Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	52	53	101	79
Average Queue (ft)	6	28	38	41
95th Queue (ft)	26	54	72	66
Link Distance (ft)	1853			1729
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		245	245	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	54	116	77	115	54	92	73	97
Average Queue (ft)	22	62	45	52	20	52	25	57
95th Queue (ft)	53	104	73	79	47	77	58	87
Link Distance (ft)		2549		3232		1711		981
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)		1		0		0	0	1
Queuing Penalty (veh)		0		0		0	0	0

Network Summary

Network wide Queuing Penalty: 6
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Intersection: 1: SR 41 & Hanford-Armona Road

Movement	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	L	T	R	UL	T	T	R	L	T	TR
Maximum Queue (ft)	96	135	81	129	21	295	300	97	536	136	177
Average Queue (ft)	42	63	20	50	1	148	142	61	221	53	55
95th Queue (ft)	91	118	53	95	10	231	227	92	423	114	125
Link Distance (ft)	5154		398			3816	3816			2646	2646
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)		250		250	845			500	855		
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 2: Driveway 1 & Hanford Armona Road

Movement	EB	EB	WB	WB	NB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	109	41	50	51	53
Average Queue (ft)	7	1	20	3	29
95th Queue (ft)	50	13	46	20	53
Link Distance (ft)	398	398		220	239
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			150		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Driveway 2 & Hanford Armona Road

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	50	96	56
Average Queue (ft)	15	46	14
95th Queue (ft)	41	80	36
Link Distance (ft)			333
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	175	90	
Storage Blk Time (%)		1	
Queuing Penalty (veh)		0	



Intersection: 4: 19th Avenue & Hanford Armona Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	68	96	116	72
Average Queue (ft)	2	29	38	42
95th Queue (ft)	22	68	70	67
Link Distance (ft)	1853			1729
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		245	245	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	53	110	92	72	52	155	52	99
Average Queue (ft)	21	53	43	43	22	63	24	46
95th Queue (ft)	47	84	71	64	46	104	50	77
Link Distance (ft)		2549		3232		1711		981
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)		0	0			1		0
Queuing Penalty (veh)		0	0			0		0

Network Summary

Network wide Queuing Penalty: 1
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**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg NB AM)**

**Scenario: Existing Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	686
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	415.41
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$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 6.92**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg NB PM)**

**Scenario: Existing Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	819
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	495.95
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$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 8.27**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg SB AM)**

**Scenario: Existing Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	736
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	445.69
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$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 7.43**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg SB PM)**

**Scenario: Existing Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	818
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	495.34
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$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 8.26**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg NB AM)**

**Scenario: Existing Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	556
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	336.69
--------------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 5.61**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg NB PM)**

**Scenario: Existing Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	878
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	531.68
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 8.86**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg SB AM)**

**Scenario: Existing Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	725
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	439.03
--------------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 7.32**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45





**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg SB PM)**

**Scenario: Existing Plus Project**

Date: 2/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	622
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	376.66
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 6.28**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45

## Appendix G: Cumulative Year 2040 plus Project Traffic Conditions



**Traffic Engineering, Inc.**

*Traffic Engineering, Transportation Planning, & Parking Solutions*

<http://www.JLBtraffic.com>

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

*(559) 570-8991*




















*Page | G*

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Cumulative Year 2040 + Project AM

05/29/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	31	27	2	349	67	362	3	16	644	170	256	744
Future Volume (vph)	31	27	2	349	67	362	3	16	644	170	256	744
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0			5.7	7.9	7.9	5.4	7.9
Lane Util. Factor		1.00			1.00			1.00	0.95	1.00	1.00	0.95
Frt		1.00			0.94			1.00	1.00	0.85	1.00	0.98
Flt Protected		0.97			0.98			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1661			1569			1619	3195	1429	1597	3131
Flt Permitted		0.97			0.98			0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1661			1569			1619	3195	1429	1597	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	29	2	379	73	393	3	17	700	185	278	809
RTOR Reduction (vph)	0	1	0	0	17	0	0	0	0	147	0	7
Lane Group Flow (vph)	0	64	0	0	828	0	0	20	700	38	278	926
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	Prot	NA	Perm	Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases										2		
Actuated Green, G (s)		8.0			77.0			3.7	37.3	37.3	26.6	59.9
Effective Green, g (s)		8.0			77.0			3.7	37.3	37.3	26.6	59.9
Actuated g/C Ratio		0.04			0.43			0.02	0.21	0.21	0.15	0.33
Clearance Time (s)		8.8			9.0			5.7	7.9	7.9	5.4	7.9
Vehicle Extension (s)		3.0			3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		73			671			33	662	296	236	1041
v/s Ratio Prot		c0.04			c0.53			0.01	c0.22		c0.17	0.30
v/s Ratio Perm										0.03		
v/c Ratio		0.88			1.23			0.61	1.06	0.13	1.18	0.89
Uniform Delay, d1		85.5			51.5			87.4	71.3	58.1	76.7	56.9
Progression Factor		1.00			1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		64.4			117.8			27.6	51.1	0.9	115.2	11.4
Delay (s)		150.0			169.3			115.0	122.5	59.0	191.9	68.3
Level of Service		F			F			F	F	E	F	E
Approach Delay (s)		150.0			169.3				109.3			96.7
Approach LOS		F			F				F			F
<b>Intersection Summary</b>												
HCM 2000 Control Delay			121.9			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.16									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			102.3%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	114
Future Volume (vph)	114
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Flt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	124
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑		↑
Traffic Vol, veh/h	334	119	51	778	0	53
Future Vol, veh/h	334	119	51	778	0	53
Conflicting Peds, #/hr	0	10	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	0	11	0	3
Mvmt Flow	363	129	55	846	0	58

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	373
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.1	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.2	-
Pot Cap-1 Maneuver	-	1197	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1186	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	649	-	-	1186	-
HCM Lane V/C Ratio	0.089	-	-	0.047	-
HCM Control Delay (s)	11.1	-	-	8.2	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection

Int Delay, s/veh 6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	382	5	25	709	120	30
Future Vol, veh/h	382	5	25	709	120	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	175	-	90	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	415	5	27	771	130	33






Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	415
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1139
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1139
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	49.2
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	188	635	-	-	1139	-
HCM Lane V/C Ratio	0.694	0.051	-	-	0.024	-
HCM Control Delay (s)	58.8	11	-	-	8.2	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	4.3	0.2	-	-	0.1	-

Intersection

Int Delay, s/veh 4









Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	412	94	134	537	77	175
Future Vol, veh/h	412	94	134	537	77	175
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	448	102	146	584	84	190

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	551
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1014
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1014
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	17.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	257	568	-	-	1014	-
HCM Lane V/C Ratio	0.326	0.335	-	-	0.144	-
HCM Control Delay (s)	25.6	14.5	-	-	9.1	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	1.4	1.5	-	-	0.5	-

Intersection	
Intersection Delay, s/veh	53.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	240	72	214	270	63	48	144	246	60	227	61
Future Vol, veh/h	65	240	72	214	270	63	48	144	246	60	227	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	71	261	78	233	293	68	52	157	267	65	247	66
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	44.6	45.8	81.6	38.4
HCM LOS	E	E	F	E

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	37%	0%	77%	0%	81%	0%	79%
Vol Right, %	0%	63%	0%	23%	0%	19%	0%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	48	390	65	312	214	333	60	288
LT Vol	48	0	65	0	214	0	60	0
Through Vol	0	144	0	240	0	270	0	227
RT Vol	0	246	0	72	0	63	0	61
Lane Flow Rate	52	424	71	339	233	362	65	313
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.144	1.052	0.194	0.868	0.625	0.909	0.181	0.812
Departure Headway (Hd)	9.924	8.938	10.302	9.606	10.099	9.435	10.393	9.71
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	360	407	350	380	361	387	348	376
Service Time	7.721	6.734	8.002	7.306	7.799	7.135	8.093	7.41
HCM Lane V/C Ratio	0.144	1.042	0.203	0.892	0.645	0.935	0.187	0.832
HCM Control Delay	14.4	89.9	15.5	50.7	28.2	57.1	15.4	43.2
HCM Lane LOS	B	F	C	F	D	F	C	E
HCM 95th-tile Q	0.5	13.9	0.7	8.4	4	9.4	0.7	7.1



# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Cumulative 2040 + Project PM

05/29/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↑↑	↔	↔	↑↑	
Traffic Volume (vph)	31	50	2	153	38	237	9	976	348	433	784	22
Future Volume (vph)	31	50	2	153	38	237	9	976	348	433	784	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.8			9.0		5.7	7.9	7.9	5.4	7.9	
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	
Frt		1.00			0.93		1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1675			1556		1597	3195	1429	1597	3182	
Flt Permitted		0.98			0.98		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1675			1556		1597	3195	1429	1597	3182	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	33	53	2	161	40	249	9	1027	366	456	825	23
RTOR Reduction (vph)	0	1	0	0	26	0	0	0	256	0	1	0
Lane Group Flow (vph)	0	87	0	0	424	0	9	1027	110	456	847	0
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	13%	13%	13%	13%	13%	13%
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		8.2			38.0		2.4	51.1	51.1	41.6	90.0	
Effective Green, g (s)		8.2			38.0		2.4	51.1	51.1	41.6	90.0	
Actuated g/C Ratio		0.05			0.22		0.01	0.30	0.30	0.24	0.53	
Clearance Time (s)		8.8			9.0		5.7	7.9	7.9	5.4	7.9	
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		80			347		22	960	429	390	1684	
v/s Ratio Prot		c0.05			c0.27		0.01	c0.32		c0.29	0.27	
v/s Ratio Perm									0.08			
v/c Ratio		1.09			1.22		0.41	1.07	0.26	1.17	0.50	
Uniform Delay, d1		80.9			66.0		83.1	59.5	45.1	64.2	25.7	
Progression Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		126.6			122.6		11.9	49.6	1.4	100.4	1.1	
Delay (s)		207.5			188.6		95.0	109.1	46.5	164.6	26.7	
Level of Service		F			F		F	F	D	F	C	
Approach Delay (s)		207.5			188.6			92.6			74.9	
Approach LOS		F			F			F			E	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			101.9			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.14									
Actuated Cycle Length (s)			170.0			Sum of lost time (s)			31.4			
Intersection Capacity Utilization			101.2%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

Intersection







Int Delay, s/veh 1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑		↑
Traffic Vol, veh/h	715	116	49	428	0	55
Future Vol, veh/h	715	116	49	428	0	55
Conflicting Peds, #/hr	0	10	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	0	11	0	3
Mvmt Flow	777	126	53	465	0	60

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	787
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.1	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.2	-
Pot Cap-1 Maneuver	-	841	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	833	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-






Approach	EB	WB	NB
HCM Control Delay, s	0	1	16.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	378	-	-	833	-
HCM Lane V/C Ratio	0.158	-	-	0.064	-
HCM Control Delay (s)	16.3	-	-	9.6	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Intersection								
Int Delay, s/veh	6.8							
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Vol, veh/h	755	15	40	362	115	22		
Future Vol, veh/h	755	15	40	362	115	22		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	0	175	-	90	0		
Veh in Median Storage, #	0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	11	3	3	11	3	3		
Mvmt Flow	821	16	43	393	125	24		
Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	0	0	821	0	1301	821		
Stage 1	-	-	-	-	821	-		
Stage 2	-	-	-	-	480	-		
Critical Hdwy	-	-	4.13	-	6.43	6.23		
Critical Hdwy Stg 1	-	-	-	-	5.43	-		
Critical Hdwy Stg 2	-	-	-	-	5.43	-		
Follow-up Hdwy	-	-	2.227	-	3.527	3.327		
Pot Cap-1 Maneuver	-	-	804	-	177	373		
Stage 1	-	-	-	-	431	-		
Stage 2	-	-	-	-	620	-		
Platoon blocked, %	-	-		-				
Mov Cap-1 Maneuver	-	-	804	-	168	373		
Mov Cap-2 Maneuver	-	-	-	-	168	-		
Stage 1	-	-	-	-	431	-		
Stage 2	-	-	-	-	587	-		
Approach	EB		WB		NB			
HCM Control Delay, s	0		1		62.3			
HCM LOS					F			
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	EBR	WBL	WBT
Capacity (veh/h)	168		373		-	-	804	-
HCM Lane V/C Ratio	0.744		0.064		-	-	0.054	-
HCM Control Delay (s)	71.3		15.3		-	-	9.7	-
HCM Lane LOS	F		C		-	-	A	-
HCM 95th %tile Q(veh)	4.7		0.2		-	-	0.2	-

Intersection

Int Delay, s/veh 5.1









Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	658	82	145	360	81	182
Future Vol, veh/h	658	82	145	360	81	182
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	708	88	156	387	87	196

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	797
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	821
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	821
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	23.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	248	408	-	-	821	-
HCM Lane V/C Ratio	0.351	0.48	-	-	0.19	-
HCM Control Delay (s)	27.2	21.7	-	-	10.4	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	1.5	2.5	-	-	0.7	-

Intersection	
Intersection Delay, s/veh	33.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	224	31	192	214	50	47	208	200	49	188	52
Future Vol, veh/h	46	224	31	192	214	50	47	208	200	49	188	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	48	236	33	202	225	53	49	219	211	52	198	55
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	24.7	23.7	55.7	22.5
HCM LOS	C	C	F	C























Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	51%	0%	88%	0%	81%	0%	78%
Vol Right, %	0%	49%	0%	12%	0%	19%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	408	46	255	192	264	49	240
LT Vol	47	0	46	0	192	0	49	0
Through Vol	0	208	0	224	0	214	0	188
RT Vol	0	200	0	31	0	50	0	52
Lane Flow Rate	49	429	48	268	202	278	52	253
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.122	0.956	0.126	0.654	0.51	0.651	0.135	0.611
Departure Headway (Hd)	8.891	8.017	9.378	8.768	9.091	8.434	9.388	8.708
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	403	451	382	411	396	428	382	414
Service Time	6.647	5.773	7.141	6.531	6.856	6.198	7.153	6.473
HCM Lane V/C Ratio	0.122	0.951	0.126	0.652	0.51	0.65	0.136	0.611
HCM Control Delay	12.9	60.6	13.5	26.7	21	25.7	13.6	24.3
HCM Lane LOS	B	F	B	D	C	D	B	C
HCM 95th-tile Q	0.4	11.5	0.4	4.5	2.8	4.5	0.5	3.9

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Cumulative Year 2040 + Project AM

05/29/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	31	27	2	349	67	362	3	16	644	170	256	744
Future Volume (vph)	31	27	2	349	67	362	3	16	644	170	256	744
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7	7.5		7.9	7.5	5.7		5.7	7.9	7.9	5.7	7.9
Lane Util. Factor	1.00	1.00		0.97	1.00	1.00		1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.99		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.98
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1626	1695		3155	1712	1455		1619	3195	1429	3099	3131
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1626	1695		3155	1712	1455		1619	3195	1429	3099	3131
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	29	2	379	73	393	3	17	700	185	278	809
RTOR Reduction (vph)	0	2	0	0	0	164	0	0	0	105	0	13
Lane Group Flow (vph)	34	29	0	379	73	229	0	20	700	80	278	920
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	3%	13%	13%	13%	13%	13%
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4		3	8	1	5	5	2	3	1	6
Permitted Phases						8				2		
Actuated Green, G (s)	3.2	3.2		11.9	14.1	27.4		2.4	22.6	34.5	13.3	33.5
Effective Green, g (s)	3.2	3.2		11.9	14.1	27.4		2.4	22.6	34.5	13.3	33.5
Actuated g/C Ratio	0.04	0.04		0.15	0.18	0.34		0.03	0.28	0.43	0.17	0.42
Clearance Time (s)	5.7	7.5		7.9	7.5	5.7		5.7	7.9	7.9	5.7	7.9
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	65	67		469	301	498		48	902	616	515	1311
v/s Ratio Prot	0.02	0.02		c0.12	0.04	c0.08		0.01	c0.22	0.02	0.09	c0.29
v/s Ratio Perm						0.08				0.04		
v/c Ratio	0.52	0.43		0.81	0.24	0.46		0.42	0.78	0.13	0.54	0.70
Uniform Delay, d1	37.7	37.5		32.9	28.4	20.5		38.1	26.4	13.7	30.5	19.1
Progression Factor	1.00	1.00		0.98	0.89	0.96		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.4	4.5		8.4	0.4	0.6		5.8	6.5	0.1	1.1	3.2
Delay (s)	45.1	42.0		40.7	25.7	20.3		43.9	32.9	13.8	31.6	22.3
Level of Service	D	D		D	C	C		D	C	B	C	C
Approach Delay (s)		43.6			29.9				29.2			24.4
Approach LOS		D			C				C			C
<b>Intersection Summary</b>												
HCM 2000 Control Delay			27.8				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			80.0				Sum of lost time (s)		29.0			
Intersection Capacity Utilization			63.4%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												












Movement	SBR
Lane Configurations	
Traffic Volume (vph)	114
Future Volume (vph)	114
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	124
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	13%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

# HCM 2010 Signalized Intersection Summary

## 3: Driveway 2 & Hanford Armona Road

Cumulative Year 2040 + Project AM

05/29/2018

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	382	5	25	709	120	30		
Future Volume (veh/h)	382	5	25	709	120	30		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1713	1900	1845	1712	1845	1845		
Adj Flow Rate, veh/h	415	5	27	771	130	33		
Adj No. of Lanes	2	0	1	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	11	11	3	11	3	3		
Cap, veh/h	2296	28	50	1332	171	152		
Arrive On Green	1.00	1.00	0.03	0.78	0.10	0.10		
Sat Flow, veh/h	3379	40	1757	1712	1757	1568		
Grp Volume(v), veh/h	205	215	27	771	130	33		
Grp Sat Flow(s),veh/h/ln	1628	1706	1757	1712	1757	1568		
Q Serve(g_s), s	0.0	0.0	1.2	14.6	5.8	1.6		
Cycle Q Clear(g_c), s	0.0	0.0	1.2	14.6	5.8	1.6		
Prop In Lane		0.02	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1135	1189	50	1332	171	152		
V/C Ratio(X)	0.18	0.18	0.55	0.58	0.76	0.22		
Avail Cap(c_a), veh/h	1135	1189	123	1332	303	270		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	38.4	3.6	35.2	33.3		
Incr Delay (d2), s/veh	0.3	0.3	9.0	1.8	6.9	0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.7	7.3	3.1	0.7		
LnGrp Delay(d),s/veh	0.3	0.3	47.4	5.4	42.1	34.0		
LnGrp LOS	A	A	D	A	D	C		
Approach Vol, veh/h	420			798	163			
Approach Delay, s/veh	0.3			6.8	40.5			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		12.0	6.5	61.6				68.0
Change Period (Y+Rc), s		* 4.2	* 4.2	5.8				5.8
Max Green Setting (Gmax), s		* 14	* 5.6	46.4				56.2
Max Q Clear Time (g_c+I1), s		7.8	3.2	2.0				16.6
Green Ext Time (p_c), s		0.2	0.0	9.6				9.4
Intersection Summary								
HCM 2010 Ctrl Delay			8.8					
HCM 2010 LOS			A					
Notes								























# HCM 2010 Signalized Intersection Summary

## 5: 19th Avenue & Cinnamon Drive

Cumulative Year 2040 + Project AM

05/29/2018
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	240	72	214	270	63	48	144	246	60	227	61
Future Volume (veh/h)	65	240	72	214	270	63	48	144	246	60	227	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1918	1900	1845	1918	1900	1845	1918	1900	1845	1845	1900
Adj Flow Rate, veh/h	71	261	78	233	293	68	52	157	267	65	247	66
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	93	362	108	236	507	118	80	193	329	90	434	116
Arrive On Green	0.05	0.26	0.26	0.13	0.34	0.34	0.05	0.30	0.30	0.05	0.31	0.31
Sat Flow, veh/h	1757	1416	423	1757	1505	349	1757	637	1082	1757	1401	374
Grp Volume(v), veh/h	71	0	339	233	0	361	52	0	424	65	0	313
Grp Sat Flow(s),veh/h/ln	1757	0	1839	1757	0	1854	1757	0	1719	1757	0	1776
Q Serve(g_s), s	2.8	0.0	11.9	9.4	0.0	11.3	2.1	0.0	16.1	2.6	0.0	10.4
Cycle Q Clear(g_c), s	2.8	0.0	11.9	9.4	0.0	11.3	2.1	0.0	16.1	2.6	0.0	10.4
Prop In Lane	1.00		0.23	1.00		0.19	1.00		0.63	1.00		0.21
Lane Grp Cap(c), veh/h	93	0	471	236	0	625	80	0	522	90	0	550
V/C Ratio(X)	0.76	0.00	0.72	0.99	0.00	0.58	0.65	0.00	0.81	0.73	0.00	0.57
Avail Cap(c_a), veh/h	154	0	674	236	0	766	124	0	647	124	0	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.0	0.0	24.0	30.5	0.0	19.3	33.2	0.0	22.7	33.0	0.0	20.4
Incr Delay (d2), s/veh	11.9	0.0	2.1	54.6	0.0	0.8	8.8	0.0	6.4	12.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	6.3	8.0	0.0	6.0	1.2	0.0	8.5	1.5	0.0	5.3
LnGrp Delay(d),s/veh	44.9	0.0	26.1	85.1	0.0	20.1	41.9	0.0	29.1	45.2	0.0	21.4
LnGrp LOS	D		C	F		C	D		C	D		C
Approach Vol, veh/h		410			594			476			378	
Approach Delay, s/veh		29.4			45.6			30.5			25.5	
Approach LOS		C			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	26.0	14.0	22.6	7.7	26.4	8.3	28.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	26.6	9.5	25.9	5.0	26.6	6.2	29.2				
Max Q Clear Time (g_c+I1), s	4.6	18.1	11.4	13.9	4.1	12.4	4.8	13.3				
Green Ext Time (p_c), s	0.0	3.0	0.0	3.4	0.0	4.0	0.0	3.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			34.0									
HCM 2010 LOS			C									

# HCM Signalized Intersection Capacity Analysis

## 1: SR 41 & Hanford-Armona Road

Cumulative Year 2040 + Project PM

05/29/2018












												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	50	2	153	38	237	9	976	348	433	784	22
Future Volume (vph)	31	50	2	153	38	237	9	976	348	433	784	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7	7.5		7.9	7.5	5.7	5.7	7.9	7.9	5.7	7.9	
Lane Util. Factor	1.00	1.00		0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1626	1702		3155	1712	1455	1597	3195	1429	3099	3182	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1626	1702		3155	1712	1455	1597	3195	1429	3099	3182	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	33	53	2	161	40	249	9	1027	366	456	825	23
RTOR Reduction (vph)	0	1	0	0	0	117	0	0	104	0	2	0
Lane Group Flow (vph)	33	54	0	161	40	132	9	1027	262	456	846	0
Heavy Vehicles (%)	11%	11%	11%	11%	11%	11%	13%	13%	13%	13%	13%	13%
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	4.8	7.2		8.2	12.8	34.5	1.2	33.9	42.1	21.7	54.4	
Effective Green, g (s)	4.8	7.2		8.2	12.8	34.5	1.2	33.9	42.1	21.7	54.4	
Actuated g/C Ratio	0.05	0.07		0.08	0.13	0.34	0.01	0.34	0.42	0.22	0.54	
Clearance Time (s)	5.7	7.5		7.9	7.5	5.7	5.7	7.9	7.9	5.7	7.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	78	122		258	219	501	19	1083	601	672	1731	
v/s Ratio Prot	0.02	c0.03		c0.05	0.02	c0.06	0.01	c0.32	0.04	c0.15	0.27	
v/s Ratio Perm						0.03			0.15			
v/c Ratio	0.42	0.44		0.62	0.18	0.26	0.47	0.95	0.44	0.68	0.49	
Uniform Delay, d1	46.3	44.5		44.4	38.9	23.6	49.1	32.2	20.5	35.9	14.2	
Progression Factor	1.00	1.00		0.96	0.97	1.22	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.7	2.6		4.4	0.4	0.3	17.5	17.4	0.5	2.7	1.0	
Delay (s)	49.9	47.0		47.1	38.3	29.1	66.6	49.6	21.0	38.7	15.2	
Level of Service	D	D		D	D	C	E	D	C	D	B	
Approach Delay (s)		48.1			36.4			42.3			23.4	
Approach LOS		D			D			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			34.0									
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			100.0									
Intersection Capacity Utilization			67.9%									
Analysis Period (min)			15									
c Critical Lane Group												

# HCM 2010 Signalized Intersection Summary

## 3: Driveway 2 & Hanford Armona Road

Cumulative Year 2040 + Project PM

05/29/2018





















								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	755	15	40	362	115	22		
Future Volume (veh/h)	755	15	40	362	115	22		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1714	1900	1845	1712	1845	1845		
Adj Flow Rate, veh/h	821	16	43	393	125	24		
Adj No. of Lanes	2	0	1	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	11	11	3	11	3	3		
Cap, veh/h	1087	21	445	1202	171	153		
Arrive On Green	0.22	0.22	0.25	0.70	0.10	0.10		
Sat Flow, veh/h	3352	64	1757	1712	1757	1568		
Grp Volume(v), veh/h	409	428	43	393	125	24		
Grp Sat Flow(s),veh/h/ln	1628	1702	1757	1712	1757	1568		
Q Serve(g_s), s	11.7	11.7	0.9	4.4	3.5	0.7		
Cycle Q Clear(g_c), s	11.7	11.7	0.9	4.4	3.5	0.7		
Prop In Lane		0.04	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	542	567	445	1202	171	153		
V/C Ratio(X)	0.75	0.75	0.10	0.33	0.73	0.16		
Avail Cap(c_a), veh/h	677	708	445	1202	330	295		
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	17.5	17.5	14.3	2.9	21.9	20.7		
Incr Delay (d2), s/veh	9.4	9.0	0.1	0.7	5.8	0.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.6	6.9	0.5	2.3	1.9	0.3		
LnGrp Delay(d),s/veh	26.9	26.6	14.4	3.6	27.7	21.1		
LnGrp LOS	C	C	B	A	C	C		
Approach Vol, veh/h	837			436	149			
Approach Delay, s/veh	26.7			4.7	26.7			
Approach LOS	C			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		9.1	18.5	22.4				40.9
Change Period (Y+Rc), s		* 4.2	5.8	* 5.8				5.8
Max Green Setting (Gmax), s		* 9.4	5.6	* 21				30.6
Max Q Clear Time (g_c+I1), s		5.5	2.9	13.7				6.4
Green Ext Time (p_c), s		0.1	0.6	2.9				2.3
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			20.0					
HCM 2010 LOS			B					
<b>Notes</b>								

# HCM 2010 Signalized Intersection Summary

## 5: 19th Avenue & Cinnamon Drive

Cumulative Year 2040 + Project PM

05/29/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	224	31	192	214	50	47	208	200	49	188	52
Future Volume (veh/h)	46	224	31	192	214	50	47	208	200	49	188	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1918	1900	1845	1918	1900	1845	1918	1900	1845	1845	1900
Adj Flow Rate, veh/h	48	236	33	202	225	53	49	219	211	52	198	55
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	79	367	51	245	477	112	80	277	267	83	432	120
Arrive On Green	0.04	0.22	0.22	0.14	0.32	0.32	0.05	0.31	0.31	0.05	0.31	0.31
Sat Flow, veh/h	1757	1645	230	1757	1500	353	1757	896	863	1757	1388	386
Grp Volume(v), veh/h	48	0	269	202	0	278	49	0	430	52	0	253
Grp Sat Flow(s),veh/h/ln	1757	0	1875	1757	0	1853	1757	0	1759	1757	0	1774
Q Serve(g_s), s	1.7	0.0	8.3	7.2	0.0	7.7	1.8	0.0	14.3	1.9	0.0	7.3
Cycle Q Clear(g_c), s	1.7	0.0	8.3	7.2	0.0	7.7	1.8	0.0	14.3	1.9	0.0	7.3
Prop In Lane	1.00		0.12	1.00		0.19	1.00		0.49	1.00		0.22
Lane Grp Cap(c), veh/h	79	0	418	245	0	589	80	0	544	83	0	552
V/C Ratio(X)	0.61	0.00	0.64	0.82	0.00	0.47	0.61	0.00	0.79	0.63	0.00	0.46
Avail Cap(c_a), veh/h	181	0	758	269	0	841	181	0	722	137	0	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	22.6	26.8	0.0	17.5	30.0	0.0	20.2	30.0	0.0	17.7
Incr Delay (d2), s/veh	7.4	0.0	1.7	17.2	0.0	0.6	7.4	0.0	4.4	7.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.5	4.7	0.0	4.0	1.0	0.0	7.6	1.1	0.0	3.7
LnGrp Delay(d),s/veh	37.5	0.0	24.2	44.0	0.0	18.1	37.5	0.0	24.6	37.6	0.0	18.3
LnGrp LOS	D		C	D		B	D		C	D		B
Approach Vol, veh/h	317			480			479			305		
Approach Delay, s/veh	26.2			29.0			25.9			21.6		
Approach LOS	C			C			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.5	24.3	13.4	18.8	7.4	24.4	7.4	24.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	26.3	9.8	25.9	6.6	24.7	6.6	29.1				
Max Q Clear Time (g_c+I1), s	3.9	16.3	9.2	10.3	3.8	9.3	3.7	9.7				
Green Ext Time (p_c), s	0.0	3.0	0.0	2.9	0.0	3.8	0.0	3.1				
Intersection Summary												
HCM 2010 Ctrl Delay	26.1											
HCM 2010 LOS	C											

Queuing and Blocking Report  
Mitigated

Cumulative Year 2040 + Project AM  
05/29/2018

Intersection: 1: SR 41 & Hanford-Armona Road

Movement	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	L	T	R	UL	T	T	R	L	L
Maximum Queue (ft)	117	101	224	211	190	223	53	226	248	91	131	226
Average Queue (ft)	25	33	109	122	55	84	12	143	140	33	73	76
95th Queue (ft)	75	74	175	190	111	169	37	218	222	69	122	147
Link Distance (ft)	5154				383				3811	3811		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250		250		250		250		845	500		855
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: SR 41 & Hanford-Armona Road

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	194	205
Average Queue (ft)	101	94
95th Queue (ft)	175	172
Link Distance (ft)	2639	2639
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Driveway 1 & Hanford Armona Road

Movement	EB	EB	EB	WB	WB	NB
Directions Served	T	T	R	L	T	R
Maximum Queue (ft)	31	453	21	53	55	22
Average Queue (ft)	1	15	1	12	5	19
95th Queue (ft)	10	149	7	39	26	32
Link Distance (ft)	383	383			236	165
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			150	150		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Driveway 2 & Hanford Armona Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	TR	L	T	L	R
Maximum Queue (ft)	178	128	94	246	170	109
Average Queue (ft)	72	20	22	90	62	21
95th Queue (ft)	150	82	58	193	121	62
Link Distance (ft)	236	236		883		334
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			175		90	
Storage Blk Time (%)				1	3	0
Queuing Penalty (veh)				0	1	0

Intersection: 4: 19th Avenue & Hanford Armona Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	22	74	136	98
Average Queue (ft)	2	32	54	49
95th Queue (ft)	13	63	94	79
Link Distance (ft)	922			1729
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		245	245	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	154	241	200	425	113	250	168	202
Average Queue (ft)	58	118	160	246	39	127	43	101
95th Queue (ft)	122	188	243	418	81	210	102	171
Link Distance (ft)		2549		3232		1711		981
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)	1	15	56	14	1	18	3	11
Queuing Penalty (veh)	4	10	187	30	2	9	8	7

Network Summary

Network wide Queuing Penalty: 257

Intersection: 1: SR 41 & Hanford-Armona Road

Movement	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	L	T	R	UL	T	T	R	L	L
Maximum Queue (ft)	121	105	74	111	86	172	45	392	323	171	231	212
Average Queue (ft)	36	41	40	61	25	88	7	221	219	83	129	109
95th Queue (ft)	88	94	73	99	65	151	27	323	315	152	206	179
Link Distance (ft)	5154				383				3811	3811		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250		250		250		250		845	500		855
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: SR 41 & Hanford-Armona Road

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	149	146
Average Queue (ft)	76	73
95th Queue (ft)	142	141
Link Distance (ft)	2639	2639
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Driveway 1 & Hanford Armona Road

Movement	EB	EB	EB	WB	WB	NB
Directions Served	T	T	R	L	T	R
Maximum Queue (ft)	73	31	30	87	50	68
Average Queue (ft)	5	2	1	20	2	23
95th Queue (ft)	32	15	10	55	16	50
Link Distance (ft)	383	383			236	165
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			150	150		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Driveway 2 & Hanford Armona Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	TR	L	T	L	R
Maximum Queue (ft)	243	161	74	119	101	65
Average Queue (ft)	138	50	32	39	57	16
95th Queue (ft)	241	131	66	96	89	44
Link Distance (ft)	236	236		882		334
Upstream Blk Time (%)	1					
Queuing Penalty (veh)	2					
Storage Bay Dist (ft)			175		90	
Storage Blk Time (%)					2	
Queuing Penalty (veh)					0	

Intersection: 4: 19th Avenue & Hanford Armona Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	51	164	96	118
Average Queue (ft)	3	65	49	57
95th Queue (ft)	20	125	85	91
Link Distance (ft)	923			1729
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		245	245	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	154	180	199	217	159	504	72	189
Average Queue (ft)	38	121	107	115	38	162	33	87
95th Queue (ft)	84	178	186	202	100	334	63	148
Link Distance (ft)		2549		3232		1711		981
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)		15	14	6		22	0	9
Queuing Penalty (veh)		7	37	12		11	1	4

Network Summary

Network wide Queuing Penalty: 74





**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg NB AM)**

**Scenario: Cumulative Year 2040 plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	1037
PHF:	0.90
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	627.96
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$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 10.47**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg NB PM)**

**Scenario: Cumulative Year 2040 Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	1244
PHF:	0.90
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	753.31
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 12.56**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg SB AM)**

**Scenario: Cumulative Year 2040 Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	1114
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	674.59
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 11.24**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (North Leg SB PM)**

**Scenario: Cumulative Year 2040 Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	1239
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	750.28
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

Density (pc/mi/ln):	12.50
---------------------	-------

$$\frac{V_p}{S}$$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg NB AM)**

**Scenario: Cumulative Year 2040 Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate (V <sub>p</sub> )	
Volume (V):	833
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type (f <sub>p</sub> ):	1.0
Heavy Vehicle Factor (f <sub>HV</sub> )	
Truck Percentage (P <sub>T</sub> ):	18.00%
RV Percentage (P <sub>R</sub> ):	0.00%
PCE Truck (E <sub>T</sub> ):	1.5
PCE RV (E <sub>R</sub> ):	0
(f <sub>HV</sub> ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
f <sub>LW</sub> :	0
f <sub>LC</sub> :	0
f <sub>M</sub> :	0
f <sub>A</sub> :	0
FFS	60
S:	60

(V <sub>p</sub> ):	504.43
--------------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 8.41**

$$\frac{V_p}{S}$$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg NB PM)**

**Scenario: Cumulative Year 2040 Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	1333
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	807.21
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 13.45**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg SB AM)**

**Scenario: Cumulative Year 2040 Plus Project**

Date: 4/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	1098
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	664.90
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 11.08**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



**Multilane Highway**

**Segment: SR 41 Hanford Armona RD (South Leg SB PM)**

**Scenario: Cumulative Year 2040 Plus Project**

Date: 2/2/2018

Prepared By: AM

Checked By: JLB

Demand Flow Rate ( $V_p$ )	
Volume (V):	939
PHF:	0.9
# Lanes in each Direction (N):	2
Driver Population Type ( $f_p$ ):	1.0
Heavy Vehicle Factor ( $f_{HV}$ )	
Truck Percentage ( $P_T$ ):	18.00%
RV Percentage ( $P_R$ ):	0.00%
PCE Truck ( $E_T$ ):	1.5
PCE RV ( $E_R$ ):	0
( $f_{HV}$ ):	0.92

See Exhibit 14-12

See Exhibit 14-12

Capacity (S)	
Free Flow Speed (FFS)	
BFFS	60
$f_{LW}$ :	0
$f_{LC}$ :	0
$f_M$ :	0
$f_A$ :	0
FFS	60
S:	60

( $V_p$ ):	568.62
------------	--------

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$$

$$V_p = \frac{V}{PHF \cdot N \cdot f_{HV} \cdot f_p}$$

**Density (pc/mi/ln): 9.48**  $\frac{V_p}{S}$

LOS TABLE Exhibit 11-5		
LOS	FFS(mi/h)	Density (pc/mi/ln)
A	All	> 0-11
B	All	> 11-18
C	All	> 18-26
D	All	> 26-35
E	60	> 35-40
	55	> 35-41
	50	> 35-43
	45	> 35-45
F	60	> 40
	55	> 41
	50	> 43
	45	> 45



## Appendix H: Cumulative Year 2040 plus Project plus Partial Type L-9 Interchange Traffic Conditions



**Traffic Engineering, Inc.**

*Traffic Engineering, Transportation Planning, & Parking Solutions*

<http://www.JLBtraffic.com>

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

*(559) 570-8991*













*Page | H*

# HCM Signalized Intersection Capacity Analysis

## 6: Hanford-Armona Road & SR 41 SB Off-Ramp

Cumulative Year 2040 + Project AM

05/29/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗		↑↑	↗				↗	↕	
Traffic Volume (vph)	0	58	2	0	84	351	0	0	0	256	0	114
Future Volume (vph)	0	58	2	0	84	351	0	0	0	256	0	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.8	5.8		5.8	5.8				4.2	4.6	
Lane Util. Factor		0.95	1.00		0.95	1.00				0.95	0.95	
Frt		1.00	0.85		1.00	0.85				1.00	0.90	
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.98	
Satd. Flow (prot)		3252	1455		3252	1455				1517	1419	
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.98	
Satd. Flow (perm)		3252	1455		3252	1455				1517	1419	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	63	2	0	91	382	0	0	0	278	0	124
RTOR Reduction (vph)	0	0	1	0	0	217	0	0	0	0	93	0
Lane Group Flow (vph)	0	63	1	0	91	165	0	0	0	208	101	0
Heavy Vehicles (%)	0%	11%	11%	0%	11%	11%	0%	0%	0%	13%	0%	13%
Turn Type		NA	Perm		NA	Perm				Prot	NA	
Protected Phases		4			8					1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		13.4	13.4		13.4	13.4				7.7	7.7	
Effective Green, g (s)		13.4	13.4		13.4	13.4				7.7	7.7	
Actuated g/C Ratio		0.43	0.43		0.43	0.43				0.25	0.25	
Clearance Time (s)		5.8	5.8		5.8	5.8				4.2	4.6	
Vehicle Extension (s)		3.0	3.0		3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		1401	626		1401	626				375	351	
v/s Ratio Prot		0.02			0.03					c0.14	0.07	
v/s Ratio Perm			0.00			c0.11						
v/c Ratio		0.04	0.00		0.06	0.26				0.55	0.29	
Uniform Delay, d1		5.1	5.0		5.2	5.7				10.2	9.5	
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.0	0.0		0.0	0.2				1.8	0.5	
Delay (s)		5.1	5.0		5.2	5.9				12.0	9.9	
Level of Service		A	A		A	A				B	A	
Approach Delay (s)		5.1			5.8			0.0			11.0	
Approach LOS		A			A			A			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			8.0			HCM 2000 Level of Service				A		
HCM 2000 Volume to Capacity ratio			0.38									
Actuated Cycle Length (s)			31.1			Sum of lost time (s)				10.4		
Intersection Capacity Utilization			26.6%			ICU Level of Service				A		
Analysis Period (min)			15									
c Critical Lane Group												

# HCM Signalized Intersection Capacity Analysis

## 7: SR 41 NB Ramps & Hanford Armona Road

Cumulative Year 2040 + Project AM

05/29/2018



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (vph)	283	31	362	416	19	170
Future Volume (vph)	283	31	362	416	19	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	4.6	5.8	4.6	4.6
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.95
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.88	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.99	1.00
Satd. Flow (prot)	3252	1408	1626	3252	1465	1358
Flt Permitted	1.00	1.00	0.95	1.00	0.99	1.00
Satd. Flow (perm)	3252	1408	1626	3252	1465	1358
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	308	34	393	452	21	185
RTOR Reduction (vph)	0	25	0	0	76	93
Lane Group Flow (vph)	308	9	393	452	28	9
Confl. Peds. (#/hr)	10					
Heavy Vehicles (%)	11%	11%	11%	11%	13%	13%
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4				2
Actuated Green, G (s)	11.7	11.7	15.6	31.9	4.0	4.0
Effective Green, g (s)	11.7	11.7	15.6	31.9	4.0	4.0
Actuated g/C Ratio	0.25	0.25	0.34	0.69	0.09	0.09
Clearance Time (s)	5.8	5.8	4.6	5.8	4.6	4.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	821	355	547	2240	126	117
v/s Ratio Prot	c0.09		c0.24	0.14	c0.02	
v/s Ratio Perm		0.01				0.01
v/c Ratio	0.38	0.02	0.72	0.20	0.22	0.08
Uniform Delay, d1	14.3	13.0	13.4	2.6	19.7	19.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.0	4.5	0.0	0.9	0.3
Delay (s)	14.6	13.0	17.9	2.6	20.6	19.7
Level of Service	B	B	B	A	C	B
Approach Delay (s)	14.4			9.8	20.2	
Approach LOS	B			A	C	
Intersection Summary						
HCM 2000 Control Delay			12.4	HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.53			
Actuated Cycle Length (s)			46.3	Sum of lost time (s)		15.0
Intersection Capacity Utilization			47.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

Intersection

Int Delay, s/veh 0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑		↑
Traffic Vol, veh/h	334	119	51	778	0	53
Future Vol, veh/h	334	119	51	778	0	53
Conflicting Peds, #/hr	0	10	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	0	11	0	3
Mvmt Flow	363	129	55	846	0	58

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	502
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.1	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.2	-
Pot Cap-1 Maneuver	-	1073	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1063	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	788	-	-	1063	-
HCM Lane V/C Ratio	0.073	-	-	0.052	-
HCM Control Delay (s)	9.9	-	-	8.6	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-

HCM 2010 TWSC  
3: Driveway 3 & Hanford Armona Road

Cumulative Year 2040 + Project AM  
05/29/2018

Intersection

Int Delay, s/veh 7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑	↖	↖
Traffic Vol, veh/h	382	5	25	709	120	30
Future Vol, veh/h	382	5	25	709	120	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	175	-	90	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	415	5	27	771	130	33






Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	420
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.145
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.2285
Pot Cap-1 Maneuver	-	-	1131
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1131
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	58
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	174	794	-	-	1131	-
HCM Lane V/C Ratio	0.75	0.041	-	-	0.024	-
HCM Control Delay (s)	70.1	9.7	-	-	8.3	-
HCM Lane LOS	F	A	-	-	A	-
HCM 95th %tile Q(veh)	4.8	0.1	-	-	0.1	-

Intersection

Int Delay, s/veh 4.4









Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	412	94	134	537	77	175
Future Vol, veh/h	412	94	134	537	77	175
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	448	102	146	584	84	190

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	551
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	1014
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1013
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	20.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	210	568	-	-	1013	-
HCM Lane V/C Ratio	0.399	0.335	-	-	0.144	-
HCM Control Delay (s)	33.1	14.5	-	-	9.2	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	1.8	1.5	-	-	0.5	-

Intersection	
Intersection Delay, s/veh	53.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	240	72	214	270	63	48	144	246	60	227	61
Future Vol, veh/h	65	240	72	214	270	63	48	144	246	60	227	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	71	261	78	233	293	68	52	157	267	65	247	66
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	44.6	45.8	81.6	38.4
HCM LOS	E	E	F	E













Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	37%	0%	77%	0%	81%	0%	79%
Vol Right, %	0%	63%	0%	23%	0%	19%	0%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	48	390	65	312	214	333	60	288
LT Vol	48	0	65	0	214	0	60	0
Through Vol	0	144	0	240	0	270	0	227
RT Vol	0	246	0	72	0	63	0	61
Lane Flow Rate	52	424	71	339	233	362	65	313
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.144	1.052	0.194	0.868	0.625	0.909	0.181	0.812
Departure Headway (Hd)	9.924	8.938	10.302	9.606	10.099	9.435	10.393	9.71
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	360	407	350	380	361	387	348	376
Service Time	7.721	6.734	8.002	7.306	7.799	7.135	8.093	7.41
HCM Lane V/C Ratio	0.144	1.042	0.203	0.892	0.645	0.935	0.187	0.832
HCM Control Delay	14.4	89.9	15.5	50.7	28.2	57.1	15.4	43.2
HCM Lane LOS	B	F	C	F	D	F	C	E
HCM 95th-tile Q	0.5	13.9	0.7	8.4	4	9.4	0.7	7.1

# HCM Signalized Intersection Capacity Analysis

## 6: Hanford-Armona Road & SR 41 SB Off-Ramp

Cumulative Year 2040 + Project PM

05/29/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		↑↑	↗		↑↑	↗				↖	↕		
Traffic Volume (vph)	0	81	2	0	47	153	0	0	0	433	0	22	
Future Volume (vph)	0	81	2	0	47	153	0	0	0	433	0	22	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		5.8	5.8		5.8	5.8				4.2	4.6		
Lane Util. Factor		0.95	1.00		0.95	1.00				0.95	0.95		
Frt		1.00	0.85		1.00	0.85				1.00	0.99		
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.96		
Satd. Flow (prot)		3252	1455		3252	1455				1517	1506		
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.96		
Satd. Flow (perm)		3252	1455		3252	1455				1517	1506		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	88	2	0	51	166	0	0	0	471	0	24	
RTOR Reduction (vph)	0	0	2	0	0	139	0	0	0	0	19	0	
Lane Group Flow (vph)	0	88	0	0	51	27	0	0	0	250	226	0	
Heavy Vehicles (%)	0%	11%	11%	0%	11%	11%	0%	0%	0%	13%	0%	13%	
Turn Type		NA	Perm		NA	Perm				Prot	NA		
Protected Phases		4			8					1	6		
Permitted Phases			4			8							
Actuated Green, G (s)		8.9	8.9		8.9	8.9				36.1	36.1		
Effective Green, g (s)		8.9	8.9		8.9	8.9				36.1	36.1		
Actuated g/C Ratio		0.16	0.16		0.16	0.16				0.66	0.66		
Clearance Time (s)		5.8	5.8		5.8	5.8				4.2	4.6		
Vehicle Extension (s)		3.0	3.0		3.0	3.0				3.0	3.0		
Lane Grp Cap (vph)		526	235		526	235				995	988		
v/s Ratio Prot		c0.03			0.02					c0.16	0.15		
v/s Ratio Perm			0.00			0.02							
v/c Ratio		0.17	0.00		0.10	0.11				0.25	0.23		
Uniform Delay, d1		19.9	19.3		19.6	19.7				3.9	3.8		
Progression Factor		1.00	1.00		0.84	1.04				1.00	1.00		
Incremental Delay, d2		0.7	0.0		0.4	1.0				0.1	0.1		
Delay (s)		20.5	19.3		16.9	21.5				4.0	3.9		
Level of Service		C	B		B	C				A	A		
Approach Delay (s)		20.5			20.5			0.0			4.0		
Approach LOS		C			C			A			A		
Intersection Summary													
HCM 2000 Control Delay			10.3									HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.24										
Actuated Cycle Length (s)			55.0							10.4			
Intersection Capacity Utilization			25.5%							A			
Analysis Period (min)			15										
c Critical Lane Group													









# HCM Signalized Intersection Capacity Analysis

## 7: SR 41 NB Ramps & Hanford Armona Road

Cumulative Year 2040 + Project PM

05/29/2018

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (vph)	483	31	237	191	9	348
Future Volume (vph)	483	31	237	191	9	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	4.6	5.8	4.6	4.6
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.95
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.86	0.85
Flt Protected	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3252	1404	1626	3252	1438	1358
Flt Permitted	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3252	1404	1626	3252	1438	1358
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	525	34	258	208	10	378
RTOR Reduction (vph)	0	21	0	0	163	171
Lane Group Flow (vph)	525	13	258	208	32	22
Confl. Peds. (#/hr)	10					
Heavy Vehicles (%)	11%	11%	11%	11%	13%	13%
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	4		3	8	2	2
Permitted Phases	4					
Actuated Green, G (s)	20.9	20.9	12.7	38.2	6.4	6.4
Effective Green, g (s)	20.9	20.9	12.7	38.2	6.4	6.4
Actuated g/C Ratio	0.38	0.38	0.23	0.69	0.12	0.12
Clearance Time (s)	5.8	5.8	4.6	5.8	4.6	4.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1235	533	375	2258	167	158
v/s Ratio Prot	c0.16		c0.16	0.06	c0.02	0.02
v/s Ratio Perm		0.01				
v/c Ratio	0.43	0.02	0.69	0.09	0.19	0.14
Uniform Delay, d1	12.6	10.7	19.3	2.7	22.0	21.8
Progression Factor	0.84	0.57	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	0.1	5.2	0.1	0.6	0.4
Delay (s)	11.6	6.1	24.5	2.8	22.5	22.2
Level of Service	B	A	C	A	C	C
Approach Delay (s)	11.3			14.8	22.4	
Approach LOS	B			B	C	
Intersection Summary						
HCM 2000 Control Delay			15.5	HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.47			
Actuated Cycle Length (s)			55.0	Sum of lost time (s)		15.0
Intersection Capacity Utilization			48.3%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑		↗
Traffic Vol, veh/h	715	116	49	428	0	55
Future Vol, veh/h	715	116	49	428	0	55
Conflicting Peds, #/hr	0	10	0	0	0	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	0	11	0	3
Mvmt Flow	777	126	53	465	0	60
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	913	0	-	409
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-	6.945
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-	3.3285
Pot Cap-1 Maneuver	-	-	755	-	0	590
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	748	-	-	579
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1		11.9	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	579	-	-	748	-	
HCM Lane V/C Ratio	0.103	-	-	0.071	-	
HCM Control Delay (s)	11.9	-	-	10.2	-	
HCM Lane LOS	B	-	-	B	-	
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-	

Intersection

Int Delay, s/veh 8.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑	↖	↖
Traffic Vol, veh/h	755	15	40	362	115	22
Future Vol, veh/h	755	15	40	362	115	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	175	-	90	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	821	16	43	393	125	24






Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	837
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.145
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.2285
Pot Cap-1 Maneuver	-	-	790
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	790
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	76.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	153	581	-	-	790	-
HCM Lane V/C Ratio	0.817	0.041	-	-	0.055	-
HCM Control Delay (s)	89.1	11.5	-	-	9.8	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	5.3	0.1	-	-	0.2	-

Intersection

Int Delay, s/veh 5.4









Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	658	82	145	360	81	182
Future Vol, veh/h	658	82	145	360	81	182
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	245	-	245	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	11	3	3	11	3	3
Mvmt Flow	708	88	156	387	87	196

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	797
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.13
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.227
Pot Cap-1 Maneuver	-	-	821
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	820
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	25.1
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	214	408	-	-	820	-
HCM Lane V/C Ratio	0.407	0.48	-	-	0.19	-
HCM Control Delay (s)	32.9	21.7	-	-	10.4	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	1.8	2.5	-	-	0.7	-

Intersection	
Intersection Delay, s/veh	33.2
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	224	31	192	214	50	47	208	200	49	188	52
Future Vol, veh/h	46	224	31	192	214	50	47	208	200	49	188	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	48	236	33	202	225	53	49	219	211	52	198	52
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	24.6	23.6	55.4	22.2
HCM LOS	C	C	F	C












Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	51%	0%	88%	0%	81%	0%	78%
Vol Right, %	0%	49%	0%	12%	0%	19%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	408	46	255	192	264	49	240
LT Vol	47	0	46	0	192	0	49	0
Through Vol	0	208	0	224	0	214	0	188
RT Vol	0	200	0	31	0	50	0	52
Lane Flow Rate	49	429	48	268	202	278	52	250
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.122	0.955	0.126	0.652	0.509	0.65	0.134	0.604
Departure Headway (Hd)	8.877	8.004	9.361	8.751	9.074	8.417	9.382	8.702
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	404	455	383	413	396	428	382	415
Service Time	6.631	5.757	7.125	6.515	6.838	6.181	7.145	6.465
HCM Lane V/C Ratio	0.121	0.943	0.125	0.649	0.51	0.65	0.136	0.602
HCM Control Delay	12.9	60.3	13.5	26.6	20.9	25.6	13.6	24
HCM Lane LOS	B	F	B	D	C	D	B	C
HCM 95th-tile Q	0.4	11.5	0.4	4.5	2.8	4.5	0.5	3.8

# HCM 2010 Signalized Intersection Summary

## 3: Driveway 2 & Hanford Armona Road

Cumulative Year 2040 + Project AM

05/29/2018





















								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	382	5	25	709	120	30		
Future Volume (veh/h)	382	5	25	709	120	30		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1713	1900	1845	1712	1845	1845		
Adj Flow Rate, veh/h	415	5	27	771	130	33		
Adj No. of Lanes	2	0	1	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	11	11	3	11	3	3		
Cap, veh/h	2029	24	53	1237	183	163		
Arrive On Green	0.62	0.62	0.03	0.72	0.10	0.10		
Sat Flow, veh/h	3380	40	1757	1712	1757	1568		
Grp Volume(v), veh/h	205	215	27	771	130	33		
Grp Sat Flow(s),veh/h/ln	1628	1706	1757	1712	1757	1568		
Q Serve(g_s), s	3.3	3.3	0.9	13.6	4.3	1.2		
Cycle Q Clear(g_c), s	3.3	3.3	0.9	13.6	4.3	1.2		
Prop In Lane		0.02	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1002	1051	53	1237	183	163		
V/C Ratio(X)	0.20	0.20	0.51	0.62	0.71	0.20		
Avail Cap(c_a), veh/h	1002	1051	146	1237	656	585		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	5.1	5.1	28.7	4.2	26.0	24.6		
Incr Delay (d2), s/veh	0.5	0.4	7.4	2.4	5.1	0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.6	1.7	0.6	7.0	2.4	0.5		
LnGrp Delay(d),s/veh	5.5	5.5	36.0	6.6	31.1	25.2		
LnGrp LOS	A	A	D	A	C	C		
Approach Vol, veh/h	420			798	163			
Approach Delay, s/veh	5.5			7.6	29.9			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		10.8	6.4	42.8				49.2
Change Period (Y+Rc), s		4.6	4.6	5.8				5.8
Max Green Setting (Gmax), s		22.4	5.0	17.6				27.2
Max Q Clear Time (g_c+I1), s		6.3	2.9	5.3				15.6
Green Ext Time (p_c), s		0.4	0.0	1.9				3.9
Intersection Summary								
HCM 2010 Ctrl Delay			9.6					
HCM 2010 LOS			A					

# HCM 2010 Signalized Intersection Summary

## 11: 19th Avenue & Cinnamon Drive

Cumulative Year 2040 + Project AM

05/29/2018












												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	240	72	214	270	63	48	144	246	60	227	61
Future Volume (veh/h)	65	240	72	214	270	63	48	144	246	60	227	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1918	1900	1845	1918	1900	1845	1918	1900	1845	1845	1900
Adj Flow Rate, veh/h	71	261	78	233	293	68	52	157	267	65	247	66
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	91	459	137	266	638	148	71	172	292	83	388	104
Arrive On Green	0.05	0.32	0.32	0.15	0.42	0.42	0.04	0.27	0.27	0.05	0.28	0.28
Sat Flow, veh/h	1757	1417	423	1757	1505	349	1757	636	1082	1757	1401	374
Grp Volume(v), veh/h	71	0	339	233	0	361	52	0	424	65	0	313
Grp Sat Flow(s),veh/h/ln	1757	0	1840	1757	0	1854	1757	0	1718	1757	0	1775
Q Serve(g_s), s	3.6	0.0	13.7	11.7	0.0	12.5	2.6	0.0	21.5	3.3	0.0	13.9
Cycle Q Clear(g_c), s	3.6	0.0	13.7	11.7	0.0	12.5	2.6	0.0	21.5	3.3	0.0	13.9
Prop In Lane	1.00		0.23	1.00		0.19	1.00		0.63	1.00		0.21
Lane Grp Cap(c), veh/h	91	0	597	266	0	786	71	0	464	83	0	492
V/C Ratio(X)	0.78	0.00	0.57	0.87	0.00	0.46	0.73	0.00	0.91	0.78	0.00	0.64
Avail Cap(c_a), veh/h	182	0	597	269	0	786	98	0	494	98	0	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.1	0.0	25.2	37.3	0.0	18.5	42.7	0.0	31.8	42.4	0.0	28.6
Incr Delay (d2), s/veh	13.2	0.0	3.9	25.6	0.0	1.9	16.3	0.0	20.7	28.8	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	7.6	7.5	0.0	6.8	1.6	0.0	12.8	2.3	0.0	7.1
LnGrp Delay(d),s/veh	55.3	0.0	29.1	62.9	0.0	20.5	59.0	0.0	52.5	71.2	0.0	31.0
LnGrp LOS	E		C	E		C	E		D	E		C
Approach Vol, veh/h		410			594			476			378	
Approach Delay, s/veh		33.6			37.1			53.2			37.9	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	29.4	17.8	34.3	7.8	30.0	8.9	43.3				
Change Period (Y+Rc), s	* 4.2	5.1	* 4.2	5.1	* 4.2	5.1	* 4.2	5.1				
Max Green Setting (Gmax), s	* 5	25.9	* 14	26.7	* 5	25.9	* 9.3	31.2				
Max Q Clear Time (g_c+I1), s	5.3	23.5	13.7	15.7	4.6	15.9	5.6	14.5				
Green Ext Time (p_c), s	0.0	0.6	0.0	1.5	0.0	1.2	0.0	1.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			40.7									
HCM 2010 LOS			D									
<b>Notes</b>												

# HCM 2010 Signalized Intersection Summary

## 3: Driveway 2 & Hanford Armona Road

Cumulative Year 2040 + Project PM

05/29/2018

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	755	15	40	362	115	22		
Future Volume (veh/h)	755	15	40	362	115	22		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1714	1900	1845	1712	1845	1845		
Adj Flow Rate, veh/h	821	16	43	393	125	24		
Adj No. of Lanes	2	0	1	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	11	11	3	11	3	3		
Cap, veh/h	2071	40	73	1275	172	153		
Arrive On Green	1.00	1.00	0.04	0.74	0.10	0.10		
Sat Flow, veh/h	3353	64	1757	1712	1757	1568		
Grp Volume(v), veh/h	409	428	43	393	125	24		
Grp Sat Flow(s),veh/h/ln	1628	1703	1757	1712	1757	1568		
Q Serve(g_s), s	0.0	0.0	1.6	5.0	4.6	0.9		
Cycle Q Clear(g_c), s	0.0	0.0	1.6	5.0	4.6	0.9		
Prop In Lane		0.04	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1032	1079	73	1275	172	153		
V/C Ratio(X)	0.40	0.40	0.59	0.31	0.73	0.16		
Avail Cap(c_a), veh/h	1032	1079	144	1275	596	532		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	31.1	2.8	28.9	27.3		
Incr Delay (d2), s/veh	1.1	1.1	7.5	0.6	5.8	0.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.9	2.5	2.5	0.4		
LnGrp Delay(d),s/veh	1.1	1.1	38.6	3.4	34.7	27.8		
LnGrp LOS	A	A	D	A	C	C		
Approach Vol, veh/h	837			436	149			
Approach Delay, s/veh	1.1			6.9	33.6			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		11.0	7.3	47.6				55.0
Change Period (Y+Rc), s		4.6	4.6	5.8				5.8
Max Green Setting (Gmax), s		22.4	5.4	23.2				33.2
Max Q Clear Time (g_c+I1), s		6.6	3.6	2.0				7.0
Green Ext Time (p_c), s		0.3	0.0	5.3				2.2
Intersection Summary								
HCM 2010 Ctrl Delay			6.3					
HCM 2010 LOS			A					























# HCM 2010 Signalized Intersection Summary

## 5: 19th Avenue & Cinnamon Drive

Cumulative Year 2040 + Project PM

05/29/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	224	31	192	214	50	47	208	200	49	188	52
Future Volume (veh/h)	46	224	31	192	214	50	47	208	200	49	188	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1918	1900	1845	1918	1900	1845	1918	1900	1845	1845	1900
Adj Flow Rate, veh/h	48	236	33	202	225	53	49	219	211	52	198	52
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	80	341	48	246	452	106	81	269	259	84	424	111
Arrive On Green	0.05	0.21	0.21	0.14	0.30	0.30	0.05	0.30	0.30	0.05	0.30	0.30
Sat Flow, veh/h	1757	1645	230	1757	1499	353	1757	896	863	1757	1407	370
Grp Volume(v), veh/h	48	0	269	202	0	278	49	0	430	52	0	250
Grp Sat Flow(s),veh/h/ln	1757	0	1875	1757	0	1853	1757	0	1759	1757	0	1777
Q Serve(g_s), s	1.6	0.0	8.1	6.8	0.0	7.5	1.7	0.0	13.8	1.8	0.0	7.0
Cycle Q Clear(g_c), s	1.6	0.0	8.1	6.8	0.0	7.5	1.7	0.0	13.8	1.8	0.0	7.0
Prop In Lane	1.00		0.12	1.00		0.19	1.00		0.49	1.00		0.21
Lane Grp Cap(c), veh/h	80	0	388	246	0	558	81	0	528	84	0	536
V/C Ratio(X)	0.60	0.00	0.69	0.82	0.00	0.50	0.60	0.00	0.82	0.62	0.00	0.47
Avail Cap(c_a), veh/h	190	0	821	254	0	878	144	0	748	144	0	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.5	0.0	22.4	25.5	0.0	17.5	28.5	0.0	19.8	28.5	0.0	17.3
Incr Delay (d2), s/veh	7.0	0.0	2.2	18.7	0.0	0.7	7.0	0.0	4.7	7.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	4.4	4.6	0.0	3.9	1.0	0.0	7.4	1.0	0.0	3.5
LnGrp Delay(d),s/veh	35.5	0.0	24.6	44.2	0.0	18.2	35.5	0.0	24.5	35.6	0.0	17.9
LnGrp LOS	D		C	D		B	D		C	D		B
Approach Vol, veh/h	317			480			479			302		
Approach Delay, s/veh	26.2			29.1			25.6			21.0		
Approach LOS	C			C			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	23.4	12.7	17.7	7.0	23.5	7.0	23.5				
Change Period (Y+Rc), s	* 4.2	5.1	* 4.2	5.1	* 4.2	5.1	* 4.2	5.1				
Max Green Setting (Gmax), s	* 5	25.9	* 8.8	26.7	* 5	25.9	* 6.6	28.9				
Max Q Clear Time (g_c+I1), s	3.8	15.8	8.8	10.1	3.7	9.0	3.6	9.5				
Green Ext Time (p_c), s	0.0	1.9	0.0	1.3	0.0	1.2	0.0	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay	25.9											
HCM 2010 LOS	C											
Notes												

Intersection: 2: Driveway 1 & Hanford Armona Road

Movement	EB	EB	EB	WB	WB	NB
Directions Served	T	T	R	L	T	R
Maximum Queue (ft)	55	31	22	56	54	46
Average Queue (ft)	2	1	1	25	8	22
95th Queue (ft)	18	10	10	54	37	39
Link Distance (ft)	189	189			149	225
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			150	150		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Driveway 2 & Hanford Armona Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	TR	L	T	L	R
Maximum Queue (ft)	154	119	68	221	115	50
Average Queue (ft)	58	33	17	94	62	19
95th Queue (ft)	128	95	45	196	103	46
Link Distance (ft)	149	149		1157		334
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	1					
Storage Bay Dist (ft)			175		90	
Storage Blk Time (%)				1	2	
Queuing Penalty (veh)				0	1	

Intersection: 4: 19th Avenue & Hanford Armona Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	23	116	118	102
Average Queue (ft)	2	41	36	57
95th Queue (ft)	13	88	73	91
Link Distance (ft)	648			1729
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		245	245	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	154	207	199	494	159	425	169	290
Average Queue (ft)	66	131	125	168	50	180	48	140
95th Queue (ft)	138	206	200	311	118	320	113	248
Link Distance (ft)		2549		3232		1711		981
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)	1	17	19	14	0	31	2	23
Queuing Penalty (veh)	4	11	65	30	0	15	5	14

Intersection: 6: Hanford-Armona Road & SR 41 SB Off-Ramp

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	R	T	R	L	LTR
Maximum Queue (ft)	47	71	27	70	99	104	145
Average Queue (ft)	5	13	2	17	58	62	78
95th Queue (ft)	25	46	15	46	86	97	148
Link Distance (ft)	406	406		659		129	129
Upstream Blk Time (%)							7
Queuing Penalty (veh)							12
Storage Bay Dist (ft)			250		250		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 7: SR 41 NB Ramps & Hanford Armona Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	LR	R
Maximum Queue (ft)	111	120	53	188	200	117	106	74
Average Queue (ft)	55	58	15	122	22	32	54	29
95th Queue (ft)	96	104	42	175	102	81	87	59
Link Distance (ft)	659	659			189	189	139	139
Upstream Blk Time (%)				1	0			
Queuing Penalty (veh)				0	2			
Storage Bay Dist (ft)			250	200				
Storage Blk Time (%)				1	0			
Queuing Penalty (veh)				1	2			

Intersection: 2: Driveway 1 & Hanford Armona Road

Movement	EB	EB	WB	WB	NB
Directions Served	T	T	L	T	R
Maximum Queue (ft)	93	50	55	54	68
Average Queue (ft)	14	3	21	2	21
95th Queue (ft)	60	20	49	18	45
Link Distance (ft)	189	189		149	225
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			150		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Driveway 2 & Hanford Armona Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	TR	L	T	L	R
Maximum Queue (ft)	210	120	73	134	156	131
Average Queue (ft)	83	38	29	37	63	19
95th Queue (ft)	170	102	67	97	118	61
Link Distance (ft)	149	149		1144		334
Upstream Blk Time (%)	2					
Queuing Penalty (veh)	7					
Storage Bay Dist (ft)			175		90	
Storage Blk Time (%)					4	
Queuing Penalty (veh)					1	

Intersection: 4: 19th Avenue & Hanford Armona Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	23	98	135	119
Average Queue (ft)	4	55	59	60
95th Queue (ft)	17	94	113	95
Link Distance (ft)	661			1729
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		245	245	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 19th Avenue & Cinnamon Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	154	184	199	348	160	294	72	332
Average Queue (ft)	53	115	115	125	45	154	42	94
95th Queue (ft)	131	176	193	275	103	248	74	186
Link Distance (ft)		2549		3232		1711		981
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		95		80	
Storage Blk Time (%)		14	25	3	3	25	0	10
Queuing Penalty (veh)		7	66	7	12	12	0	5

Intersection: 6: Hanford-Armona Road & SR 41 SB Off-Ramp

Movement	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	R	L	LTR
Maximum Queue (ft)	62	76	61	128	129	86
Average Queue (ft)	16	17	12	43	61	32
95th Queue (ft)	49	53	34	93	100	71
Link Distance (ft)	406	406	659		129	129
Upstream Blk Time (%)					0	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)				250		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: SR 41 NB Ramps & Hanford Armona Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	LR	R
Maximum Queue (ft)	194	202	67	174	189	173	155	157
Average Queue (ft)	108	99	19	121	16	46	111	81
95th Queue (ft)	165	171	47	173	73	102	157	137
Link Distance (ft)	659	659			189	189	139	139
Upstream Blk Time (%)				0	0	0	2	0
Queuing Penalty (veh)				0	0	0	4	1
Storage Bay Dist (ft)			250	200				
Storage Blk Time (%)				0	0			
Queuing Penalty (veh)				0	0			

## Appendix I: Signal Warrants



**Traffic Engineering, Inc.**

*Traffic Engineering, Transportation Planning, & Parking Solutions*

<http://www.JLBtraffic.com>

[info@JLBtraffic.com](mailto:info@JLBtraffic.com)

*1300 E. Shaw Ave., Ste. 103*

*Fresno, CA 93710*

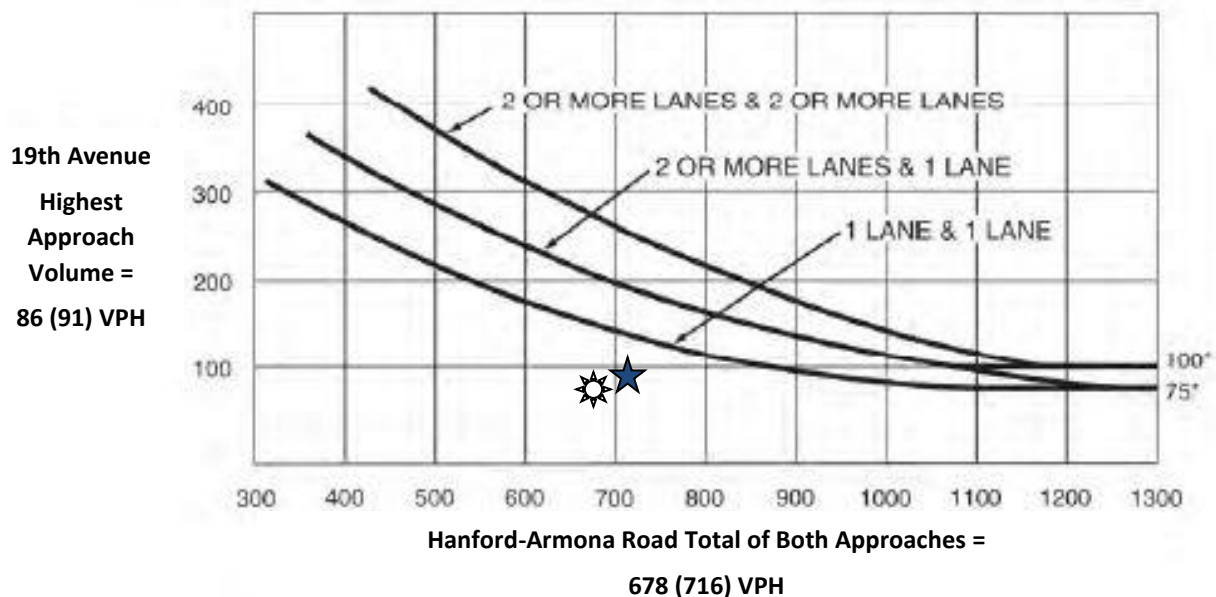
*(559) 570-8991*

*Page | I*

## Peak Hour Signal Warrant (Rural Areas)

Existing Traffic Conditions  
4. 19th Avenue / Hanford-Armona Road  
AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**  
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Not Met



PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)  
Chapter 4C: Traffic Control Signal Needs Studies  
Part 4: Highway Traffic Signals  
November 7, 2014



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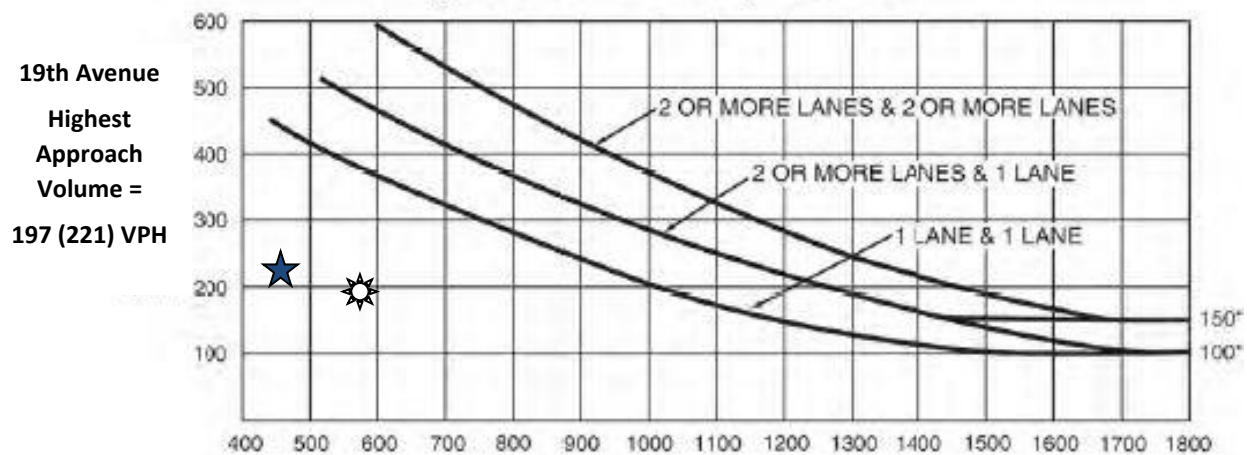
Fresno, CA 93710

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## Peak Hour Signal Warrant (Urban Areas)

Existing Traffic Conditions  
5. 19th Avenue / Cinnamon Drive  
AM (PM) Peak Hour

Figure 4C-3. Warrant 3, Peak Hour



Cinnamon Drive Total of Both Approaches =

577 (468) VPH

\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Not Met



PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)  
Chapter 4C: Traffic Control Signal Needs Studies  
Part 4: Highway Traffic Signals  
November 7, 2014



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## Peak Hour Signal Warrant (Rural Areas)

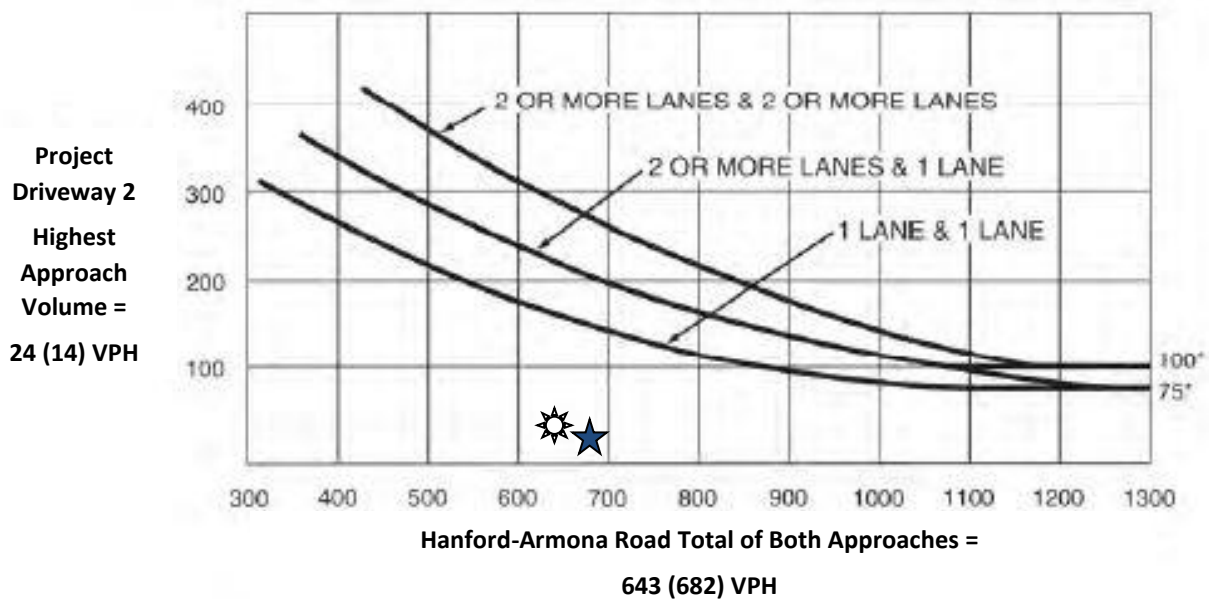
Existing plus Project Phase 1 Traffic Conditions

3. Project Driveway 2 / Hanford-Armona Road

AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Not Met



PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)

Chapter 4C: Traffic Control Signal Needs Studies

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## Peak Hour Signal Warrant (Rural Areas)

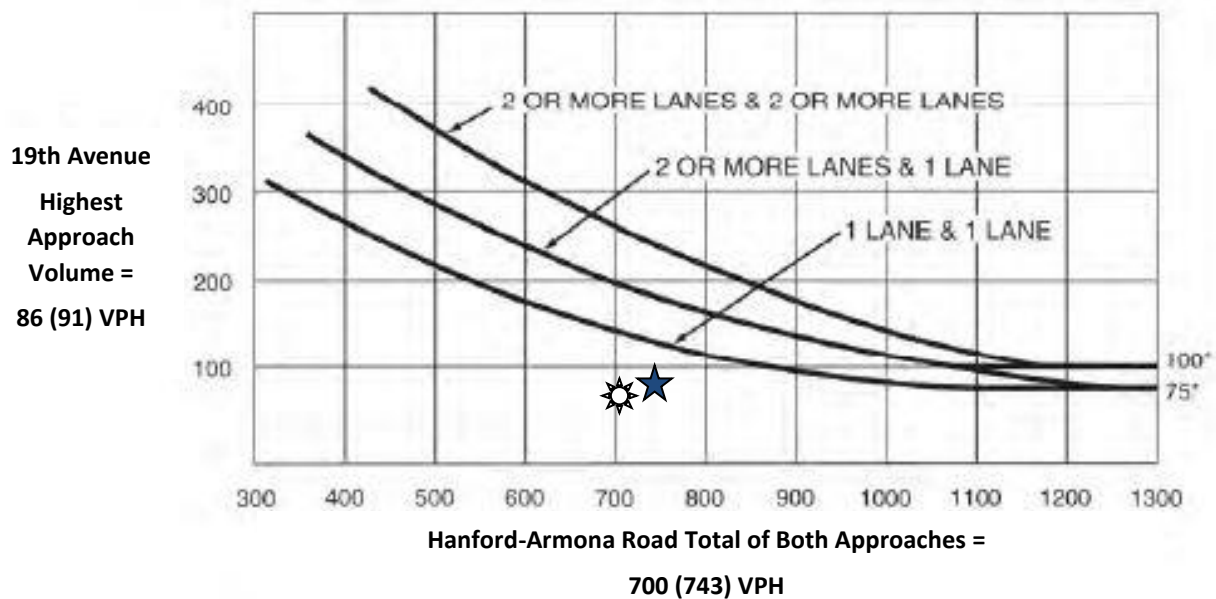
Existing plus Project Phase 1 Traffic Conditions

4. 19th Avenue / Hanford-Armona Road

AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Not Met



PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)

Chapter 4C: Traffic Control Signal Needs Studies

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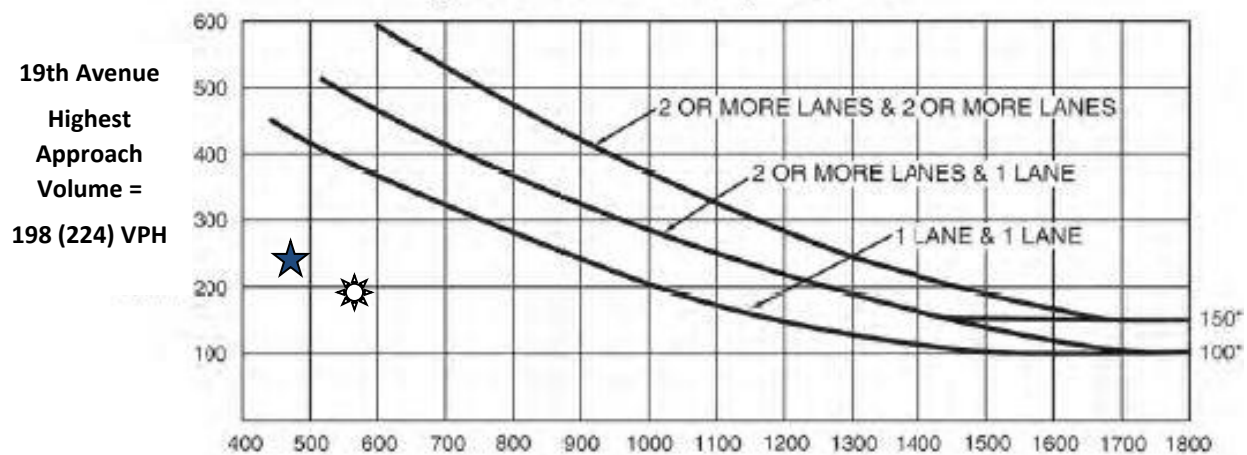
Fresno, CA 93710

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## Peak Hour Signal Warrant (Urban Areas)

Existing plus Project Phase 1 Traffic Conditions  
5. 19th Avenue / Cinnamon Drive  
AM (PM) Peak Hour

Figure 4C-3. Warrant 3, Peak Hour



Cinnamon Drive Total of Both Approaches =

586 (480) VPH

\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Not Met



PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)  
Chapter 4C: Traffic Control Signal Needs Studies  
Part 4: Highway Traffic Signals  
November 7, 2014



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## Peak Hour Signal Warrant (Rural Areas)

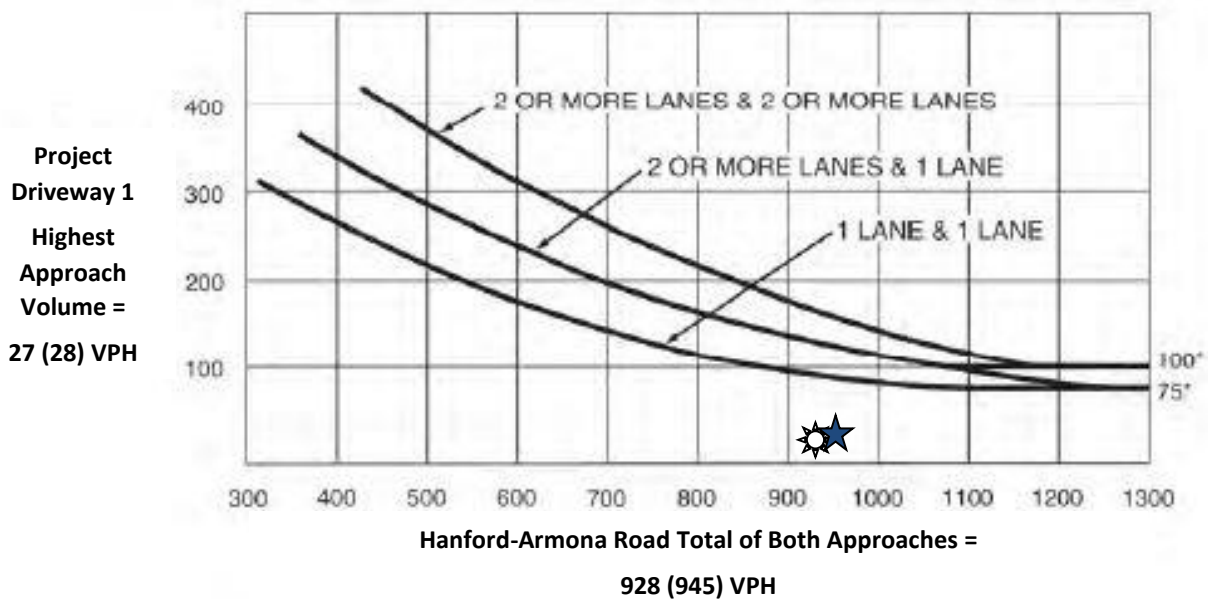
Existing plus Project Buildout Traffic Conditions

2. Project Driveway 1 / Hanford-Armona Road

AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Not Met



PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)

Chapter 4C: Traffic Control Signal Needs Studies

Part 4: Highway Traffic Signals

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## Peak Hour Signal Warrant (Rural Areas)

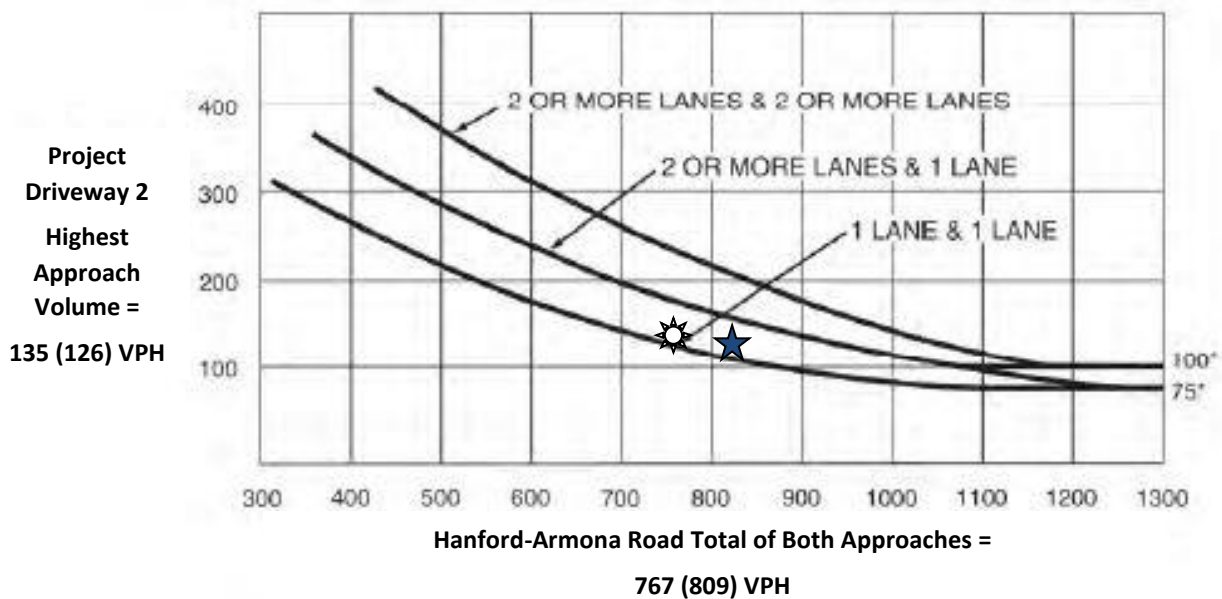
Existing plus Project Buildout Traffic Conditions

3. Project Driveway 2 / Hanford-Armona Road

AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Met



PM Peak Hour – Signal Warrant is Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)

Chapter 4C: Traffic Control Signal Needs Studies

Part 4: Highway Traffic Signals

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## Peak Hour Signal Warrant (Rural Areas)

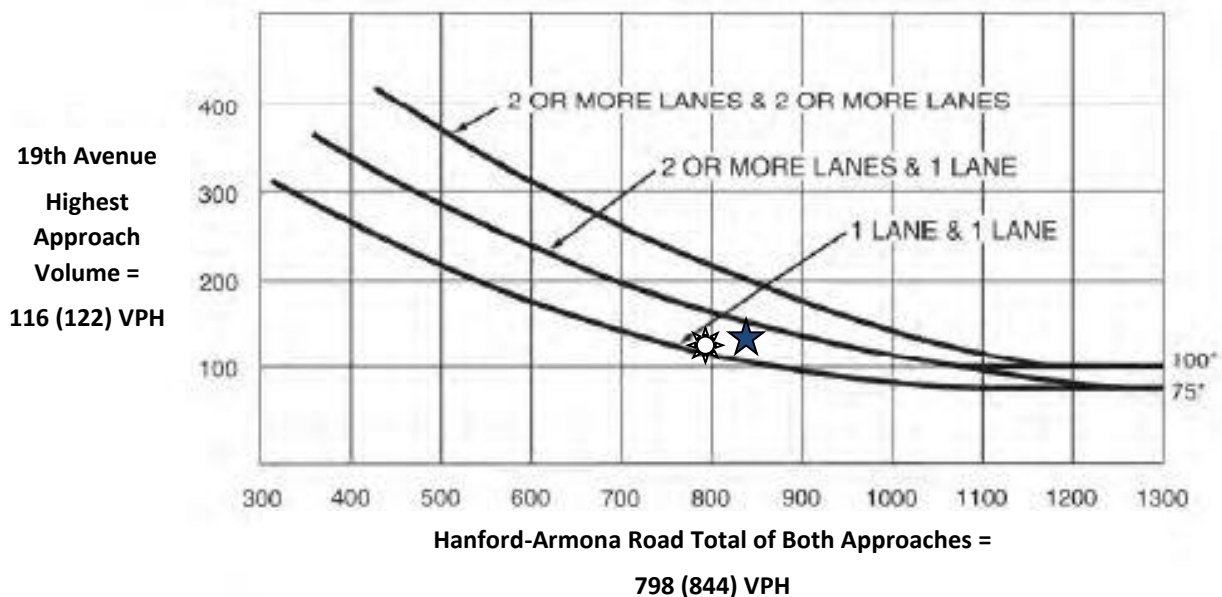
Existing plus Project Buildout Traffic Conditions

4. 19th Avenue / Hanford-Armona Road

AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Met



PM Peak Hour – Signal Warrant is Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)

Chapter 4C: Traffic Control Signal Needs Studies

Part 4: Highway Traffic Signals

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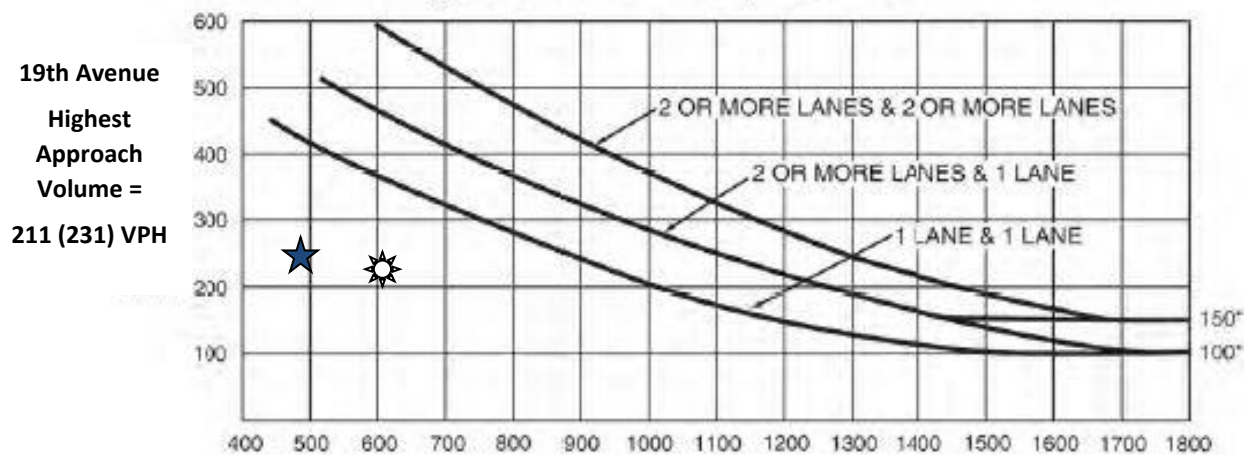
(559) 570-8991



## Peak Hour Signal Warrant (Urban Areas)

Existing plus Project Buildout Traffic Conditions  
5. 19th Avenue / Cinnamon Drive  
AM (PM) Peak Hour

Figure 4C-3. Warrant 3, Peak Hour



Cinnamon Drive Total of Both Approaches =

601 (495) VPH

\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Not Met



PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)  
Chapter 4C: Traffic Control Signal Needs Studies  
Part 4: Highway Traffic Signals  
November 7, 2014



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## Peak Hour Signal Warrant (Rural Areas)

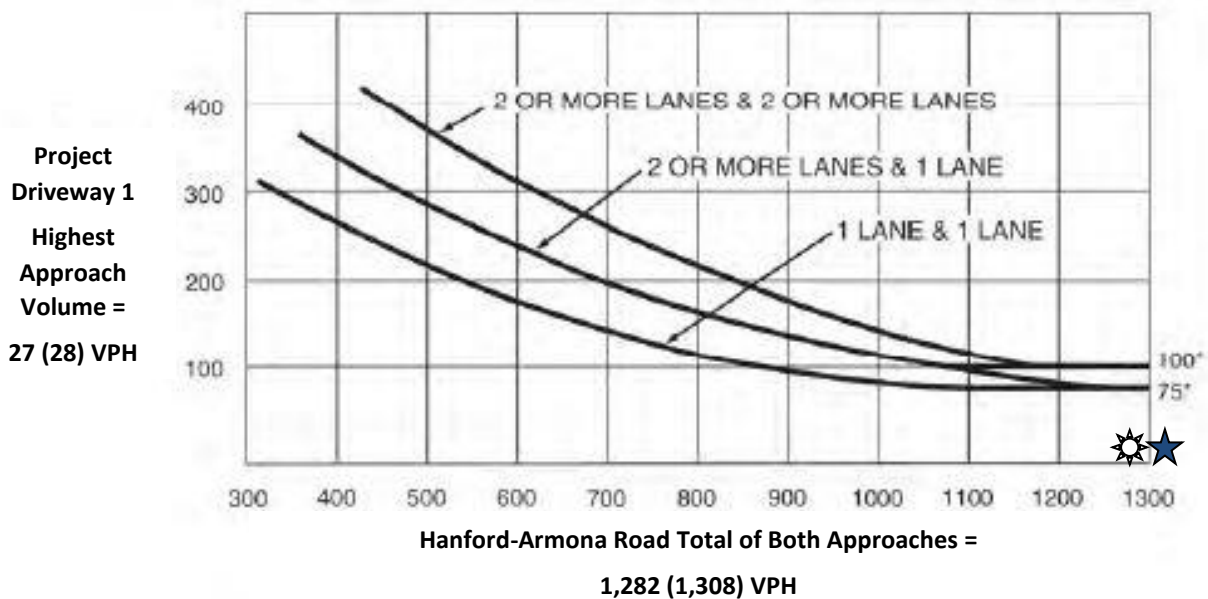
Cumulative Year 2040 plus Project Traffic Conditions

2. Project Driveway 1 / Hanford-Armona Road

AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Not Met



PM Peak Hour – Signal Warrant is Not Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)

Chapter 4C: Traffic Control Signal Needs Studies

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## Peak Hour Signal Warrant (Rural Areas)

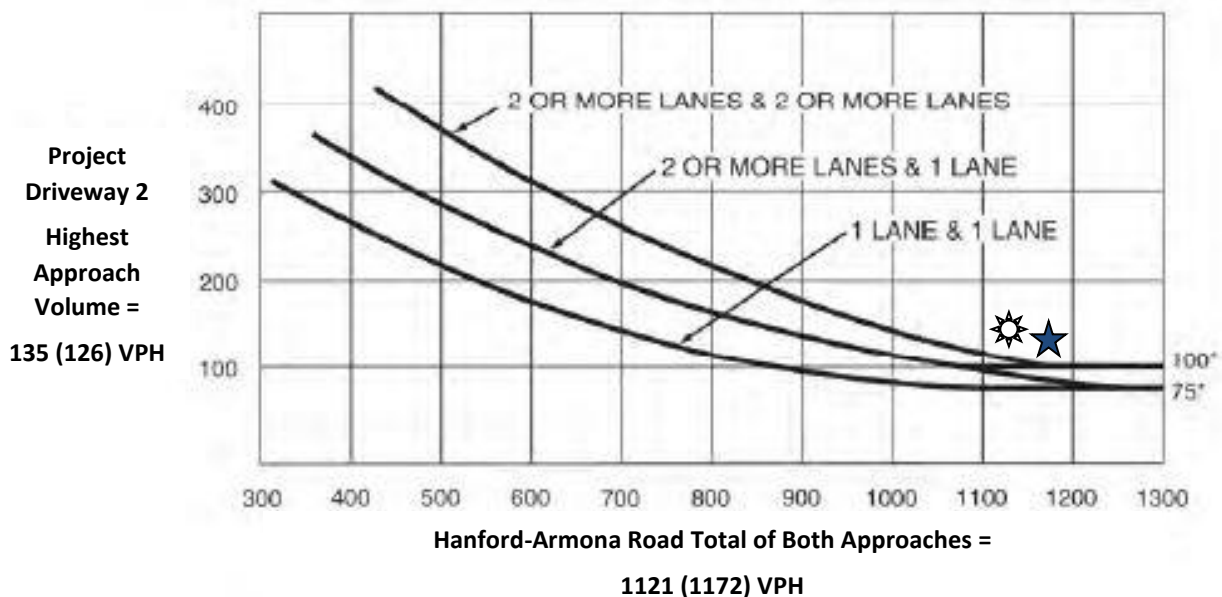
Cumulative Year 2040 plus Project Traffic Conditions

3. Project Driveway 2 / Hanford-Armona Road

AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Met



PM Peak Hour – Signal Warrant is Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)

Chapter 4C: Traffic Control Signal Needs Studies

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## Peak Hour Signal Warrant (Rural Areas)

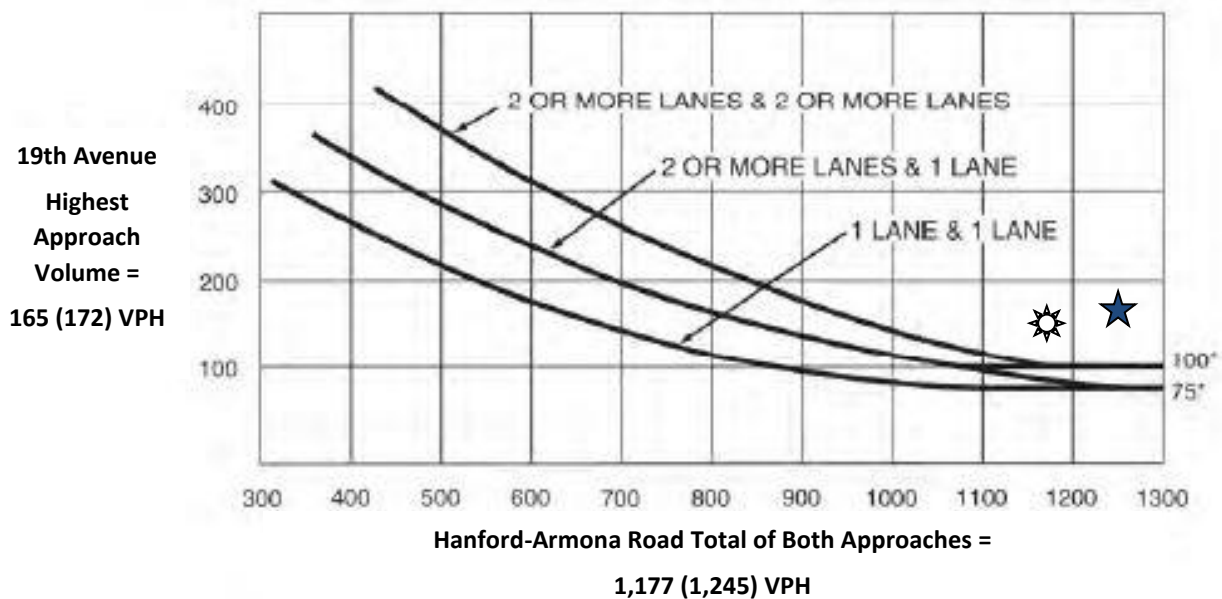
Cumulative Year 2040 plus Project Traffic Conditions

4. 19th Avenue / Hanford-Armona Road

AM (PM) Peak Hour

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



**AM Peak Hour – Signal Warrant is Met**



**PM Peak Hour – Signal Warrant is Met**

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)

Chapter 4C: Traffic Control Signal Needs Studies

Part 4: Highway Traffic Signals

November 7, 2014



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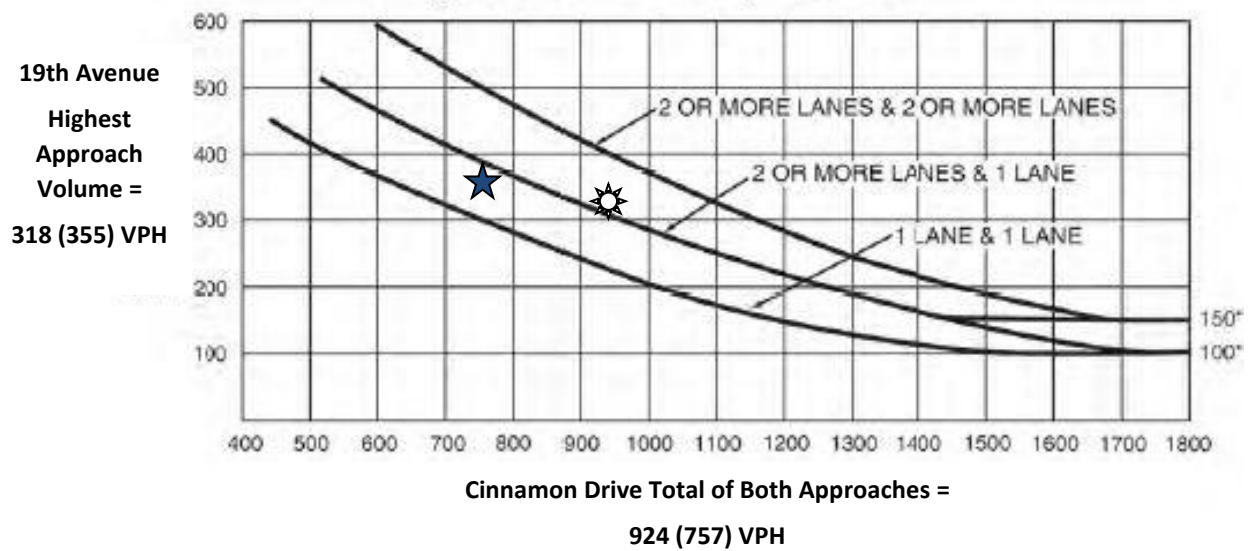
Fresno, CA 93710

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## Peak Hour Signal Warrant (Urban Areas)

Cumulative Year 2040 plus Project Traffic Conditions  
5. 19th Avenue / Cinnamon Drive  
AM (PM) Peak Hour

Figure 4C-3. Warrant 3, Peak Hour



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.



AM Peak Hour – Signal Warrant is Met



PM Peak Hour – Signal Warrant is Met

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)  
Chapter 4C: Traffic Control Signal Needs Studies  
Part 4: Highway Traffic Signals  
November 7, 2014



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1300 E. Shaw Ave., Ste. 103

Fresno, CA 93710

(559) 570-8991



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## Staff Report

**Item No: 4-2**

**To: Lemoore City Council**

**From: Steve Brandt, AICP**

**Date: October 11, 2018**

**Meeting Date: November 6, 2018**

**Subject: Consideration of Mitigated Negative Declaration and Disposition and Development Agreement between the City of Lemoore and KKAL, LP. :**  
A request by the City of Lemoore and KKAL, LP for the adoption of the Mitigated Negative Declaration (MND) and approval of the Disposition and Development Agreement (DDA) between the City of Lemoore and KKAL, LP for Development of Approximately 83.5 acres, located near the Northeast corner of State Route (SR) 41 and Idaho Avenue (APN 024-051-031)

### **Strategic Initiative:**

- |  |   |
|--|---|
| <input type="checkbox"/> Safe & Vibrant Community            | <input checked="" type="checkbox"/> Growing & Dynamic Economy |
| <input type="checkbox"/> Fiscally Sound Government           | <input type="checkbox"/> Operational Excellence               |
| <input type="checkbox"/> Community & Neighborhood Livability | <input type="checkbox"/> Not Applicable                       |

**Proposed Motion:** City staff recommends that the City Council adopt Resolution No. 2018-47 adopting the Mitigated Negative Declaration, and adopt Ordinance No. 2018-09 for the approval of the Disposition and Development Agreement between the City of Lemoore and KKAL, LP.

### **Subject/Discussion:**

The City of Lemoore owns real property located near the Northeast corner of State Route (SR) 41 and Idaho Avenue, consisting of approximately 83.5 acres. It is planned Light Industrial pursuant to the Lemoore 2030 General Plan. The City has attempted to find a developer willing to develop the property in order to promote economic growth in the community.

Since 2017, the City has been in discussion with KKAL, LP, regarding potential development on the site. The proposed DDA outlines the requirements of both parties, should the City Council approve the document.

*"In God We Trust"*

The proposed DDA would allow KKAL, LP to purchase the property for ten (10) dollars. In exchange, the developer will develop a manufacturing, distribution, and warehouse center consisting of approximately 1,025,000 square feet of building space, create approximately 1300 jobs, increase the property tax base, and provide secondary economic benefits to the City of Lemoore.

The project will be developed in phases; twelve (12) acres every two (2) years over six (6) phases. The City of Lemoore will be responsible for constructing the necessary infrastructure for the project; including water, sewer, storm water, and streets, curbs, and gutters.

City staff has been working with KKAL, LP to establish terms that are agreeable to both parties. The development of the property has the potential to create jobs in the community, stimulate economic growth through property tax revenues, and encourage interest from other developers for future projects.

The Mitigated Negative Declaration evaluated the proposed project under the DDA and concludes that the initial study identified potentially significant effects, but:

1. Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and initial study were released for public review avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
2. There is no substantial evidence, in light of the whole record before the agency, that the project as revised with the mitigation measures may have a significant effect on the environment.
3. In response to a letter received from the Santa Rosa Rancheria Tribe, Mitigation Measure MM CUL-2 requires the applicant to offer interested Tribes the opportunity to provide a Native American Monitor during ground disturbing activities during construction.

The DDA describes an alternative site plan approval process where the conceptual site plan and elevations are conceptually approved, and then the detailed site plans will be submitted and expedited when they are consistent with the conceptual site plan. The site plan, elevations, and parcel map attached to the DDA are conceptual at this point. They will be formally reviewed at a later date.

**Financial Consideration(s):** The City is selling the land for less than market value and constructing necessary infrastructure to the site with the goal of creating jobs in the community, stimulating economic growth through property tax revenues, and encouraging interest from other developers for future projects.

**Alternatives or Pros/Cons:**

**Pros:**

- Job creation
- Economic benefits through tax generation
- Potential stimulation of future growth

### Cons

- City funds to construct infrastructure
- Below market value sales price

### **Commission/Board Recommendation:**

The Lemoore Planning Commission has approved Resolution No. 2018-08, recommending adoption of the Mitigated Negative Declaration and approval of the DDA.

### **Staff Recommendation:**

City Staff recommends adoption of a resolution approving the Mitigated Negative Declaration and an ordinance adopting the DDA with KKAL, LP and the City of Lemoore for the development of approximately 83.5 acres into a manufacturing, warehousing, and distribution center.

#### **Attachments:**

- ☒ Resolution: 2018-47
- ☒ Ordinance: 2018-09
- ☐ Map
- ☐ Contract
- ☒ Other

List:

Disposition and Development Agreement  
Planning Commission Resolution 2018-08  
Mitigated Negative Declaration

#### **Review:**

- ☒ Asst. City Manager 10/29/18
- ☒ City Attorney 11/01/18
- ☒ City Clerk 11/02/18
- ☒ City Manger 10/31/18
- ☒ Finance 10/29/18

#### **Date:**

**RESOLUTION NO. 2018-47**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LEMOORE  
APPROVING A MITIGATED NEGATIVE DECLARATION FOR A DISPOSITION  
AND DEVELOPMENT AGREEMENT BETWEEN THE CITY OF LEMOORE AND  
KKAL, LP, ON PROPERTY LOCATED ON THE NORTHEAST CORNER OF  
HIGHWAY 41 AND IDAHO AVENUE IN THE CITY OF LEMOORE**

**WHEREAS**, KKAL, LP has requested a Disposition and Development Agreement (DDA) between KKAL, LP and the City of Lemoore on property owned by the City of Lemoore consisting of approximately 83.5 acres located within the jurisdictional boundaries of the City of Lemoore (APN 024-051-031); and

**WHEREAS**, the proposed site is vacant; and

**WHEREAS**, the zoning on the parcel is ML (Light Industrial); and

**WHEREAS**, the Initial Study and Mitigated Negative Declaration were made available for public comment for 20-days, beginning on August 1, 2018 and ending August 21, 2018; and

**WHEREAS**, a Notice of Intent to Adopt the Mitigated Negative Declaration was published in the Hanford Sentinel, in compliance with the California Environmental Quality Act (CEQA); and

**WHEREAS**, as Lead Agency under the California Environmental Quality Act (CEQA), the City staff reviewed the project to determine whether it could have a significant effect on the environment because of its development. In accordance with CEQA Guidelines Section 15382, “[s]ignificant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An Initial Study was prepared. The Initial Study found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project in the form of mitigations have been made by or agreed to by the project proponent. A Mitigated Negative Declaration was prepared; and

**WHEREAS**, the DDA will be acted upon by ordinance; and

**WHEREAS**, the public hearing for this item was duly noticed for the Planning Commission’s October 8, 2018, meeting and the commission recommended that the City Council adopt the Mitigated Negative Declaration.

**NOW THEREFORE, BE IT RESOLVED** that the City Council of the City of Lemoore hereby makes the following findings regarding the proposed Mitigated Negative Declaration:

1. The Initial Study and Mitigated Negative Declaration identified that the project would result in less than significant or no impacts after mitigation have been included in the

project for all environmental issue areas including: Aesthetics/Shadows, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Construction Effects, Geology/Soils, Greenhouse Gas Emissions, Hazards/Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Neighborhood Effects, Population and Housing, Public Services, Transportation/Circulation, Utilities and Mandatory Findings of Significance.

2. The City Council finds, based on the whole record before it, including the Initial Study and Mitigated Negative Declaration and any comments received, that there is no substantial evidence that the project will have a significant effect on the environment with the application of the mitigation measures set forth in the Mitigated Negative Declaration, and that the Mitigated Negative Declaration reflects the City's independent judgement and analysis.

**BE IT FURTHER RESOLVED** that the City Council of the City of Lemoore hereby adopt the Mitigated Negative Declaration.

**PASSED AND ADOPTED** by the City Council of the City of Lemoore at a Regular Meeting held on 6<sup>th</sup> day of November 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

APPROVED:

---

Mary J. Venegas  
City Clerk

---

Ray Madrigal  
Mayor



**ORDINANCE NO. 2018-09**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LEMOORE  
APPROVING A CITY AGREEMENT, A DISPOSITION AND DEVELOPMENT  
AGREEMENT BETWEEN THE CITY OF LEMOORE AND KKAL, LP**

**THE CITY COUNCIL OF THE CITY OF LEMOORE DOES ORDAIN AS FOLLOWS:**

**Section 1. Incorporation of Agreement.**

This ordinance incorporates the establishment of the Disposition and Development Agreement (“Development Agreement”) between the City and KKAL, LP (“Developer”), a copy of which is attached to this ordinance as **Exhibit A**.

**Section 2. Hearing before the Planning Commission.**

On September 10, 2018, in accordance with Government Code Section 65867, the Planning Commission conducted a noticed public hearing on an application to approve an Initial Study/Mitigated Negative Declaration and a Development Agreement. During the hearing, the Planning Commission received and considered evidence and testimony. After the hearing concluded, the Planning Commission forwarded to the City Council a recommendation to approve the Initial Study/Mitigated Negative Declaration and proposed Agreement.

**Section 3. Hearing before the City Council; Findings.**

On November 6, 2018, in accordance with Government Code Section 65867, the City Council conducted a noticed public hearing on the application to establish a Development Agreement. During the hearing, the City Council received and considered evidence and testimony concerning the proposed Initial Study/Mitigated Negative Declaration and Agreement. Based on the information in the application and the evidence and testimony received at the hearing, the City Council approves the Initial Study/Mitigated Negative Declaration and finds that the proposed Development Agreement:

- a) Is consistent with the objectives, policies, and general land uses specified in the general plan and any applicable specific plans;
- b) Is compatible and in conformity with public convenience, general welfare, and good land use and zoning practice;
- c) Is not detrimental to the health, safety, and general welfare of the city;
- d) Does not adversely affecting the orderly development of property or the preservation of property values.
- e) Is in the best interest of City and that the public health, safety, and welfare will be served by entering into this Agreement.
- f) Will contribute to the economic growth of City.

g) Will facilitate development of the property subject to the Development Agreement, which should be encouraged in order to meet important economic, social, environmental, or planning goals of the specific community plan.

h) Without the Development Agreement, Developer would be unlikely to proceed with development of property subject to the Development Agreement in the manner proposed.

i) Requires Developer to incur substantial costs to provide public improvements, facilities, or services, including but not limited to, the mitigation identified in the Initial Study/Mitigated Negative Declaration, from which the general public will benefit, including job creation, enhanced tax revenue and diversification of the city economic base.

#### **Section 4. Approval and Authorization.**

The City Council hereby approves the Initial Study/Mitigated Negative Declaration and the Development Agreement. The City Council hereby authorizes the Mayor to sign on the City's behalf, on or after the effective date of this ordinance, the Development Agreement.

The foregoing Ordinance was introduced at a Regular Meeting of the City Council of the City of Lemoore held on the 6<sup>th</sup> day of November 2018, by the following vote:

AYES:

NOES:

ABSTAINING:

ABSENT:

ATTEST:

APPROVED:

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Mary J. Venegas, City Clerk

---

Ray Madrigal, Mayor

**EXHIBIT A:** Disposition and Development Agreement

*Recorded By and For the Benefit of,  
And When Recorded Return to:*

CITY OF LEMOORE  
119 Fox Street  
Lemoore, California 93245  
ATTN: City Clerk

---

(Space Above for Recorder's Use)

**DISPOSITION AND DEVELOPMENT AGREEMENT  
AND JOINT ESCROW INSTRUCTIONS**

**LEMOORE, CA**

**APN # 024-051-031**

**CITY OF LEMOORE**  
a California municipal corporation

**AND**

KKAL, LP, a California limited partnership ("Developer")

**NOTICE OF REVERSIONARY INTEREST**

PURSUANT TO ARTICLE 5 OF THIS DISPOSITION AND DEVELOPMENT AGREEMENT AND JOINT ESCROW INSTRUCTIONS, IF DEVELOPER, OR ITS SUCCESSORS AND ASSIGNS, FAILS TO TIMELY COMPLY WITH THE TERMS AND CONDITIONS OF THIS AGREEMENT THE PROPERTY WILL REVERT BACK TO CITY.

**DISPOSITION AND DEVELOPMENT AGREEMENT  
AND JOINT ESCROW INSTRUCTIONS**

This Disposition and Development Agreement and Joint Escrow Instructions (“Agreement”) dated \_\_\_\_\_ for identification purposes (“Effective Date” is defined herein) is entered into between the City of Lemoore, a California municipal corporation (“City”) and KKAL, LP, a California limited partnership (“Developer”), with respect to the following Recitals, which are a substantive part of this Agreement:

**RECITALS**

A. City owns real property near the North East Corner of State Route 41 and Idaho Avenue, consisting of approximately 84.22 acres, planned Light Industrial pursuant to the Lemoore 2030 General Plan; and zoned consistent with the designated land use (APN 024-051-031) legally described and depicted in **Attachment No. 1** (“Property”).

B. Developer and City intend to enter into this Agreement to establish the terms on which City will sell the Property to Developer and Developer will acquire from City and construct a manufacturing, distribution and warehouse center consisting of approximately 1,025,000 sq. ft. of building space according to schedule imposed herein; all in consideration of the City constructing the requisite right of way and infrastructure to accommodate the industrial development (“City Improvements”) and selling the Property to Developer for the sum disclosed to the City Council in Closed Session (“Project”).

C. Completion of the Project will provide public benefit including; a significant increase in the local property tax base, creation of an estimated 1,366 new jobs and related secondary economic benefits to the City.

D. Developer is an experienced developer or has otherwise contracted with experienced developers, contractors, architects, and other professionals for the purposes of developing the Property. City desires to sell the Property to Developer for the purposes set forth in these Recitals based upon Developer’s proposal, as further described in this Agreement.

E. Developer has submitted Developer’s Preliminary Site Plan (“Preliminary Site Plan”) and Elevations (“Preliminary Elevations”) (attached hereto as **Attachments No. 2** and **No. 3**) which has been reviewed and preliminarily approved by City staff; which, upon approval of this Agreement, shall become the Approved Preliminary Site Plan and Approved Elevations.

F. As provided herein, concurrently with City’s construction of City’s Improvements, Developer will process a Parcel Map (described in Article 4) for City approval, which will subdivide the Property into legal parcels, including a separate parcel to be dedicated to the City for City Improvements.

G. Before commencement of construction of the Developer Improvements (Article 3 Section A) or other related works of improvement upon or adjacent to the Property, Developer shall, at its own expense, secure or cause to be secured any and all necessary governmental approvals, including, but not limited to the approval of Parcel Specific Site Plans, Improvement Plans, building permits, and grading permits.

H. Developer has submitted evidence, all to the satisfaction of the City that Developer has the necessary experience and financial wherewithal to complete the Project in the manner provided for herein.

I. Developer has provided the City with evidence of adequate insurance as required by the City.

J. To strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the California Legislature adopted Government Code Section 65864 et seq., hereinafter referred to as “Development Agreement Statute,” which authorizes any city, county, or city and county to enter into a development agreement with an applicant for a development project establishing certain development rights in the property which is the subject of the development project application.

K. In accordance with the Development Agreement Statute, City has adopted Chapter 9-2B-21 of the Municipal Code (“Enabling Ordinance”), incorporated herein by reference, establishing rules, regulations, procedures, and requirements, including fees, for consideration of development agreements.

L. The Planning Commission of the City of Lemoore, serving as City’s planning agency for the purpose of development agreements, reviewed this Agreement pursuant to Government Code Section 65867 and Chapter 9-2B-21 of the Municipal Code and recommended approval of this Agreement to the City Council.

M. The Application for this Agreement was considered by the City at a duly noticed public hearing in accordance with the Development Agreement Statute and the City Enabling Ordinance.

N. Pursuant to Chapter 9-2B-21 of the Lemoore Municipal Code, the City Council finds the Project and this Agreement are:

- (1) Consistent with the objectives, policies, and general land uses specified in the general plan and any applicable specific plans;
- (2) Compatible and in conformity with public convenience, general welfare, and good land use and zoning practice;
- (3) Not detrimental to the health, safety, and general welfare of the city;
- (4) Not adversely affecting the orderly development of property or the preservation of property values.
- (5) In the best interest of City and that the public health, safety, and welfare will be served by entering into this Agreement.
- (6) Will contribute to the economic growth of City.

O. City further finds the construction, completion and operation of the Project, pursuant to the terms of this Agreement, are in the vital and best interest of the City and the health, safety, and welfare of its residents, and will serve the public purpose of economic development in City and that due to the large scope of the Project, estimated length of time for full Project build out, and unforeseen future market conditions, Developer desires this Agreement, which will impact multiple aspects of the Project, in order to ensure the Project is financially viable and marketable now and in the future.

P. In order to ensure certain dedications, commitments, standards, and to facilitate economic growth and the successful completion and full build out of the Project, City is willing to enter into this Agreement.

Q. All procedures of the California Environmental Quality Act (“CEQA”) have been met with respect to the Project and this Agreement by the approval of City Council Resolution No. 2018-47 adopted on November 6, 2018, which certified a Mitigated Negative Declaration.

**NOW, THEREFORE**, City and Developer agree as follows:

**ARTICLE 1  
CONVEYANCE OF PROPERTY**

A. Disposition of the Property. Developer agrees to purchase the Property from City, and City agrees to sell the Property to Developer, in accordance with and subject to all of the terms, covenants, and conditions of this Agreement, for the “Purchase Price” set forth below. The conveyance of the Property shall be by “Grant Deed” substantially in the form of **Attachment No. 4**.

B. Purchase Price and Deposit. The purchase price for the Property shall be \$10.00 (“Purchase Price”). The parties agree that the Purchase Price constitutes the fair market value of the Property and the rights conveyed in consideration of the Development benefits provided by Developer to the public under this Agreement. Upon opening of Escrow, Developer shall deposit the Purchase Price in Escrow (“Developer Deposit”). The Developer Deposit shall not be refundable to Developer.

C. Escrow. Within three (3) days after the Effective Date of this Agreement by both parties, the parties shall open escrow (“Escrow”) with Old Republic Title Company in its Fresno office, or another escrow company mutually satisfactory to both parties (“Escrow Agent”).

D. Costs of Escrow. Developer shall be solely responsible for all costs incurred during Escrow, including but not limited to: (1) the premium for the Title Policy as set forth in Article 1.K. hereof; (2) the documentary transfer taxes due, if any, with respect to the conveyance of the Property; and (3) all other usual fees, charges, and costs which arise from Escrow.

E. Escrow Instructions. This Agreement constitutes the joint escrow instructions of Developer and City, and Escrow Agent to whom these instructions are delivered is hereby empowered to act under this Agreement. The parties hereto agree to do all acts reasonably necessary to close this Escrow in the shortest possible time.

If in the opinion of either party it is necessary or convenient in order to accomplish the Closing, such party may require that the parties sign supplemental escrow instructions; provided that if there is any inconsistency between this Agreement and the supplemental escrow instructions, then the provisions of this Agreement shall control. The parties agree to execute such other and further documents as may be reasonably necessary, helpful or appropriate to effectuate the provisions of this Agreement.

F. Authority of Escrow Agent. Escrow Agent is authorized to, and shall:

(1) Pay and charge Developer for the premium of the Title Policy and any endorsements thereto as set forth in Article 1.K. and any amount necessary to place title in the condition necessary to satisfy Article 1.J. of this Agreement.

(2) Pay and charge Developer for any escrow fees, charges, and costs payable under Article 1.D. of this Agreement.

(3) Disburse funds and deliver and record the Grant Deed when both the Developer Conditions of Closing and the City Conditions of Closing have been fulfilled or waived by Developer and City.

(4) Do such other actions as necessary to fulfill its obligations under this Agreement.

(5) Do such other actions as necessary to comply with any federal, state, or local reporting requirements, including directing City and Developer to execute any required forms, statements or certificates.

G. Closing. This transaction shall close escrow (“Closing”) within forty-five (45) days of the filing of the Notice of Determination pursuant to CEQA, provided all of City and Developer Conditions of Closing as set forth in Article 1.L. of this Agreement are met, but in no event later than one hundred and eighty (180) days after Effective Date (“Closing Deadline”), unless otherwise extended by written agreement of the parties. Closing shall mean the time and day the Grant Deed is filed for record with the Kings County Recorder.

H. Termination. If Escrow is not in condition to close by the Closing Deadline, then either party which has fully performed under this Agreement may, in writing, demand termination of the Escrow. Under these circumstances, Escrow Agent shall return all money, papers and documents deposited in Escrow to the respective depositing party, except that Developer Deposit shall be delivered to City in accordance with Article 1.B. above unless otherwise provided in Article 1.B. If either party makes a written demand for termination of Escrow, Escrow shall not terminate until ten (10) days after Escrow Agent shall have delivered copies of such demand to the other party at the address shown in this Agreement. If any objections are raised within that ten (10) day period, Escrow Agent is authorized to hold all money, papers, and documents until instructed by a court of competent jurisdiction or by mutual written instructions of the parties. Termination of Escrow shall be without prejudice as to whatever legal rights either party may have against the other arising from this Agreement. If no demands are made, Escrow Agent shall proceed with Closing as soon as possible.

I. Closing Procedure. Escrow Agent shall close Escrow as follows:

(1) Record the Grant Deed with instructions for the Kings County Recorder to deliver the Grant Deed to Developer.

(2) Instruct the Title Company to deliver the Title Policy to Developer and a copy of the Title Policy to City.

(3) File and deliver any informational reports, forms, statements, and certificates as required by federal, state or local law.

(4) Forward to both Developer and City a separate accounting of all funds received and disbursed for each party and copies of all executed and recorded or filed documents deposited into Escrow, with such recording and filing date and information endorsed thereon.

J. Review of Title. City shall cause Old Republic Title Company, or another title company mutually agreeable to both parties (“Title Company”), to deliver to Developer a standard preliminary title report (“Title Report”) with respect to title to the Property, together with legible copies of the documents underlying the exceptions (“Exceptions”) set forth in the Title Report, within fifteen (15) days after the Escrow is opened. Developer shall have the right to reasonably approve or disapprove the Exceptions; provided, however, that Developer hereby approves the following Exceptions:

(1) Property interests held by a public body or public bodies, including without limitation easements, franchises, licenses, or other property interests of the public body or public bodies, on the Property and/or within the public rights-of-way around the perimeter of the Property.

(2) The lien of any non-delinquent property taxes and assessments (to be prorated at

Closing).

(3) Any incidental easements or other matters affecting title which do not preclude Developer's use of the Property as proposed herein.

(4) Such other exceptions to title as may hereafter be mutually approved by City and Developer.

Developer shall have forty-five (45) days from the date of its receipt of the Title Report to give written notice to City and Escrow Agent of Developer's approval or disapproval of any of the Exceptions. Developer's failure to give written disapproval of the Title Report within such time limit shall be deemed approval of the Title Report. If Developer notifies City of its disapproval of any Exceptions in the Title Report, City shall have the right, but not the obligation, to remove any disapproved Exceptions within fifteen (15) days after receiving written notice of the Developer's disapproval or provide assurances satisfactory to Developer that such Exception(s) will be removed on or before Closing. If City cannot or does not elect to remove any of the disapproved Exceptions within that period, Developer shall have fifteen (15) days after the expiration of the fifteen (15) day period to either give City written notice that Developer elects to proceed with purchase of the Property subject to the previously disapproved Exceptions or to give City written notice that Developer elects to terminate this Agreement. The Exceptions to title approved by Developer as provided herein shall hereinafter be referred to as the "Condition of Title."

K. Title Insurance. Upon recordation of the Grant Deed, the Title Company shall issue to Developer a California Land Title Association (CLTA) policy of title insurance ("Title Policy"), together with such endorsements as are reasonably requested by Developer, issued by the Title Company insuring that the title to the Property is vested in Developer in the condition required by Article 1.J. of this Agreement. The Title Policy shall be for the amount of \$2,105,500. [which shall not be less than the current value of the Property]. The Title Company shall provide City with a copy of the Title Policy. Developer shall be responsible for the cost of providing the Title Policy and any additional endorsements Developer desires.

L. Conditions of Closing. Closing is conditioned upon satisfaction of the following terms and conditions within the times designated below.

(1) City's Conditions of Closing. City's obligation to proceed with Closing is subject to the fulfillment by Developer or waiver by City of each and all of the conditions precedent (a) through (h), inclusive, described below ("City Conditions of Closing"), which are solely for the benefit of City, and which shall be fulfilled or waived by the time periods provided for herein:

a. City Council Approval. Prior to City's obligation to sell the Property to Developer, the City Council shall have approved this Agreement and authorized the City Manager to enter into and execute this Agreement on behalf of the City.

b. No Default. Prior to the Close of Escrow, Developer shall not be in default in any of its obligations under the terms of this Agreement and all representations and warranties of Developer contained herein shall be true and correct in all material respects.

c. Execution of Documents. City shall have executed the Grant Deed and any other documents required hereunder and delivered such documents into Escrow.

d. Payment of Funds. Prior to Closing, Developer shall have deposited all required costs of Closing into Escrow in accordance with Articles 1.B. and 1.D. hereof.



(2) Developer's Conditions of Closing. Developer's obligation to proceed with Closing of the purchase of the Property is subject to the fulfillment by City or waiver by Developer of each and all of the conditions precedent (a) through (e), inclusive, described below ("Developer Conditions of Closing"), which are solely for the benefit of Developer, and which shall be fulfilled or waived by the time periods provided for herein:

a. No Default. Prior to the Close of Escrow, City shall not be in default in any of its obligations under the terms of this Agreement and all representations and warranties of City contained herein shall be true and correct in all material respects.

b. Execution of Documents. City shall have executed the Grant Deed and any other documents required hereunder and delivered such documents into Escrow.

c. Review and Approval of Title. Developer shall have reviewed and approved the condition of title of the Property, as provided in Article 1.J. hereof.

d. Title Policy. The Title Company shall, upon payment by Developer of Title Company's regularly scheduled premium, have agreed to provide to Developer the Title Policy for the Property upon Close of Escrow, in accordance with Article 1.K. hereof.

M. Representations and Warranties.

(1) City Representations. City represents and warrants to Developer as follows:

a. Authority. City has the full right, power and lawful authority to acquire, grant, sell and convey the Property as provided herein, and the execution, performance and delivery of this Agreement by City has been fully authorized by all requisite actions on the part of City.

b. FIRPTA. City is not a "foreign person" within the parameters of the Foreign Investment in Real Property Act of 1980 ("FIRPTA") or any similar state statute, or is exempt from the provisions of FIRPTA or any similar state statute, or that City has complied and will comply with all the requirements under FIRPTA or any similar state statute.

c. No Conflict. To the best of City's knowledge, City's execution, delivery and performance of its obligations under this Agreement will not constitute a default or a breach under any contract, agreement or order to which City is a party or by which it is bound.

d. Litigation. To the best of City's knowledge, there are no actions, suits, material claims, legal proceedings or any other proceedings affecting the Property, or any portion thereof, at law or in equity, before any court or governmental agency, domestic or foreign.

e. Disclosure. City hereby represents and warrants that it has no actual knowledge, and has not received any notice or communication from any government agency having jurisdiction over the Property, notifying such party of the presence of surface or subsurface zone Hazardous Materials in, on, or under the Property, or any portion thereof. "Actual knowledge," as used herein, shall not impose a duty of investigation, and shall be limited to the actual knowledge of current City staff and its Councilmembers, City Manager, department heads and employees.

Until Closing, City shall, upon learning of any material fact or condition that would cause

any of the warranties and representations in this Article not to be true as of Closing, immediately give written notice of such fact or condition to Developer. Such exception(s) to a representation shall not be deemed a breach by City hereunder but shall constitute an exception which Developer shall have a right to approve or disapprove if such exception would have an effect on the value and/or operation of the Property. If Developer elects to close Escrow following disclosure of such information, City's representations and warranties contained herein shall be deemed to have been made as of Closing, subject to such exception(s). If, following the disclosure of such information, Developer elects to not close Escrow, then this Agreement and Escrow shall automatically terminate, and neither party shall have any further rights, obligations or liabilities hereunder. Under these circumstances the Developer Deposit and any accrued interest shall be returned to Developer.

All of the representations and warranties set forth in this Article are made with the acknowledgment that they are material, and with the intention that Developer shall rely upon them as inducements to enter into this Agreement and to perform its obligations hereunder and to close the transactions contemplated herein. The representations and warranties contained in this Article shall each survive the execution of this Agreement and Closing.

(2) Developer Representations. Developer represents and warrants to City as follows:

a. Authority. Developer has the full right, power and lawful authority to purchase and accept the conveyance of the Property, or any portion thereof, and undertake all obligations as provided herein and the execution, performance and delivery of this Agreement by Developer has been fully authorized by all requisite actions on the part of Developer.

b. Experience. Developer is an experienced developer and operator of commercial properties, or has otherwise contracted with experienced commercial developers, contractors, architects, and other professionals for the purposes of developing the Property.

c. No Conflict. To the best of Developer's knowledge, Developer's execution, delivery and performance of its obligations under this Agreement will not constitute a default or a breach under any contract, agreement or order to which Developer is a party or by which it is bound.

d. No Developer Bankruptcy. Developer is not the subject of a bankruptcy or other insolvency proceeding.

e. FIRPTA. Developer is not a "foreign person" within the parameters of FIRPTA or any similar state statute or is exempt from the provisions of FIRPTA or any similar state statute, or Developer has complied and will comply with all the requirements under FIRPTA or any similar state statute.

f. Deliveries. All documents, instruments and other information delivered by Developer to City pursuant to this Agreement are, to the best of Developer's knowledge, true, correct and complete.

g. Commissions. To the best of the Developer's knowledge, there are no broker's commissions or finder's fees payable in connection with the Property.

h. No Further Warranties As To Property; Release of City. Notwithstanding any provisions of this Agreement to the contrary, the conveyance of all or any portion of the Property shall be conveyed to the Developer in an "AS IS" condition, with no warranty, express or implied by City, as to the condition of improvements on the Property, the soil, its geology, the presence of known or unknown

faults or Hazardous Materials. Any soils and environmental reports relating to the Property that City knows to be in its possession shall be provided to Developer.

i. Developer Precautions After Closing. Upon Closing, Developer shall take all necessary precautions to prevent the release into the environment of any Hazardous Materials which are located in, on or under the Property. Such precautions shall include compliance with all governmental requirements with respect to Hazardous Materials. In addition, Developer shall install and utilize such equipment and implement and adhere to such procedures as are consistent with commercially reasonable standards as respects the disclosure, storage, use, removal and disposal of Hazardous Materials.

j. Hazardous Materials Definition. For purposes of this Article, Hazardous Materials means any substance, material, or waste which is or becomes defined and is regulated as hazardous by any governmental authority, the State of California, or the United States government, but shall not include commercially reasonable amounts of such materials in the ordinary course of the development and operation of the Property which are used and stored in accordance with all applicable environmental laws, ordinances and regulations.

Until Closing, the Developer shall, upon learning of any material fact or condition which would cause any of the warranties and representations in this Article not to be true as of the Closing, immediately give written notice of such fact or condition to City. Such exception(s) to a representation shall not be deemed a breach by Developer hereunder but shall constitute an exception which City shall have a right to approve or disapprove if such exception would have an effect on the value and/or operation of the Property. If City elects to close Escrow following disclosure of such information, Developer's representations and warranties contained herein shall be deemed to have been made as of Closing, subject to such exception(s). If, following the disclosure of such information, City elects to not close Escrow, then this Agreement and Escrow shall automatically terminate, and neither party shall have any further rights, obligations or liabilities hereunder.

All of the representations and warranties set forth in this Article are made with the acknowledgment that they are material, and with the intention that City shall rely upon them as inducements to enter into this Agreement and to perform its obligations hereunder and to close the transactions contemplated herein. The representations and warranties contained in this Article shall each survive the execution of this Agreement and Closing.

N. Developer Indemnity. Upon Closing, Developer agrees to indemnify, defend and hold City, and its officers, agents, employees, and volunteers, harmless from and against any claim, action, suit, proceeding, loss, cost, damage, liability, deficiency, fine, penalty, punitive damage, or expense (including, without limitation, attorneys' fees), resulting from, arising out of, or based upon: (a) the presence, release, use, generation, discharge, storage or disposal of any Hazardous Materials on, under, in or about, or the transportation of any such Hazardous Materials to or from, the Property which occurs after Closing and is caused, directly or indirectly by the activities of Developer, including, but not limited to Developer's agents, invitees, contractors or subcontractors; or (b) the violation, or alleged violation, of any statute, ordinance, order, rule, regulation, permit, judgment or license relating to the use, generation, release, discharge, storage, disposal or transportation of Hazardous Materials on, under, in or about, to or from, the Property which occurs after Closing and is caused, directly or indirectly by the activities of Developer, including, but not limited to Developer's agents, invitees, contractors or subcontractors. For avoidance of doubt, Developer shall be responsible for and indemnify the City, as provided herein for occurrences after Closing, even in the event that the City reacquires all or a portion of the Property pursuant to the reversionary procedures outlined herein. This indemnity shall include, without limitation, any damage, liability, fine, penalty, parallel indemnity after closing cost or expense arising from or out of any claim, action, suit or proceeding for personal injury (including sickness, disease or death), tangible or

intangible property damage, compensation for lost wages, business income, profits or other economic loss, damage to the natural resource or the environment, nuisance, contamination, leak, spill, release or other adverse effect on the environment. At the request of Developer, City shall cooperate with and assist Developer in its defense of any such claim, action, suit, proceeding, loss, cost, damage, liability, deficiency, fine, penalty, punitive damage, or expense; provided that City shall not be obligated to incur any expense in connection with such cooperation or assistance. The indemnity obligations herein shall not extend to, and Developer shall not be required to indemnify the City for occurrences caused directly by the City, its employees, contractors, or agents; or for claims, actions, fines, penalties, or the like resulting from the City's passive ownership of the Property.

## **ARTICLE 2 CONSTRUCTION COVENANT**

A. Construction Covenant. Within three (3) business days of the Effective Date, this Agreement shall be recorded against the Property and constitute a covenant running with the land, governing the development of the Property ("Construction Covenant").

B. Covenants Run With Land. During the Term of this Agreement, all covenants and agreements contained in this Agreement shall be construed as covenants running with the land and all rights and powers given to and obligations imposed upon the respective parties shall be construed as binding upon the successors and assigns of the parties hereto. All of Developer's Obligations to Construct Developer Improvements related to a given parcel, except as provided hereunder shall terminate and shall become null and void upon completion of the Developer Improvements and the recordation of a Release of Construction Covenant with respect to the given Parcel or Parcels. All of City's Obligations to Construct City Improvements shall terminate upon City's completion and acceptance of such improvements in accordance with this Agreement.

C. Covenants For Benefit of City. All covenants without regard to technical classification or designation shall be binding for the benefit of City, and such covenants shall run in favor of City for the entire period during which such covenants shall be in force and effect, without regard to whether City is or remains an owner of any land or interest therein to which such covenants relate. City, in the event of any breach of any such covenants, shall have the right to exercise all the rights and remedies and to maintain any actions at law or suits in equity or other proper proceedings to enforce the curing of such breach.

D. Partial Release of Construction Covenant.

(1) Upon completion of construction and City's issuance of a certificate of occupancy, with respect to any single Parcel, or group of Parcels, as the case may be, City shall promptly cause to be recorded a "Release of Construction Covenant," substantially in the form of **Attachment No. 6**, as it relates to that Parcel or Parcels.

(2) City shall not unreasonably withhold such Release of Construction Covenant.

(3) The Release of Construction Covenant shall relieve the Parcel, Parcel or Property, as the case may be, and the owner thereof, from all Developer Obligations related to that Parcel, Parcels, or Property under this Agreement and the Release of Construction Covenants shall so state.

(4) If City refuses or fails to record the Release of Construction Covenant, after written request from Developer, City shall, within fifteen (15) days of written request therefor, provide Developer

with a written statement of the reasons City refused or failed to furnish the Release of Construction Covenant. The statement shall also contain City's opinion of the actions the Developer must take to obtain the Release of Construction Covenant. The Release of Construction Covenants is not a notice of completion as referred to in Section 3093 of the California Civil Code.

E. Partial Assignment and Assumption of Development Agreement. The Parties acknowledge that in developing the Property, the Developer may have the need or opportunity to sell a Parcel prior to the completion of Developer Improvements on that Parcel. The City further acknowledges that the sale of Parcels to third party who intend to own and develop a Parcel consistent with the terms and conditions of this Agreement, is consistent with the goals of the Project and will lead to the ultimate buildout of the Project. Therefore, notwithstanding subsection (1) above, upon the written request of Developer, City may approve a Partial Assignment and Assumption Agreement between Developer and the third-party purchaser, wherein Developer assigns and the third party purchaser assumes all of Developer's rights, title, interests and obligations in this Agreement, except with respect to the reversionary interest of City in the Parcel, which shall be specifically excluded from the Partial Assignment and Assumption Agreement. Assignments will be considered on a case by case basis where the City finds that the third-party purchaser has experience and financial ability to complete Developer Improvements related to that Parcel. City's consent to such assignment shall not be unreasonably withheld. Developer shall be credited with completion of Developer Improvements on assigned Parcels and shall remain responsible to fulfill the total Developer Improvement obligations in this Agreement.

F. Subordination. Notwithstanding the forgoing, Developer's commercial lenders may request the City to subordinate this Agreement to Developer's construction financing. In such event, and upon such request from Developer, City shall cooperate with Developer and Developer's commercial lender in the execution and recordation of a Subordination Agreement, in a form acceptable to Developer's commercial lender. City's consent to subordination shall not be unreasonably withheld, so long as the proposed development is consistent with this Agreement.

### ARTICLE 3 DEVELOPMENT OF THE PROPERTY

A. Developer's Obligation to Construct Developer Improvements. Developer shall develop or cause the development in accordance with the Schedule of Performance (**Attachment No. 5**); the Approved Preliminary Site Plan (**Attachment No. 2**); the Approved Preliminary Elevations (**Attachment No. 3**); the City of Lemoore Municipal Code; and the Parcel Specific Site Plans and Improvement Plans as submitted by Developer and approved by City as set forth in this Article 3. Before commencement of construction of the Developer Improvements or other related works of improvement upon or adjacent to the Property, Developer shall, at its own expense, secure or cause to be secured any and all necessary governmental approvals, including, but not limited to the approval of Parcel Specific Site Plans, Improvement Plans, building permits, and grading permits. Nothing in this Agreement is intended to or shall operate to commit City's discretion with respect to any such approvals which may be required by Developer with respect to the Developer Improvements.

(1) Approved Preliminary Site Plan. As of the Effective Date, the Preliminary Site Plan attached hereto as **Attachment No. 2** shall be known as the "Approved Preliminary Site Plan." Developer shall construct the Project consistent with the Approved Preliminary Site Plan ("Approved Preliminary Site Plan").

a. Parcel Specific Site Plan. For each Parcel being developed by Developer, Developer shall submit to the City Manager, for initial review, a Parcel Specific Site Plan. The City

Manager shall have five (5) business days to review and confirm whether the Parcel Specific Site Plan is materially consistent with the Approved Preliminary Site Plan. Provided the Parcel Specific Site Plan is deemed a complete submission by the City and materially consistent with the Approved Preliminary Site Plan, within the same five (5) business days, the City Manager shall distribute the Parcel Specific Site Plan for Expedited Review. In the event the City Manager determines that the Parcel Specific Site Plan is not consistent with the Approved Preliminary Site Plan, the City Manager shall notify Developer, in writing, within the same five (5) business days with an explanation of the inconsistency. Developer shall then have the option of meeting and conferring with the City Manager regarding the inconsistency; submitting the Parcel Specific Site Plan to the Planning Commission for approval; or, submitting a revised Parcel Specific Site Plan, consistent with the City Manager's comments. For purposes this Agreement, Expedited Review means the City shall have fourteen (14) business days from the date distributed by City Manager to either "review and respond" or "review and approve" the Parcel Specific Site Plan. Notwithstanding the foregoing, if City staff, via the Expedited Review process approves the Parcel Specific Site Plan with conditions unacceptable to Developer, or disapproves Parcel Specific Site Plan, Developer may file an appeal to the Planning Commission provided such appeal is made in writing and delivered to the City Manager not later than fifteen (15) days following the decision of City staff which is the subject of Developer's appeal.

(2) Approved Preliminary Elevations. As of the Effective Date, the Elevations attached hereto as **Attachment No. 3** shall be known as the "Approved Preliminary Elevations." Developer shall construct the Project consistent with the Approved Preliminary Elevations.

a. Improvement Plans. Prior to construction of any portion of the Project, Developer shall submit to City Manager detailed construction plans and drawings with respect to the Developer Improvements for that particular Parcel, including, as necessary, a grading plan, which shall have been prepared by a registered civil engineer ("**Improvement Plans**"). For each Parcel being developed by Developer, Developer shall submit to the City Manager, for initial review, a Parcel Specific Improvement Plans. The City Manager shall have five (5) business days to review and confirm whether the Parcel Specific Improvement Plans are materially consistent with the Approved Preliminary Elevations and Approved Preliminary Site Plan. Provided the Parcel Specific Improvement Plans are deemed complete by the City and materially consistent with the Approved Preliminary Elevations and Site Plan, within the same five (5) business days, the City Manager shall distribute the Parcel Specific Improvement Plans for Expedited Review. In the event the City Manager determines that the Parcel Specific Improvement Plans are not consistent with the Approved Preliminary Elevations and Site Plan, the City Manager shall notify Developer, in writing, within the same five (5) business days with an explanation of the inconsistency. Developer shall then have the option of meeting and conferring with the City Manager regarding the inconsistency; submitting the Parcel Specific Improvement Plans to the Planning Commission for approval; or, submitting a revised Parcel Specific Site Plan, consistent with the City Manager's comments. For purposes this Agreement, Expedited Review means the City shall have fourteen (14) business days from the date distributed by City Manager to either "review and respond" or "review and approve" the Parcel Specific Improvement Plans. Notwithstanding the foregoing, if City staff, via the Expedited Review process approves the Parcel Specific Site Plan with conditions unacceptable to Developer, or disapproves Parcel Specific Site Plan, Developer may file an appeal to the Planning Commission provided such appeal is made in writing and delivered to the City Manager not later than fifteen (15) days following the decision of City staff which is the subject of Developer's appeal.

(3) Permits. Prior to construction of any portion of the Project, Developer shall obtain from City, or other governmental agency with jurisdiction over the Project, or a portion of the Project, any required permits, including, but not limited to grading permits and building permits.

(4) City Review and Approval. Subject to the provisions of this subsection (4) City shall

have the right to review and approve the above described Plans and Permits in its reasonable discretion. Developer shall not be entitled to any monetary damages or compensation as a result of the City's disapproval or failure to approve or disapprove such Plans and Permits.

Notwithstanding any provision of this Agreement to contrary effect, the times for review and action upon plans or drawings by City shall not be deemed to be commenced unless and until the corresponding submittals by Developer are deemed by the City to be complete and in accordance with all normal requirements of City for the consideration of plans or drawings.

(5) Consultation and Coordination. During the preparation of Parcel Specific Site Plans or any related Improvement Plans, staff of City and Developer shall hold regular progress meetings to coordinate the preparation of, submission to, and review of the Parcel Specific Site Plans and/or Improvement Plans. The staff of City and Developer shall communicate and consult informally as frequently as is necessary to ensure that the formal submittal of any documents to City can receive prompt and thorough consideration. The City Manager shall designate an employee to serve as the project manager, on behalf of the City, who is responsible for the coordination of City's activities under this Agreement and for expediting approval of Parcel Specific Site Plans, Elevation modifications and/or Improvement Plans.

(6) Defects in Plans. City shall not be responsible either to Developer or to third parties in any way for any defects in the Plans and Permits, nor for any structural or other defects in any work done according to the approved Plans and Permits, nor for any delays reasonably caused by the review and approval processes established by this Article. Developer shall hold harmless, indemnify and defend City, and its officers, agents, employees, and volunteers, from and against any claims, suits for damages to property or injuries to persons arising out of or in any way relating to defects in the Plans and Permits, including without limitation the violation of any laws, and for defects in any work done according to the approved Plans and Permits.

(7) Plans and Permits. For purposes of this Agreement, the phrase Plans and Permits refers to the Approved Preliminary Site Plan, the Approved Elevations, the Approved Parcel Specific Site Plan, the Approved Improvement Plans and Permits (Building and Grading).

(8) Cost of Construction. All of the costs of planning, designing, developing, and constructing the Developer Improvements, including site preparation and grading, shall be borne solely by the Developer.

(9) Insurance Requirements. Developer shall take out prior to commencement of construction of the Developer Improvements, and maintain or shall cause its contractor to take out and maintain until the issuance of the Release of Construction Covenants pursuant to Article 3.K of this Agreement, a comprehensive general liability policy in the amount of Five Million Dollars (\$5,000,000) combined single limit policy, and if Developer owns automobiles, a comprehensive automobile liability policy in the amount of Two Million Dollars (\$2,000,000), combined single limit, or such other policy limits as City may approve at its discretion, including contractual liability, as shall protect Developer and City from claims for such damages, and which policy shall be issued by an "A" rated insurance carrier. Such policy or policies shall be written on an occurrence form. Developer shall also furnish or cause to be furnished to City evidence satisfactory to City that the Developer and any contractor with whom it has contracted for the performance of work on The Property or otherwise pursuant to this Agreement carries workers' compensation insurance as required by law. Developer shall furnish a notarized certificate of insurance countersigned by an authorized agent of the insurance carrier on a form approved by City setting forth the general provisions of the insurance coverage. This countersigned certificate shall name City and its respective officers, agents, employees, and volunteers, as additionally insured parties under

the policy, and the certificate shall be accompanied by a duly executed endorsement evidencing such additional insured status. The certificate and endorsement by the insurance carrier shall contain a statement of obligation on the part of the carrier to notify City of any material change, cancellation or termination of the coverage at least thirty (30) days in advance of the effective date of any such material change, cancellation or termination. Coverage provided hereunder by Developer shall be primary insurance and not be contributing with any insurance maintained by City, and the policy shall contain such an endorsement. The insurance policy or the endorsement shall contain a waiver of subrogation for the benefit of City. The required certificate shall be furnished by Developer at the time set forth therefor in the Schedule of Performance or, if no time is specified, prior to the commencement of construction of the Developer Improvements.

(10) Rights of Access. Prior to the issuance of a Release of Construction Covenants (as specified in Section 2.D of this Agreement), for purposes of assuring compliance with this Agreement, including construction of the Developer Improvements, representatives of City shall have the right of access to the Property conveyed to Developer without charges or fees, at normal construction hours during the period of construction. City representatives shall comply with all safety rules during any such inspection.

(11) Compliance with Laws. Developer shall carry out the design, construction and operation of the Developer Improvements in conformity with all applicable laws, including all applicable state labor standards, City zoning and development standards, building, plumbing, mechanical and electrical codes, and all other provisions of the City Municipal Code, and all applicable disabled and handicapped access requirements, including without limitation the Americans With Disabilities Act, 42 U.S.C. Section 12101, et seq., California Government Code Section 4450, et seq., California Government Code Section 11135, et seq., and the Unruh Civil Rights Act, Civil Code Section 51, et seq.

(12) Nondiscrimination in Employment. Developer certifies and agrees that all persons employed or applying for employment by it, its affiliates, subsidiaries, or holding companies, and all subcontractors, bidders and vendors, are and will be treated equally by it without regard to, or because of any protected class under State of California or federal law.

(13) Taxes and Assessments. Developer shall pay prior to delinquency all ad valorem real estate taxes and assessments on the Property conveyed to Developer. Developer shall remove or have removed any levy or attachment made on any portion of the Property or assure the satisfaction thereof within a reasonable time. Developer shall not apply for or receive any exemption from the payment of property taxes or assessments on any interest in or to the Property or the Developer Improvements.

(14) No Encumbrances. Developer shall not encumber by deed of trust, mortgage or any other security instrument, all or a part of the Property at any time prior to the City's Release of Construction Covenants, on any particular Parcel or Parcels, without the advance and express written consent of City, and upon such terms and conditions as City may require.

B. City's Obligation to Construct City Improvements. City shall develop or cause substantial development of the City Improvements, as described in **Attachment No. 8**, in accordance with the Schedule of Performance (**Attachment No. 5**), consistent with the City approved Infrastructure and Improvement Plans, and the terms and conditions of this Agreement. City's development and construction of City Improvements is a material term of this Agreement and a material factor which induced Developer to enter into this Agreement.

(1) Consultation and Coordination. During the preparation of the City's Infrastructure and Improvement Plans, staff of City and Developer shall hold regular progress meetings to coordinate the



preparation of, submission to, and review of the City's Improvement Plans. The staff of City and Developer shall communicate and consult informally as frequently as is necessary to ensure that the City's Improvement Plans are approved in a time and manner consistent with the Performance Schedule and the terms and conditions of this Agreement.

(2) Failure to Approve Infrastructure and Improvement Plans. City's failure to approve City's Infrastructure and Improvement Plans which are consistent with this Agreement within a reasonable time following execution of this Agreement shall constitute a material breach of this Agreement by City.

(3) Cost of Construction. All of the costs of planning, designing, developing, and constructing the City's Improvements, including site preparation and grading, shall be borne solely by the City, at no cost to Developer. The cost of the City Improvements shall not in any way cloud the title of the Property, including but not limited any covenant or lien imposed on the Property, by City, requiring future reimbursement for the cost of City's Improvements. City shall keep the Property free and clear of mechanic's or materialmen liens, or other similar type liens.

(4) Rights of Access. At all times from and after the Effective Date, Developer grants the City a temporary license to enter upon the Property for purposes of planning and constructing to completion, City's Improvements.

(5) Indemnity. City shall indemnify, defend and hold Developer and the Property free and harmless from all loss, cost, expense (including court costs and fees of consultants, experts, and attorneys), damage, claim, lien, or liability to the extent arising from such activities of City upon the Property and from all mechanics liens and other liens to the extent resulting from any such conduct of City, or its agents, employees, contractors and subcontractors.

(6) Compliance with Laws. Developer shall carry out the design, construction and operation of the Developer Improvements in conformity with all applicable laws, including all applicable state labor standards, City zoning and development standards, building, plumbing, mechanical and electrical codes, and all other provisions of the City Municipal Code, and all applicable disabled and handicapped access requirements, including without limitation the Americans With Disabilities Act, 42 U.S.C. Section 12101, et seq., California Government Code Section 4450, et seq., California Government Code Section 11135, et seq., and the Unruh Civil Rights Act, Civil Code Section 51, et seq.

(7) Dedication to City. Upon completion of the City Improvements and upon City request, Developer shall dedicate to the City and the City shall accept from Developer, by way of an Easement for Right of Way and Utility Purpose, all City Improvements on, under or within the Property.

#### **ARTICLE 4 PARCEL MAP**

A. Parcel Map. From and after the Effective Date, and concurrent with City's development of City's construction of City's Improvements, Developer, at Developer's sole cost and expense, shall process and obtain City approval of a Parcel Map which subdivides the Property consistent with the Approved Preliminary Site Plan.

## **ARTICLE 5 DEFAULTS AND REMEDIES**

A. Default Remedies. Subject to the extensions of time set forth in Article 6.B. of this Agreement, failure by either party to perform any action or covenant required by this Agreement within the time periods provided herein following notice and failure to cure as described hereafter, constitutes a “Default” under this Agreement. A party claiming a Default shall give written Notice of Default to the other party specifying the Default complained of. Except as otherwise expressly provided in this Agreement, the claimant shall not institute any proceeding against any other party, and the other party shall not be in Default if such party within thirty (30) days from receipt of such Notice immediately, with due diligence, commences to cure, correct or remedy such failure or delay and shall complete such cure, correction or remedy with diligence.

B. Institution of Legal Actions. In addition to any other rights or remedies and subject to the restrictions otherwise set forth in this Agreement, either party may institute an action at law or equity to seek specific performance of the terms of this Agreement, or to cure, correct or remedy any Default, to recover damages for any Default, or to obtain any other remedy consistent with the purpose of this Agreement. Such legal actions must be instituted in the Superior Court of the County of Kings, State of California.

C. Termination by the Developer Prior to Conveyance of the Property. In the event that prior to the conveyance of the Property Developer is not in default under this Agreement and: (1) City does not tender title pursuant to the Grant Deed in the manner and condition and by the date provided in this Agreement; or (2) one or more of the Developer Conditions of Closing is not fulfilled on or before the time set forth in the Schedule of Performance and such failure is not caused by Developer; or (3) any default of City prior to Closing is not cured within the time set forth in Article 3.A. hereof, after written demand by Developer; or (5) Developer timely disapproves the environmental condition of the Property pursuant to Article 1.N. hereof; then this Agreement may, at the option of Developer, be terminated by written Notice thereof to City. From the date of the Notice of termination of this Agreement by Developer to City and thereafter this Agreement shall be deemed terminated and there shall be no further rights or obligations between the parties with respect to the Property by virtue of or with respect to this Agreement. Under these circumstances, Developer shall be entitled to a return of the Developer Deposit.

D. Termination by the City Prior to Conveyance of the Property. In the event that prior to conveyance of the Property City is not in Default under this Agreement and: (1) Developer (or any successor in interest) assigns or attempts to assign the Agreement or any rights therein or in the Property in violation of this Agreement; or (2) one or more of the City Conditions of Closing is not fulfilled on or before the time set forth in the Schedule of Performance and such failure is not caused by City; or (3) Developer is otherwise in default of this Agreement and fails to cure such default within the time set forth in Article 3.A. hereof; then this Agreement and any rights of Developer or any assignee or transferee with respect to or arising out of the Agreement, shall, at the option of City, be terminated by City by written Notice thereof to Developer. From the date of the Notice of termination of this Agreement by City to Developer and thereafter this Agreement shall be deemed terminated and there shall be no further rights or obligations between the parties.

E. Reentry and Revesting of Title in the City for Failure to Timely Commence and Complete Developer Improvements or for an Unlawful Transfer.

(1) After the Closing and Prior to Completion of the Developer Improvements. With respect to Parcels currently affected by the Construction Covenant, and not with respect to Parcels for which the Construction Covenant has been released, in whole or part, City has the right, at its election, to reenter

and take possession of the Property transferred to Developer by Grant Deed pursuant to this Agreement, with all improvements thereon, and terminate and revest in City the estate conveyed to Developer if after the Closing and before the furnishing of the Release of Construction Covenants, Developer (or its successors in interest) shall:

a. Fail to start the construction of the Developer Improvements as required by this Agreement for a period of thirty (30) days after written notice thereof from City; or

b. Abandon or substantially suspend construction of the Developer Improvements required by this Agreement for a period of thirty (30) days after written notice thereof from the City, unless such abandonment or suspension is not caused by Developer's acts or omissions or as provided for in Article 4.B.; or

c. Fail to complete the Developer Improvements and open Conforming Business Activities within the time limits set forth in the Schedule of Performance; or

d. Contrary to the provisions of Article 4.C., Transfer or suffer any involuntary Transfer in violation of this Agreement.

(2) Conditions of Reentry and Revesting Rights. Except where the City has agreed to subordinate the Construction Covenant, City's right to reenter, terminate and revest is not subject to any mortgage or deed of trust. The Grant Deed shall contain appropriate reference and provision to give effect to City's right as set forth in this Article, to reenter and take possession of the Property, with all improvements thereon, and to terminate and revest in City the estate conveyed to Developer.

(3) Perfecting Reversionary Interest. City may perfect its revisionary interest by recording a Notice of Reversionary Interest in substantially the form set forth in **Attachment No. 6.**

## **ARTICLE 6 GENERAL PROVISIONS**

A. Notices, Demands and Communications between the Parties. Any approval, disapproval, demand, document or other notice ("Notice") which either party may desire to give to the other party under this Agreement must be in writing and may be given by any commercially acceptable means to the party to whom the Notice is directed at the address of the party as set forth below, or at any other address as that party may later designate by Notice.

To City:                      City Manager  
                                    City of Lemoore  
                                    711 Cinnamon Dr.  
                                    Lemoore, California 93245  
                                    Email: nolson@lemoore.com  
                                    Tel: (559) 924-6700

To Developer:              KKAL, LP,  
                                    265 E River Park Circle Suite 270  
                                    Fresno CA 93720  
                                    Attn: John Kashian  
                                    Email: jkashian@lance-kashian.com  
                                    Tel: (559) 437-4812

Any written notice, demand or communication shall be deemed received: immediately if delivered by hand; 24 hours after delivery to a receipted, overnight delivery service such as Federal Express; 24 hours after delivery by e-mail with an acknowledgement of receipt by the intended recipient; and on the fourth (4th) day from the date it is postmarked if delivered by registered or certified mail.

B. Enforced Delay; Extension of Times of Performance. In addition to specific provisions of this Agreement, performance by either party hereunder shall not be deemed to be in default, and all performance and other dates specified in this Agreement shall be extended, where delays or defaults are due to: War; insurrection; riots; floods; earthquakes; fires; casualties; acts of God; acts of the public enemy; governmental restrictions; litigation; acts or omissions of the other party; or acts or failures to act of City or any other public or governmental agency or entity (other than the acts or failures to act of City which shall not excuse performance by City). Notwithstanding anything to the contrary in this Agreement, an extension of time for any such cause shall be for the period of the enforced delay and shall commence to run from the time of the commencement of the cause, if Notice by the party claiming such extension is sent to the other party within thirty (30) days of the commencement of the cause. Times of performance under this Agreement may also be extended in writing by the mutual agreement of City and Developer. Notwithstanding any provision of this Agreement to the contrary, the lack of funding to complete the Developer Improvements shall not constitute grounds of enforced delay pursuant to this Article.

C. Transfers of Interest in Property or Agreement.

(1) Prohibition. The qualifications and identity of Developer, as well as Developer's proposal, are of particular concern and benefit to City. Therefore, for the period commencing upon the date of this Agreement and until furnishing of the Release of Construction Covenants: (a) no voluntary or involuntary successor in interest of Developer shall acquire any rights or powers under this Agreement; (b) nor shall Developer make any total or partial sale, transfer, conveyance, assignment, subdivision, refinancing or lease of the whole or any part of the Property or the Developer Improvements thereon; (c) nor shall Developer make an assignment for financing purposes or otherwise encumber the Property; collectively referred to herein as a "**Transfer,**" without the prior written approval of the City, except as expressly set forth herein.

(2) Permitted Transfers. Except as provided in Article 2 of this Agreement, City approval of a Transfer shall not be required in connection with any of the following:

a. Any Transfer to an entity or entities in which Developer retains a minimum of fifty-one percent (51%) of the ownership or beneficial interest and retains management and control of the transferee entity or entities.

b. Leases for the operation of office, retail or other similar businesses after completion of the Developer Improvements.

In the event of a Transfer by Developer under subparagraph (a) above not requiring the City's prior approval, Developer nevertheless agrees that at least thirty (30) days prior to such Transfer it shall give written notice to City of such assignment and satisfactory evidence that the assignee has assumed in writing, through an assignment and assumption agreement in a form satisfactory to City's legal counsel, all of the obligations of this Agreement. Such assignment shall not, however, release the assigning Developer from any obligations to City hereunder.

(3) City Consideration of Requested Transfer. Except as provided in Article 2 of this Agreement, City agrees that it will not unreasonably withhold approval of a request for approval of a Transfer made pursuant to this Article, provided Developer delivers written Notice to City requesting such approval. Such Notice shall be accompanied by evidence regarding the proposed transferee's development and/or operational qualifications and experience, and its financial commitments and resources, in sufficient detail to enable City to evaluate the proposed assignee or purchaser pursuant to the criteria set forth in this Article and as reasonably determined by City. City may, in considering any such request, take into consideration such factors as: (a) the quality of any new and/or replacement operator; (b) the sales tax revenues projected to be received from the Property; (c) the transferee's past performance as developer and operator of commercial facilities; (d) the current financial condition of the transferee, and similar factors. City agrees not to unreasonably withhold its approval of any such requested Transfer, taking into consideration the foregoing factors.

An assignment and assumption agreement in form satisfactory to City's legal counsel shall also be required for all proposed Transfers requiring City approval. Within thirty (30) days after the receipt of Developer's written Notice requesting City approval of a Transfer pursuant to this Article, City shall either approve or disapprove such proposed assignment or shall respond in writing by stating what further information, if any, City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, Developer shall promptly furnish to City such further information as may be reasonably requested.

D. Successors and Assigns. All of the terms, covenants and conditions of this Agreement shall be binding upon Developer and its permitted successors and assigns. Whenever the term "Developer" is used in this Agreement, such term shall include any other permitted successors and assigns as herein provided.

E. Assignment by City. The City may assign or transfer any of its rights or obligations under this Agreement with the approval of Developer, which approval shall not be unreasonably withheld.

F. Relationship between City and Developer. It is hereby acknowledged that the relationship between City and Developer is not that of a partnership or joint venture, and that City and Developer shall not be deemed or construed for any purpose to be the agent of the other. Except as expressly provided herein or in the Attachments hereto, City shall not have any rights, powers, duties or obligations with respect to the development, operation, maintenance or management of the Developer Improvements.

G. City Approvals and Actions. City shall maintain authority over this Agreement and the authority to implement this Agreement through the City Manager (or his/her duly authorized representative). The City Manager shall have the authority to make approvals, issue interpretations, waive provisions, and/or enter into certain amendments of this Agreement on behalf of City so long as such actions do not materially change the uses or development permitted on the Property, and such approvals, interpretations, waivers and/or amendments may include extensions of time to perform as specified in the Schedule of Performance. All other material and/or substantive interpretations, waivers, or amendments shall require the consideration, action and written consent of the City Council.

H. Counterparts. This Agreement may be signed in multiple counterparts which, when signed by all parties, shall constitute a binding agreement. This Agreement shall be executed in three (3) originals, each of which is deemed to be an original.

I. Integration. This Agreement contains the entire understanding between the parties relating to the transaction contemplated by this Agreement, notwithstanding any previous negotiations or agreements between the parties or their predecessors in interest with respect to all or any part of the subject matter

hereof. All prior or contemporaneous agreements, understandings, representations and statements, oral or written, are merged in this Agreement and shall be of no further force or effect. Each party is entering this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material. This Agreement includes Attachment Nos. 1 through 9, which are incorporated herein.

J. Real Estate Brokerage Commission. City and Developer each represent and warrant to the other that no broker or finder is entitled to any commission or finder's fee in connection with Developer's acquisition of the Property from the City. The parties agree to defend and hold harmless the other party from any claim to any such commission or fee from any other broker, agent or finder with respect to this Agreement which is payable by such party.

K. Interpretation. As used in this Agreement, masculine, feminine or neuter gender and the singular or plural number shall each be deemed to include the others where and when the context so dictates. The word "including" shall be construed as if followed by the words "without limitation." This Agreement has been prepared with input from both parties and shall be interpreted as though prepared jointly by both parties.

L. No Waiver. Any failures or delays by either party in asserting any of its rights and remedies as to any Default shall not operate as a waiver of any Default or of any such rights or remedies or deprive either such party of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce any such rights or remedies. Nor shall a waiver by either party of a breach of any of the covenants, conditions or agreements under this Agreement to be performed by the other party shall not be construed as a waiver of any succeeding breach of the same or other covenants, agreements, restrictions or conditions of this Agreement.

M. Modifications. Any alteration, change, or modification of or to this Agreement, in order to become effective, shall be made in writing, and in each instance signed on behalf of each party.

N. Severability. If any term, provision, condition or covenant of this Agreement or its application to any party or circumstances shall be held, to any extent, invalid or unenforceable, the remainder of this Agreement, or the application of the term, provision, condition or covenant to persons or circumstances other than those as to whom or which it is held invalid or unenforceable, shall not be affected, and shall be valid and enforceable to the fullest extent permitted by law.

O. Legal Advice. Each party represents and warrants to the other the following: they have carefully read this Agreement, and in signing this Agreement, they do so with full knowledge of any right which they may have; they have received independent legal advice from their respective legal counsel as to the matters set forth in this Agreement, or have knowingly chosen not to consult legal counsel as to the matters set forth in this Agreement; and, they have freely signed this Agreement without any reliance upon any agreement, promise, statement or representation by or on behalf of the other party, or their respective agents, employees, or attorneys, except as specifically set forth in this Agreement, and without duress or coercion, whether economic or otherwise.

P. Prevailing Wages. City makes no representation whether prevailing wages apply to the Development. Developer is solely responsible to determine the applicability of prevailing wages and pay and cause its contractor and subcontractors to pay prevailing wages as applicable to the Development. Developer shall indemnify, defend and hold City harmless against any claim for damages, compensation, fines, penalties or other amounts arising out of the failure or alleged failure of any person or entity (including Developer, its contractors and subcontractors) to pay prevailing wages.

Q. Cooperation. Each party agrees to cooperate with the other in this transaction and, in that regard, to sign any and all documents which may be reasonably necessary, helpful, or appropriate to carry out the purposes and intent of this Agreement including, but not limited to, releases or additional agreements consistent with this Agreement.

R. Rights and Remedies Are Cumulative. Except as otherwise expressly stated in this Agreement, the rights and remedies of the parties are cumulative, and the exercise by either party of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the other party.

S. Applicable Law. The laws of the State of California shall govern the interpretation and enforcement of this Agreement. Venue for any suit arising from this Agreement shall be in Kings County Superior Court.

T. Non-Liability of Officials and Employees of the City. No member, official or employee of the City shall be personally liable to the Developer, or any successor in interest, in the event of any Default or breach by the City or for any amount which may become due to the Developer or its successors, or on any obligations under the terms of this Agreement.

U. Attorneys' Fees. In any action between the parties to interpret, enforce, reform, modify, rescind, or otherwise in connection with any of the terms or provisions of this Agreement, the prevailing party in the action shall be entitled, in addition to damages, injunctive relief, or any other relief to which it might be entitled, reasonable costs and expenses including, without limitation, litigation costs and reasonable attorneys' fees.

V. Precedence of Documents. If there is any conflict between this Agreement, supplemental escrow instructions, and the Developer proposal, the order of precedence for resolving conflicts shall be as follows: first this Agreement, second the supplemental escrow instructions, and third the Developer proposal.

W. Term. The term of this Agreement shall be consistent with buildout of 14 years from the Effective Date unless otherwise extended by the Parties, in writing. Any such extension requires the express approval of the City Council of the City of Lemoore.

X. Effective Date. The Effective Date of this Agreement shall be the later to occur of the following: (a) the last date set forth opposite the signatures of the parties at the end of this Agreement; or, (b) the date the City Council approves this Agreement, provided, that the City Manager shall execute this Agreement not later than five (5) business days following City Council approval.

Z. Representation of Developer. Developer represents and warrants to City as follows:

Developer shall not, and does hereby waive, any and all claims or defenses Developer may have as to City's right to exercise its reversionary interest, as set forth in Article 5. E. of this Agreement, based upon the fact that this Agreement, the Grant Deed, and/or the Notice of Reversionary Interest are vague, ambiguous, or unenforceable; or, because the specific terms of this Agreement are not set forth in the Grant Deed.

**IN WITNESS WHEREOF**, the City and the Developer have executed this Disposition and Development Agreement as of the date set forth above.

\_\_\_\_\_

\_\_\_\_\_  
Principal

Date: \_\_\_\_\_

**CITY OF LEMOORE**

\_\_\_\_\_  
City Manager

Date: \_\_\_\_\_

**ATTEST:**

\_\_\_\_\_  
City Clerk

Date: \_\_\_\_\_

**APPROVED AS TO FORM:**

LOZANO SMITH

\_\_\_\_\_  
Jenell Van Bindsbergen, City Attorney

Date: \_\_\_\_\_

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**ATTACHMENT NO. 1**  
**LEGAL DESCRIPTION AND DEPICTION OF PROPERTY**  
**1655 South 19th Avenue, Lemoore, CA 93245**

The land referred to is situated in the County of Kings, City of Lemoore, State of California, and is described as follows:

That certain parcel of land lying in both the North half of the Northeast quarter of Section 21, and the Southeast quarter of Section 16, Township 19 South, Range 20 East, Mount Diablo Baseline and Meridian, according to the United States Government Township Plat approved October 28, 1869, in the City of Lemoore, County of Kings, State of California, more particularly described as follows:

All of Lot 11 of Tract No. 614, recorded in Volume 14 of Licensed Surveyor's Plats at Page 42, in said County.

TOGETHER WITH the North half of the Northeast quarter of said Section 21;

EXCEPTING THEREFROM the West thirty feet of the Northeast quarter of said Section 21; and the South five acres of the North half of the Northeast quarter of said Section 21.

ALSO EXCEPTING THEREFROM, the following described property:

COMMENCING at the North quarter corner of said Section 21; thence along the West line of said North half of the Northeast quarter, South 00° 26' 45" West, a distance of 153.84 feet; thence perpendicular to said West line, South 89° 33' 15" East, a distance of 30.00 feet to a point on the Easterly right-of-way line of California Highway 41, said point being the true point of beginning; thence continuing along a line perpendicular to said West line, South 89° 33' 15" East, a distance of 208.00 feet; thence South 84° 14' 00" East, a distance of 125.01 feet to a point 155.00 feet Southerly from (measured at right angle to) the North line of said Northeast quarter of Section 21; thence parallel with said North line, South 87° 54' 56" East, a distance of 525.74 feet; thence along a line parallel with said West line, South 00° 26' 45" West, a distance of 1083.85 feet to the North line of the South 5 acres of said North half; thence along said North line of the, South 5 acres, North 88° 00' 10" West, a distance of 858.31 feet to a line 30.00 feet East from (measured at right angle to) the West line of the aforementioned North half, also being the aforementioned Easterly right-of-way line of California Highway 41; thence along said Easterly right-of way line, North 00° 26' 45" East, a distance of 1087.24 feet to the true point of beginning.

Basis of Bearings is the North line of the Northeast quarter of Section 21, Township 19 South, Range 20 East, Mount Diablo Baseline and Meridian, which bears South 87° 54' 56" East, as shown on the Map recorded in Book 8 of Parcel Maps at Page 80, Kings County Records.

EXCEPTING THEREFROM that portion thereof described in the Grant Deed to the State of California, recorded January 19, 1996, as Instrument No. 96-01168 of Official Records.

ALSO EXCEPTING THEREFROM those portions thereof granted to City of Lemoore, a municipal corporation, "for public road and utility purposes," in the Grant Deeds recorded August 21, 2002, as Instrument Nos. 02-18214 and 02-18216 of Official Records.

ALSO EXCEPTING THEREFROM that portion thereof granted to The Artesia Companies, Inc. in the Grant Deed dated August 5, 2002, and recorded September 5, 2002, as Instrument No. 02-19417 of Official Records.

ALSO EXCEPTING THEREFROM that portion thereof lying within the lands granted to Richard C. Wills, et al, in the Grant Deed dated December 2, 2002, and recorded April 18, 2003, as Instrument No. 03-09947 of Official Records.

ALSO EXCEPTING all mineral's every kind and nature whatsoever including, without limiting the generality of the foregoing, petroleum, oil, asphaltum, gas, and all other hydrocarbon substances, carbon dioxide, nitrogen, sulphur dioxide, helium and all other natural gases, together with the exclusive right to prospect, bore, drill for and produce any or all of such minerals, either by means of facilities located on said land or located on adjoining or nearby lands; and further reserving the exclusive easements and right to bore or drill in and through said above-described property to explore for and extract petroleum, oil, asphaltum, gas, and other hydrocarbon substances, nitrogen, carbon dioxide, sulphur dioxide, helium and all other natural gases and minerals of every kind and nature whatsoever from adjoining or nearby lands; also reserving the right to drill for, develop, and use such water on said above-described property as may be required for drilling and/or producing operations only; as excepted, retained and reserved in that certain Deed from Socony Mobil Oil Company, Inc., a New York Corporation, to Thomas H. Hess, et al, dated December 30, 1963 in Book 844 at Page 306 of Official Records, as Document No. 16709.

APN: 024-051-031  
024-080-066  
024-080-069

**ATTACHMENT NO. 2**  
**APPROVED PRELIMINARY SITE PLAN**

**[See Attached]**

**ATTACHMENT NO. 3**  
**APPROVED ELEVATIONS**  
**[See Attached]**

**ATTACHMENT NO. 4  
FORM OF GRANT DEED**

**Recording Requested By:**

Old Republic Title Company

**When Recorded Mail To:**

KKAL, LP

(Space Above for Recorder's Use)

**GRANT DEED**

For valuable consideration, receipt of which is hereby acknowledged,

The City of Lemoore, a California municipal corporation ("City"), hereby grants to KKAL, LP, a California limited partnership ("Developer") the real property hereinafter referred to as the "Property," described in **Attachment 1** attached hereto and incorporated herein, subject to the terms and conditions of the Disposition and Development and Joint Escrow Instructions between the City and Developer, incorporated herein by reference, recorded concurrently herewith.

**CITY OF LEMOORE**

\_\_\_\_\_  
City Manager

Date: \_\_\_\_\_

**ATTEST:**

\_\_\_\_\_  
City Clerk

Date: \_\_\_\_\_

**APPROVED AS TO FORM:**

LOZANO SMITH

\_\_\_\_\_  
Jenell Van Bindsbergen, City Attorney

Date: \_\_\_\_\_

**ATTACHMENT NO. 1**  
**LEGAL DESCRIPTION AND DEPICTION OF PROPERTY**  
**1655 South 19th Avenue, Lemoore, CA 93245**

The land referred to is situated in the County of Kings, City of Lemoore, State of California, and is described as follows:

That certain parcel of land lying in both the North half of the Northeast quarter of Section 21, and the Southeast quarter of Section 16, Township 19 South, Range 20 East, Mount Diablo Baseline and Meridian, according to the United States Government Township Plat approved October 28, 1869, in the City of Lemoore, County of Kings, State of California, more particularly described as follows:

All of Lot 11 of Tract No. 614, recorded in Volume 14 of Licensed Surveyor's Plats at Page 42, in said County.

TOGETHER WITH the North half of the Northeast quarter of said Section 21;

EXCEPTING THEREFROM the West thirty feet of the Northeast quarter of said Section 21; and the South five acres of the North half of the Northeast quarter of said Section 21.

ALSO EXCEPTING THEREFROM, the following described property:

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ALSO EXCEPTING THEREFROM that portion thereof lying within the lands granted to Richard C. Wills, et al, in the Grant Deed dated December 2, 2002, and recorded April 18, 2003, as Instrument No. 03-09947 of Official Records.

ALSO EXCEPTING all mineral's every kind and nature whatsoever including, without limiting the generality of the foregoing, petroleum, oil, asphaltum, gas, and all other hydrocarbon substances, carbon dioxide, nitrogen, sulphur dioxide, helium and all other natural gases, together with the exclusive right to prospect, bore, drill for and produce any or all of such minerals, either by means of facilities located on said land or located on adjoining or nearby lands; and further reserving the exclusive easements and right to bore or drill in and through said above-described property to explore for and extract petroleum, oil, asphaltum, gas, and other hydrocarbon substances, nitrogen, carbon dioxide, sulphur dioxide, helium and all other natural gases and minerals of every kind and nature whatsoever from adjoining or nearby lands; also reserving the right to drill for, develop, and use such water on said above-described property as may be required for drilling and/or producing operations only; as excepted, retained and reserved in that certain Deed from Socony Mobil Oil Company, Inc., a New York Corporation, to Thomas H. Hess, et al, dated December 30, 1963 in Book 844 at Page 306 of Official Records, as Document No. 16709.

APN: 024-051-031  
024-080-066  
024-080-069

## **ATTACHMENT NO. 5**

### **SCHEDULE OF PERFORMANCE**

Developer will develop 12 acres every two years over six phases of development (“Development Schedule”). Developer may lease or sell parcels for immediate development consistent with this Agreement and receive credit for construction on the leased or sold parcels. Except as provide herein, the Development Schedule shall commence from the date City completes City’s Improvements in accordance with this Agreement. For purposes of the Schedule of Performance, City shall not be required to complete construction of and/or relocation of the existing canal on the Property. For avoidance of doubt, Developers obligation to comply with the Schedule of Performance shall commence when City has completed all of City’s Improvements, except such improvements related to the construction and/or relocation of the canal. Developer shall be required to construct or cause to be constructed those Developer Improvements required by the City related to a given phase of development prior to the issuance of the first building permit for a given phase of development.



**ATTACHMENT NO. 6**  
**RELEASE OF CONSTRUCTION COVENANTS**

Recording Requested By:	
When Recorded Mail To:	

(Space Above for Recorder's Use)

**RELEASE OF CONSTRUCTION COVENANTS**

THIS RELEASE OF CONSTRUCTION COVENANTS ("Release") is made by the City of Lemoore, a California municipal corporation ("City"), in favor of \_\_\_\_\_ ("Developer"), as of the date set forth below.

**RECITALS**

A. City and Developer have entered into that certain Disposition and Development Agreement and Joint Escrow Instructions dated \_\_\_\_\_, 2018 ("Agreement") recorded on \_\_\_\_\_ as Instrument No. \_\_\_\_\_ in Book \_\_\_\_\_, Page \_\_\_\_\_ of \_\_\_\_\_ Kings County Records, concerning the development of certain real property situated in the City of Lemoore, California as more fully described in **Attachment 1** attached hereto and made a part hereof.

B. On \_\_\_\_\_, 2018, City approved Parcel Map No. \_\_\_\_\_ recorded on \_\_\_\_\_, 2018, as Instrument No. \_\_\_\_\_, at Book \_\_\_\_\_, Page \_\_\_\_\_ of Maps, Kings County Records, which subdivided the Property.

C. As referenced in Article 2.C of the Agreement, City is required to furnish Developer or its successors with a Release of Construction Covenants upon completion of construction of the Developer Improvements, with respect to a specific Parcel or Parcels, which Release is required to be in such form as to permit it to be recorded in the Recorder's office of Kings County. This Release is conclusive determination of satisfactory completion of the construction and development required by the Agreement for the Developer Improvements, with respect to such Parcel or Parcels described in Exhibit B attached hereto.

D. City has conclusively determined that such construction and development of the Developer Improvements has been satisfactorily completed with respect to such Parcel or Parcels described in Exhibit B attached hereto.

**NOW, THEREFORE**, the City hereby certifies as follows:

1. The Developer Improvements to be constructed by Developer have been fully and satisfactorily completed in conformance with the Agreement, with respect to such Parcel or Parcels described in Exhibit B attached hereto. The Agreement, together with any and all covenants and obligations of Developer with respect to the Parcel or Parcels described in Exhibit B attached hereto are hereby released and Developer and its successors and assigns have no further obligation to the City.

2. Nothing contained in this Release shall modify in any other way any other provisions of the DDA.

**IN WITNESS WHEREOF**, the City has executed this Release this \_\_\_\_ day of \_\_\_\_\_ 201\_\_\_\_.

**CITY OF LEMOORE,**  
a California municipal corporation

By: \_\_\_\_\_  
City Manager

**ATTEST:**

\_\_\_\_\_  
City Clerk

**APPROVED BY DEVELOPER:**

\_\_\_\_\_

By: \_\_\_\_\_  
Principal

**ATTACHMENT NO. 1**  
**LEGAL DESCRIPTION AND DEPICTION OF PROPERTY**  
**1655 South 19th Avenue, Lemoore, CA 93245**

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All of Lot 11 of Tract No. 614, recorded in Volume 14 of Licensed Surveyor's Plats at Page 42, in said County.

TOGETHER WITH the North half of the Northeast quarter of said Section 21;

EXCEPTING THEREFROM the West thirty feet of the Northeast quarter of said Section 21; and the South five acres of the North half of the Northeast quarter of said Section 21.

ALSO EXCEPTING THEREFROM, the following described property:

COMMENCING at the North quarter corner of said Section 21; thence along the West line of said North half of the Northeast quarter, South 00° 26' 45" West, a distance of 153.84 feet; thence perpendicular to said West line, South 89° 33' 15" East, a distance of 30.00 feet to a point on the Easterly right-of-way line of California Highway 41, said point being the true point of beginning; thence continuing along a line perpendicular to said West line, South 89° 33' 15" East, a distance of 208.00 feet; thence South 84° 14' 00" East, a distance of 125.01 feet to a point 155.00 feet Southerly from (measured at right angle to) the North line of said Northeast quarter of Section 21; thence parallel with said North line, South 87° 54' 56" East, a distance of 525.74 feet; thence along a line parallel with said West line, South 00° 26' 45" West, a distance of 1083.85 feet to the North line of the South 5 acres of said North half; thence along said North line of the, South 5 acres, North 88° 00' 10" West, a distance of 858.31 feet to a line 30.00 feet East from (measured at right angle to) the West line of the aforementioned North half, also being the aforementioned Easterly right-of-way line of California Highway 41; thence along said Easterly right-of way line, North 00° 26' 45" East, a distance of 1087.24 feet to the true point of beginning.

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California, recorded January 19, 1996, as Instrument No. 96-01168 of Official Records.

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APN: 024-051-031  
024-080-066  
024-080-069

***INSERT EXHIBIT B TO ATTACHMENT NO. 6  
LEGAL DESCRIPTION OF PARCEL OR PARCELS RELEASED  
FROM CONSTRUCTION COVENANT.***

**ATTACHMENT NO. 7**  
**NOTICE OF REVERSIONARY INTEREST**

*Recorded By and For the Benefit of,  
And When Recorded Return to:*

CITY OF LEMOORE  
119 Fox Street  
Lemoore, California 93245  
ATTN: City Clerk

(Space Above for Recorder's Use)

**NOTICE OF REVERSIONARY INTEREST**  
**(Insert Address and APN)**  
**RECITALS**

WHEREAS, the City of Lemoore, a California municipal corporation ("City"), and \_\_\_\_\_ ("Developer"), entered into that certain Disposition and Development Agreement dated \_\_\_\_\_, 2018 ("Agreement") concerning the development of certain real property situated in the City of Lemoore, County of Kings, State of California ("Property") as more fully described in **Attachment 1** attached hereto and made a part hereof; and

WHEREAS, pursuant to Article 5 of the Agreement, Developer failed to complete certain Improvements by specified dates or otherwise failed to timely cure a breach of the Agreement, and therefore Title to the Property has reverted back to City.

NOW, THEREFORE, City does hereby give notice that Title has reverted to City for the Property and City intends to exercise all rights to the Property.

IN WITNESS WHEREOF, City has duly executed this instrument this \_\_\_\_ day of \_\_\_\_\_, 201\_.

CITY OF LEMOORE

By: \_\_\_\_\_  
City Manager

**ATTACHMENT NO. 1**  
**LEGAL DESCRIPTION AND DEPICTION OF PROPERTY**  
**1655 South 19th Avenue, Lemoore, CA 93245**

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APN: 024-051-031  
024-080-066  
024-080-069



## ATTACHMENT NO. 8

### CITY IMPROVEMENTS

#### **City Improvements, Kashian Development Agreement**

##### Streets

- 60' Right Of Way (ROW) extending approximately 3175 Linear Feet (LF) from Enterprise Lane south towards Idaho. Estimated cost \$650,000.
- 60' ROW running east/west approximately 2000 LF to connect to 19<sup>th</sup> Ave. Estimated cost \$409,000
- 60' ROW running north/south approximately 725 LF to connect access to Idaho. Estimated cost \$148,000.

The 60' ROW will include the following improvements:

- Curb/Gutter. Estimated cost \$295,000
- All asphalt work for roadway
- City water infrastructure and hookups w/ laterals behind curb. Estimated cost \$600,000
- Sanitary sewer infrastructure and hookups laterals to clean out. Estimated cost \$600,000
- Storm drain infrastructure as required by design. Estimated cost \$600,000.
  - Lift station to push water to property south of Idaho Estimated cost \$250,000

##### Canal

- Underground approx. 1600 LF of Lemoore Canal and Irrigation ditch. Estimated cost \$560,000

**RESOLUTION NO. 2018-08**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LEMOORE RECOMMENDING  
ADOPTION OF THE CEQA INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION AND  
APPROVAL OF THE DISPOSITION AND DEVELOPMENT AGREEMENT BETWEEN THE CITY OF  
LEMOORE AND KKAL, LP FOR DEVELOPMENT OF APPROXIMATELY 83.5 ACRES  
LOCATED ON THE NORTHEAST CORNER OF STATE ROUTE 41 AND IDAHO AVENUE  
IN THE CITY OF LEMOORE (APN 024-051-031)**

At a Regular Meeting of the Planning Commission of the City of Lemoore duly called and held on October 8, 2018, at 7:00 p.m. on said day, it was moved by Commissioner MEADE, seconded by Commissioner FRANKLIN, and carried that the following Resolution be adopted:

**WHEREAS**, KKAL, LP has requested a Disposition and Development Agreement (DDA) between KKAL, LP and the City of Lemoore on property owned by the City of Lemoore consisting of approximately 83.5 acres located within the jurisdictional boundaries of the City of Lemoore (APN 024-051-031); and

**WHEREAS**, the proposed site is vacant; and

**WHEREAS**, the zoning on the parcel is ML (Light Industrial); and

**WHEREAS**, the Initial Study and Mitigated Negative Declaration were made available for public comment for 20-days, beginning on August 1, 2018 and ending August 21, 2018; and

**WHEREAS**, a Notice of Intent to Adopt the Initial Study and Mitigated Negative Declaration was published in the Hanford Sentinel, in compliance with the California Environmental Quality Act (CEQA); and

**WHEREAS**, the public hearing for this item was duly noticed for the Planning Commission's September 10, 2018, meeting and was continued to the October 8, 2018 meeting.

**NOW THEREFORE, BE IT RESOLVED** that the Planning Commission of the City of Lemoore hereby makes the following findings regarding the proposed Initial Study/Negative Declaration and the DDA:

1. The Initial Study and Mitigated Negative Declaration identified that the project would result in less than significant or no impacts after mitigation have been included in the project for all environmental issue areas including: Aesthetics/Shadows, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Construction Effects, Geology/Soils, Greenhouse Gas Emissions, Hazards/Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Neighborhood Effects, Population and Housing, Public Services, Transportation/Circulation, Utilities and Mandatory Findings of Significance.
2. The Planning Commission finds, based on the whole record before it, including the Initial Study and Mitigated Negative Declaration and any comments received, that there is no substantial evidence that the project will have a significant effect on the environment with the application of the mitigation measures set forth in the Mitigated Negative Declaration, and that the Mitigated Negative Declaration reflects the City's independent judgement and analysis.

3. The proposed DDA is consistent with the objectives, policies, and general land uses specified in the general plan and applicable specific plans.
4. The proposed DDA is compatible and in conformity with public convenience, general welfare, and good land use and zoning practice.
5. The proposed DDA will not be detrimental to the health, safety, and general welfare of the City of Lemoore.
6. The proposed DDA will not adversely affect the orderly development of property or the preservation of property values.

**BE IT FURTHER RESOLVED** that the Planning Commission of the City of Lemoore hereby recommends that the City Council adopt the Mitigated Negative Declaration and approve the DDA.

Passed and adopted at a Regular Meeting of the Planning Commission of the City of Lemoore held on October 8, 2018, by the following votes:

**AYES:** MEADE, FRANKLIN, BOERKAMP, MARVIN, ETCHEGOIN, CLEMENT

**NOES:**

**ABSTAINING:**

**ABSENT:** KOELEWYN

**APPROVED:**

  
\_\_\_\_\_  
Bob Clement, Chairperson

**ATTEST:**

  
\_\_\_\_\_  
Kristie Baley, Commission Secretary

# INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

---

## **CITY OF LEMOORE KASHIAN INDUSTRIAL DEVELOPMENT**

Comments must be received by: August 21, 2018 (20 days after notice)

**JULY 2018**

---



# INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

## KASHIAN INDUSTRIAL DEVELOPMENT

**Prepared for:**



711 W Cinnamon Drive  
Lemoore, CA 93245

Contact Person: Judy Holwell, Development Services Director  
Phone: 559) 924-6740

**Consultant:**



901 East Main Street  
Visalia, CA 93292

Contact: Steve Brandt, City Planner  
Phone: (559) 733-0440  
Fax: (559) 733-7821

July 2018

## Table of Contents

<b><i>Mitigated Negative Declaration</i></b> .....	<b>1</b>
<b><i>SECTION 1 - Introduction</i></b> .....	<b>11</b>
1.1 - Overview .....	11
1.2 - CEQA Requirements.....	11
1.3 - Impact Terminology.....	11
1.4 - Document Organization and Contents.....	11
<b><i>SECTION 2 - Project Description</i></b> .....	<b>13</b>
2.1 - Introduction .....	13
2.2 - Project Location.....	13
2.3 - Surrounding Land Uses .....	13
2.4 - Proposed Project.....	13
<b><i>SECTION 3 - Evaluation of Environmental Impacts</i></b> .....	<b>18</b>
3.1 - Environmental Checklist and Discussion .....	18
3.2 - Environmental Factors Potentially Affected: .....	20
3.3 - Determination .....	20
3.4 - Evaluation of Environmental Impacts .....	22
3.4.1 - Aesthetics .....	24
3.4.2 - Agriculture and Forestry Resources .....	26
3.4.3 - Air Quality .....	31
3.4.4 - Biological Resources .....	37
3.4.5 - Cultural Resources.....	60
3.4.6 - Geology and Soils.....	65
3.4.7 - Greenhouse Gas Emissions.....	71
3.4.8 - Hazards and Hazardous Materials.....	74
3.4.9 - Hydrology and Water Quality.....	78
3.4.10 - Land Use and Planning.....	86
3.4.11 - Mineral Resources.....	88
3.4.12 - Noise .....	90
3.4.13 - Population and Housing.....	94
3.4.14 - Public Services.....	96
3.4.15 - Recreation .....	100
3.4.16 - Transportation and Traffic .....	102
3.4.17 - Tribal Cultural Resources.....	106
3.4.18 - Utilities and Service Systems .....	108
3.4.19 - Mandatory Findings of Significance .....	112

## **SECTION 4 - References..... 115**

### **Appendices**

Appendix A – Biological Analysis

Appendix B – Cultural Resources Records

### **List of Figures**

Figure 2-1 Project Site Map.....	14
Figure 2-2 Regional Location .....	15
Figure 2-3 Project Location in City.....	16
Figure 2-4 Surrounding Land Uses .....	17
Figure 3.4.2-1 Farmland Mapping and Monitoring Program (FMMP).....	28
Figure 3.4.2-2 Williamson Act Contracts .....	29
Figure 3.4.4-1 Project Site and Survey Area, Lemoore Industrial Project, Lemoore, California.....	39
Figure 3.4.4-2 CNDDDB Sensitive Natural Communities and Special-Status Plant Species, Lemoore Industrial Project, Lemoore, California .....	42
Figure 3.4.4-3 CNDDDB Special-Status Reptile, Amphibian, and Invertebrate Species, Lemoore Industrial Project, Lemoore, California .....	43
Figure 3.4.4-4 CNDDDB Special-Status Bird Species, Lemoore Industrial Project, Lemoore, California.....	44
Figure 3.4.4-5 CNDDDB Special-Status Mammal Species, Lemoore Industrial Project, Lemoore, California.....	45
Figure 3.4.4-6 Biological Resources, Lemoore Industrial Project, Lemoore, California.....	47
Figure 3.4.4-7 Critical Habitat, Lemoore Industrial Project, Lemoore, California .....	51
Figure 3.4.4-8 National Wetlands Inventory and National Hydrography Dataset, Lemoore Industrial Project, Lemoore, California .....	58
Figure 3.4.6-1 Project Site Soil Map .....	69
Figure 3.4.9-1 100-Year Floodplain .....	83

### **List of Tables**

Table 3.4.4-1 Plants Observed on the Lemoore Industrial Project, Lemoore, California .....	46
Table 3.4.4-2 Wildlife Observed on the Lemoore Industrial Project, Lemoore, California ...	48

## **MITIGATED NEGATIVE DECLARATION**

As Lead Agency under the California Environmental Quality Act (CEQA), the City of Lemoore reviewed the Project described below to determine whether it could have a significant effect on the environment because of its development. In accordance with CEQA Guidelines Section 15382, “[s]ignificant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

### ***Project Name***

Kashian Industrial Development

### ***Project Location***

The proposed site is located at the northeast corner of Idaho Avenue and SR 41 in southern region of the City of Lemoore. The project is within Assessor’s Parcel Number (APN) 024-051-031, which totals 81.9 acres in size.

### ***Project Description***

A request by Lance-Kashian & Company for a site plan review for new industrial development (project). The project includes the construction of industrial buildings of varying sizes, with a total of approximately 1,025,000 square feet. This development will be built in phases, with a plan to develop 12 acres every two years until the site is built out. The site size is 81.9 acres. Each phase will be subject to additional review in accordance with City ordinances.

### ***Mailing Address and Phone Number of Contact Person***

John Kashian  
Owner/Applicant  
265 E. River Park Circle – Suite 270  
Fresno, CA 93720  
(559) 696-9584

### ***Findings***

As Lead Agency, the Kings County finds that the project will not have a significant effect on the environment. The Environmental Checklist (CEQA Guidelines Appendix G) or Initial Study (IS) (see *Section 3 - Environmental Checklist*) identified one or more potentially significant effects on the environment, but revisions to the project have been made before the release of this Mitigated Negative Declaration (MND) or mitigation measures would be implemented that reduce all potentially significant impacts less-than-significant levels. The



Lead Agency further finds that there is no substantial evidence that this project would have a significant effect on the environment.

***Mitigation Measures Included in the Project to Avoid Potentially Significant Effects***

**MM AQ-1:** Construction and operation of the proposed project shall be conducted in compliance with applicable rules and regulations set forth by the San Joaquin Valley Air Pollution Control District. Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged.

- a. Land Preparation, Excavation, and/or Demolition. The following dust control measures shall be implemented:
  1. All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall take place a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
  2. All clearing, grading, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over 1 hour), if disturbed material is easily windblown, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property.
  3. All fine material transported on-site a freeboard limit of at least 6 inches shall be maintained and fine material shall be either sufficiently watered or securely covered to prevent excessive dust.
  4. Areas disturbed by clearing, earth moving, or excavation activities shall be minimized at all times.
  5. Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.
  6. Where acceptable to the Fire Department, weed control shall be accomplished by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.
- b. Site Construction. After clearing, grading, earth moving, and/or excavating, the following dust control practices shall be implemented:
  1. Once initial leveling has ceased, all inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.
  2. All active disturbed soil areas shall be sufficiently watered at least twice daily to prevent excessive dust.
  3. The project proponent and/or its contractor(s) shall comply with the provisions of SJVAPCD Rule 4601 - Architectural Coatings, during the construction of all

- buildings and facilities. Application of architectural coatings shall be completed in a manner that poses the least emissions impacts whenever such application is deemed proficient.
4. The project proponent and/or its contractor(s) shall comply with the provisions of SJVAPCD Rule 4641 during the construction and pavement of all roads and parking areas within the project area. Specifically, the applicant shall not allow the use of rapid cure cutback asphalt, medium cure cutback, or slow cure cutback or emulsified asphalt.
- c. Vehicular Activities. During all phases of construction, the following vehicular control measures shall be implemented:
1. On-site vehicle speed shall be limited to 15 miles per hour.
  2. All areas with vehicle traffic shall be paved, treated with dust palliatives, or watered a minimum of twice daily.
  3. Streets adjacent to the project site shall be kept clean, and project-related accumulated silt shall be removed.
  4. Access to the site shall be by means of an apron into the project site from adjoining surfaced roadways. The apron shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly or other such device shall be used on the road exiting the project site, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires.

**MM AQ-2:** The project proponent and/or its contractor(s) shall implement the following measures during construction of the proposed project:

- a. All equipment shall be maintained as recommended by manufacturer manuals.
- b. Equipment shall be shut down when not in use for extended periods of time.
- c. Construction equipment shall operate no longer than eight cumulative hours per day.
- d. Electric equipment shall be used whenever possible in lieu of diesel- or gasoline-powered equipment.
- e. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO<sub>x</sub> emissions.
- f. On- and off-road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines.
- g. On- and off-road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines.
- h. All construction workers shall be encouraged to shuttle (car-pool) to retail establishments or to remain on-site during lunch breaks.
- i. All construction activities within the project area shall be discontinued during the first stage smog alerts.
- j. Construction and grading activities shall not be allowed during first stage ozone alerts. First stage ozone alerts are declared when the ozone level exceeds 0.20 ppm (1-hour average).

**MM AQ-3:** Prior to the issuance of building and grading permits, the project proponent shall provide the City of Lemoore Development Services Department with proof that an Indirect Source Review application has been approved by the San Joaquin Valley Air Pollution Control District, if applicable.

**MM AQ-4:** Prior to the issuance of demolition permits, the project proponent shall provide the City of Lemoore Development Services Department with proof that a Demolition Permit has been issued by the San Joaquin Valley Air Pollution Control District, if applicable.

**MM-BIO-1 (protection of San Joaquin kit fox):** The U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (2011) shall be enacted. These recommendations include but are not limited to:

- Pre-construction surveys shall be conducted no fewer than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities, or any Project activity likely to impact the San Joaquin kit fox at Action Area 2.
- Project-related vehicles shall observe a daytime speed limit of 20-mph throughout the Action Area 2, except on County roads and State and federal highways; this is particularly important at night when kit fox is the most active. Night-time construction shall be minimized to the extent possible. However, if night construction should occur, then the speed limit shall be reduced to 10-mph. Off-road traffic outside of designated project areas shall be prohibited.
- To prevent inadvertent entrapment of kit fox or other animals during the construction phase of a Project, all excavated, steep-walled holes or trenches more than 2-feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals.
- Kit fox are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way.
- All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from the Action Area 2.
- No pets, such as dogs or cats, shall be permitted at the Action Area 2 to prevent harassment, mortality of kit fox, or destruction of dens.
- Use of rodenticides and herbicides in project areas shall be restricted. This is necessary to prevent primary or secondary poisoning of kit fox and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and federal legislation, as well as additional project-related restrictions deemed necessary by the

Service. If rodent control must be conducted, zinc phosphide shall be used because of a proven lower risk to kit fox.

- A representative shall be appointed by the Project proponent who will be the contact source for any employee or contractor who might observe a kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the USFWS.
- An employee education program shall be conducted for any Project that has anticipated impacts to kit fox or other endangered species. The program shall consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the Project. The program shall include the following: A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the previously referenced people and anyone else who may enter the project site.
- In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape, or the USFWS should be contacted for guidance.
- New sightings of kit fox shall be reported to the CNDDB. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the USFWS at the address below.

**MM BIO-2 (protection of Swainson's hawk):** If all Project activities are completed outside of the Swainson's hawk nesting season (February 15 through August 31), no mitigation shall be required. If construction is planned during the nesting season, a preconstruction survey shall be conducted by a qualified biologist to evaluate the site and a 0.5-mile buffer for active Swainson's hawk nests. If potential Swainson's hawk nests or nesting substrates are located within 0.5 mile of the Project sites, then those nests or substrates must be monitored for activity on a routine and repeating basis throughout the breeding season, or until Swainson's hawks or other raptor species are verified to be using them. Monitoring will be conducted according to the protocol outlined in the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). The protocol recommends that ten visits be made to each nest or nesting site: one during January 1-March 20 to identify potential nest sites, three during March 20-April 5, three during April 5-April 20, and three during June 10-July 30. To meet the minimum level of protection for the species, surveys shall be completed for at least the two survey periods immediately prior to Project-related ground disturbance activities. During the nesting period, active Swainson's hawk nests shall be avoided by 0.5 mile unless this avoidance buffer is reduced through consultation with the CDFW and/or USFWS. If an active Swainson's hawk nest is located within 250 feet of the Project or within the Project, including the stick nest located within the Project, CDFW will require an Incidental Take Permit.

**MM BIO-3 (protection of western burrowing owl):** A qualified biologist shall conduct a pre-construction survey on the Project site and within 250 feet of its perimeter where feasible, to identify the presence of the western burrowing owl. The survey should be conducted between 14 and 30 days prior to the start of construction activities. If any burrowing owl burrows are observed during the preconstruction survey, avoidance measures shall be consistent with those included in the CDFW staff report on burrowing owl mitigation (CDFG 2012). If occupied burrowing owl burrows are observed outside of the breeding season (September 1 through January 31) and within 500 feet of proposed construction activities, a passive relocation effort may be instituted in accordance with the guidelines established by the California Burrowing Owl Consortium (1993) and the California Department of Fish and Wildlife (2012). During the breeding season (February 1 through August 31), a 250-foot (minimum) buffer zone should be maintained unless a qualified biologist verifies through noninvasive methods that either the birds have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

**MM BIO-4 (protection of migratory birds and raptors):** If construction is planned outside the nesting period for raptors and migratory birds (February 15 to August 31), no mitigation shall be required. If construction is planned during the nesting season for migratory birds and raptors, a preconstruction survey to identify active bird nests shall be conducted by a qualified biologist to evaluate the site and a 250-foot buffer for migratory birds and a 500-foot buffer for raptors. If nesting birds are identified during the survey, active raptor nests shall be avoided by 500 feet and all other migratory bird nests shall be avoided by 250 feet. Avoidance buffers may be reduced if a qualified on-site monitor determines that encroachment into the buffer area is not affecting nest building, the rearing of young, or otherwise affecting the breeding behaviors of the resident birds.

No construction or earth-moving activity shall occur within a non-disturbance buffer until it is determined by a qualified biologist that the young have fledged (left the nest) and have attained sufficient flight skills to avoid Project construction areas. Once the migratory birds or raptors have completed nesting and young have fledged, disturbance buffers will no longer be needed and can be removed, and monitoring can cease.

**BIO-5 (WEAP training):** Prior to ground disturbance activities, within one week of employment all new construction workers at the Project site shall attend a Construction Worker Environmental Awareness Training and Education Program, developed and presented by a qualified biologist.

The Construction Worker Environmental Awareness Training and Education Program would be presented by the biologist and should include information on the life history wildlife and plant species that may be encountered during construction activities, their legal protections, the definition of “take” under the Endangered Species Act, measures the Project operator is implementing to protect the San Joaquin kit fox and other species, reporting requirements, specific measures that each worker would employ to avoid take of the wildlife species, and penalties for violation of the Act. Identification and information regarding

sensitive or other special status plant species should also be provided to construction personnel.

- An acknowledgement form signed by each worker indicating that environmental training has been completed.
- A sticker that shall be placed on hard hats indicating that the worker has completed the environmental training. Construction workers should not be permitted to operate equipment within the construction area unless they have attended the training and are wearing hard hats with the required sticker;
- A copy of the training transcript and/or training video/CD, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms should be maintain on site for the duration of construction activities.
- The construction crews and contractor(s) would be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by Project permits.

**MM BIO-6 (riparian vegetation):** It is recommended that the project be designed to avoid the 0.957 acres of riparian habitat. To ensure avoidance, ESA fencing shall be placed around the riparian areas prior to beginning of construction and maintained throughout construction. The Project shall be designed to allow sufficient water to maintain the riparian area.

If it is not possible to avoid the riparian habitat then one of the following two options for mitigating the loss of riparian habitat will be implemented.

1. On-site mitigation: In-kind compensation of 2.871 acres shall be provided within the Project site. Removal of riparian trees equal to or greater than 4 inches in DBH will be mitigated by the replacement of those trees at a 3:1 ratio for each tree type within the mitigation land.
2. Off-site mitigation: In-kind compensation of 2.871 acres shall be provided outside of the Project site. Removal of riparian trees equal to or greater than 4 inches in DBH will be mitigated by the replacement of those trees at a 3:1 ratio for each tree type within the mitigation land.

**MM BIO-7 (water quality):** Best management practices (BMPs) would serve to reduce impacts to waters of the U.S. and waters of the State to less than significant levels. Impacts to the banks of the canal on the south side of the Project will require a Streambed Alteration Agreement from CDFW through Section 1600. Compliance with these permits may require implementation of additional measures.

The Project will employ best management practices (BMPs) to prevent all construction pollutants from contacting storm water, with the intent of keeping sedimentation or any other pollutants from moving offsite and into receiving waters. Some of these BMPs may include the following:

- Construction materials, including topsoil and chemicals, should be stored, covered, and isolated to prevent runoff losses and contamination of storm water and groundwater;
- Topsoil removed during construction should be carefully stored and treated as an important resource. Berms should be placed around topsoil stockpiles to prevent runoff during storm events;
- Fuel and vehicle maintenance areas should be established away from all drainage courses and these areas should be designed to control runoff;
- Disturbed areas should be revegetated after completion of construction activities;
- Sanitary facilities should be provided for construction workers; and
- Hazardous materials should be stored in appropriate and approved containers, maintaining required clearances. Materials should be handled in accordance with applicable federal, state and/or local regulatory agency protocols.

**MM BIO-8 (valley sink scrub):** Construction equipment and vehicles shall not be permitted in the area of Valley Sink Scrub located to the southeast of the Project. This area shall be excluded from the Project by ESA fencing.

**MM CUL-1 (Archaeological Monitoring):** Prior to any ground disturbance, a surface inspection of the Index Project site shall be conducted by a qualified archeologist. The qualified archeologist shall monitor the site during grading activities. The archeologist shall provide pre-construction briefings to supervisory personnel, any excavation contractor, and any person who will perform unsupervised, ground disturbing work on the project in connection with construction or decommissioning. The briefings will include information on potential cultural material finds and, on the procedures, to be enacted if resources are found.

**MM CUL-2 (Native American Monitoring):** Prior to any ground disturbance, the applicant shall offer interested Tribes the opportunity to provide a Native American Monitor during ground disturbing activities during construction. Tribal participation would be dependent upon the availability and interest of the Tribe.

**MM CUL-3 (Stop Work in the Event of Unanticipated Discoveries):** In the event that cultural resources, paleontological resources or unique geologic features are discovered during construction, operations shall stop within 100 feet of the find, and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall determine the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the CEQA Guidelines. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing, and data recovery, among other options. Any previously undiscovered resources found during construction within the Project area shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance. No further ground disturbance shall occur in the immediate vicinity of the discovery until approved by the qualified archaeologist. Upon discovery of cultural resources, in addition to other procedures described in this mitigation measure, the Kings County Community Development Agency,

along with other relevant agency or Tribal officials, shall be contacted to begin coordination on the disposition of the find(s), and treatment of any significant cultural resource shall be undertaken pursuant to the Plan. In the event of any conflict between this mitigation measure and the Plan, the stipulations of the Plan shall control.

**MM-CUL 4 (Disposition of Cultural Resources):** Upon coordination with the Kings County Community Development Agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.

**MM CUL-5:** During any ground disturbance activities, if paleontological resources are encountered, all work within 25 feet of the find shall halt until a qualified paleontologist as defined by the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010), can evaluate the find and make recommendations regarding treatment. Paleontological resource materials may include resources such as fossils, plant impressions, or animal tracks preserved in rock. The qualified paleontologist shall contact the Natural History Museum of Los Angeles County or other appropriate facility regarding any discoveries of paleontological resources. If the qualified paleontologist determines that the discovery represents a potentially significant paleontological resource, additional investigations and fossil recovery may be required to mitigate adverse impacts from project implementation. If avoidance is not feasible, the paleontological resources shall be evaluated for their significance. If the resources are not significant, avoidance is not necessary. If the resources are significant, they shall be avoided to ensure no adverse effects, or such effects must be mitigated. Construction in that area shall not resume until the resource appropriate measures are recommended or the materials are determined to be less than significant. If the resource is significant and fossil recovery is the identified form of treatment, then the fossil shall be deposited in an accredited and permanent scientific institution. Copies of all correspondence and reports shall be submitted to the Lead Agency.

**MM CUL-6:** If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the county coroner.

**MM GEO-1:** Prior to final design, a geotechnical study shall be prepared for the project site and recommendations of the study shall be incorporated into final design of the project. A copy of the report shall be submitted to the Kings County Community Development Agency for review.



**MM GHG-1:** Prior to the issuance of building or grading permits, and continually throughout Project operations, the Project proponent shall comply with applicable policies of the City of Lemoore General Plan, as well as all applicable rules and regulations set forth by San Joaquin Valley Air Pollution Control District.

**MM GHG-2:** Prior to the issuance of building or grading permits, and continually throughout Project operations, the Project proponent shall comply with applicable policies of the City of Lemoore General Plan, as well as all applicable rules and regulations set forth by San Joaquin Valley Air Pollution Control District.

**MM HYD-1:** Prior to ground-disturbing activities, the City shall prepare and implement a Storm water Pollution Prevention Plan (SWPPP) that specifies best management practices (BMP), with the intent of keeping all products of erosion from moving offsite. The SWPPP shall include contain a site map that shows the construction site perimeter, existing and proposed man-made facilities, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the Project site. Additionally, the SWPPP shall contain a visual monitoring program and a chemical monitoring program for non-visible pollutants to be implemented (if there is a failure of best management practices). The requirements of the SWPPP and BMPs shall be incorporated into design specifications and construction contracts. Recommended best management practices for the construction phase may include the following:

- Stockpiling and disposing of demolition debris, concrete, and soil properly;
- Protecting any existing storm drain inlets and stabilizing disturbed areas;
- Implementing erosion controls;
- Properly managing construction materials; and
- Managing waste, aggressively controlling litter, and implementing sediment controls.

## **SECTION 1 - INTRODUCTION**

### **1.1 - Overview**

A request by Lance-Kashian & Company for tentative parcel map and site plan review for new industrial development (project). The project includes the construction of industrial buildings of varying sizes, with a total of approximately 1,025,000 square feet. This development will be built in phases, with a plan to develop 12 acres every two years until the site is built out. The site size is 81.9 acres.

### **1.2 - CEQA Requirements**

The City of Lemoore is the Lead Agency for this Project pursuant to the CEQA Guidelines (Public Resources Code Section 15000 et seq.). The Environmental Checklist (CEQA Guidelines Appendix G) or Initial Study (IS) (see *Section 3 – Initial Study*) provides analysis that examines the potential environmental effects of the construction and operation of the Project. Section 15063 of the CEQA Guidelines requires the Lead Agency to prepare an IS to determine whether a discretionary project will have a significant effect on the environment. A Negative Declaration (ND) is appropriate when an IS has been prepared and a determination can be made that no significant environmental effects will occur.

Based on the IS, the Lead Agency has determined that the environmental review for the proposed application can be completed with a ND.

### **1.3 - Impact Terminology**

The following terminology is used to describe the level of significance of project environmental impacts.

- A finding of “no impact” is appropriate if the analysis concludes that the project would not affect a topic area in any way.
- An impact is considered “less than significant” if the analysis concludes that it would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered “less than significant with mitigation incorporated” if the analysis concludes that it would cause no substantial adverse change to the environment with the inclusion of environmental commitments that have been agreed to by the proponent.
- An impact is considered “potentially significant” if the analysis concludes that it could have a substantial adverse effect on the environment.

### **1.4 - Document Organization and Contents**

The content and format of this IS/MND is designed to meet the requirements of CEQA. The report contains the following sections:

- *Section 1 – Introduction:* This section provides an overview of CEQA requirements, intended uses of the IS/MND, document organization, and a list of regulations that have been incorporated by reference.
- *Section 2– Project Description:* This section describes the Project and provides data on the site's location.
- *Section 3 – Environmental Checklist:* This chapter contains the evaluation of 18 different environmental resource factors contained in Appendix G of the CEQA Guidelines. Each environmental resource factor is analyzed to determine whether the proposed Project would have an impact. One of four findings is made which include: no impact, less-than-significant impact, less than significant with mitigation, or significant and unavoidable. If the evaluation results in a finding of significant and unavoidable for any of the 18 environmental resource factors, then an Environmental Impact Report will be required.
- *Section 4 – References:* This chapter contains a full list of references that were used in the preparation of this IS/MND.

## **SECTION 2 - PROJECT DESCRIPTION**

### ***2.1 - Introduction***

Lance-Kashian & Company (KKAL) is a real estate development and management company based in Fresno, California. Their services include asset management, property management, and development. The company plans to build an industrial development complex in Lemoore in order to allow new business to come to Lemoore and existing businesses in the area to expand.

### ***2.2 - Project Location***

The proposed site is located at the northeast corner of Idaho Avenue and SR 41 in southern region of the City of Lemoore as shown in Figures 2-1, 2-2, and 2-3. The project is within Assessor's Parcel Number (APN) 024-051-031, which totals 81.9 acres in size.

The site is in Section 16, Township 19 South, Range 20 East, Mount Diablo Base and Meridian (MDB&M) within the Lemoore United States Geological Survey (USGS) 7.5-minute topographic quadrangle.

### ***2.3 - Surrounding Land Uses***

The area surrounding the proposed industrial site consists of undeveloped farmland to the west (beyond SR 41). The southern portion of the site currently contains a storm drainage pond. The pond will be relocated south of Idaho Avenue, outside of the proposed site area. East of the site is light industrial development, and there is vacant land directly north of the site. Land uses and development surrounding the site are depicted in Figure 2-4.

### ***2.4 - Proposed Project***

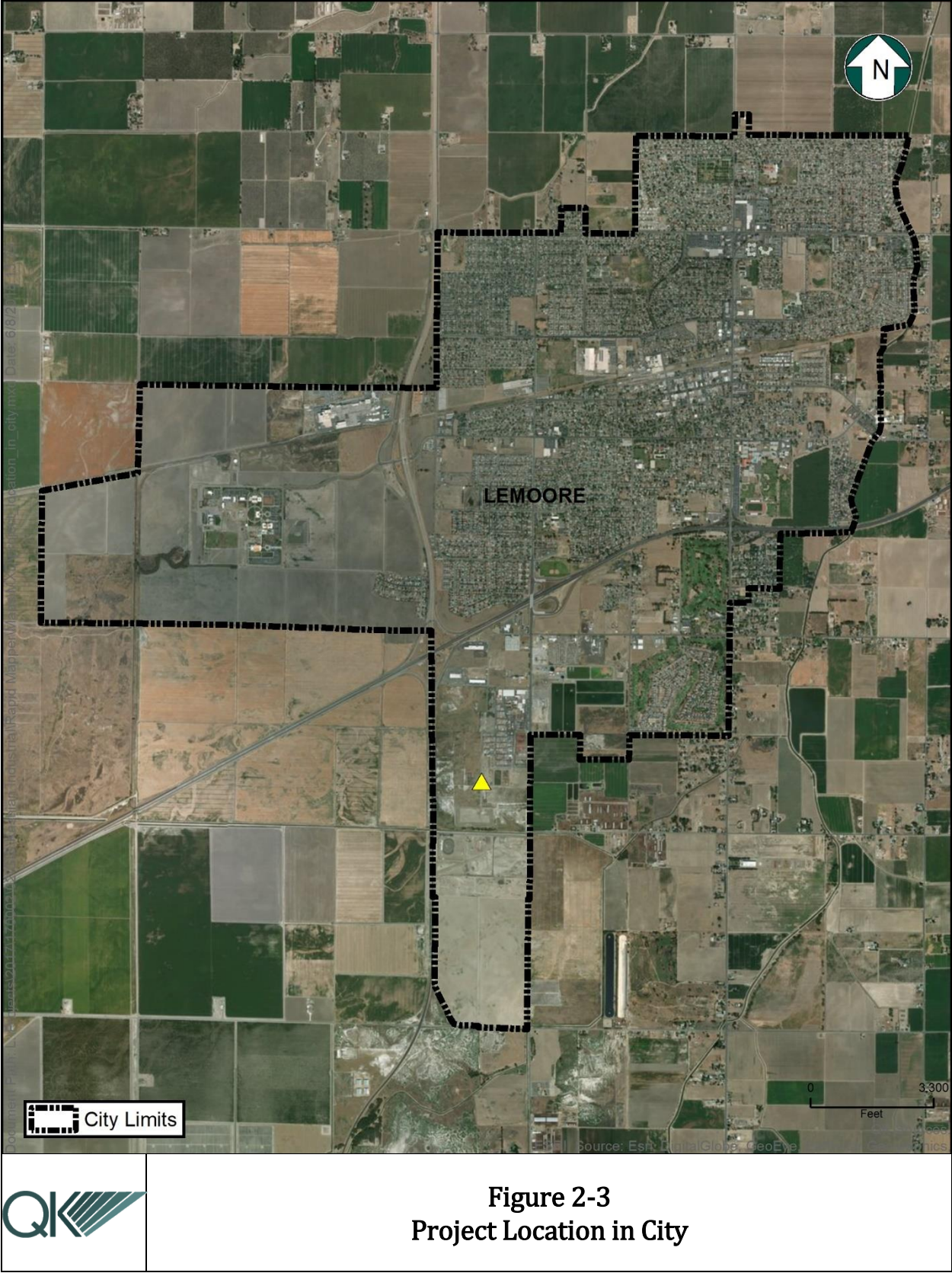
Lance-Kashian & Company requests approval of a tentative parcel map and site plan review for light industrial development in a site in southwest Lemoore (project). The project includes the construction of industrial buildings of varying sizes, with a total of approximately 1,025,000 square feet. The development will also include the provision of onsite parking, loading spaces, refuse collection, landscaping, and the dedication of a public road. This development will be built in phases. The 81.9-acre site is located at the northeast corner of Highway 41 and Idaho Avenue as shown in Figure 2-1. The site is currently undeveloped except for a ponding basin that will be relocated to a new site as part of this project.

















## **SECTION 3 - EVALUATION OF ENVIRONMENTAL IMPACTS**

### **3.1 - Environmental Checklist and Discussion**

**1. Project Title:**

Kashian Industrial Development

**2. Lead Agency Name and Address:**

City of Lemoore  
119 Fox Street  
Lemoore, CA 93245

**3. Contact Person and Phone Number:**

Judy Holwell, Development Services Director  
(559) 924-6740

**4. Project Location:**

The proposed site is located at the northeast corner of Idaho Avenue and SR 41 in western region of the City of Lemoore. The project is within Assessor's Parcel Number (APN) 024-051-031.

**5. Project Sponsor's Name and Address:**

John Kashian  
Owner/Applicant  
265 E. River Park Circle – Suite 270  
Fresno, CA 93720  
(559) 696-9584

**6. General Plan Designation:**

Light Industrial

**7. Zoning:**

Light Industrial - ML

**8. Description of Project:**

*See Section 2.4 – Proposed Project.*

**9. Surrounding Land Uses and Setting:**

*See Section 2.3 – Surrounding Land Uses and Figure 2-4.*

**10. Other Public Agencies Approval Required:**

None.

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

Yes, the Santa Rosa Rancheria Tachi Tribe has requested consultation with the City of Lemoore. A letter was sent to the tribe on July 3, 2018, informing them of the Project.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

### 3.2 - Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality               |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Geology /Soils            |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials    | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use/Planning        | <input type="checkbox"/> Mineral Resources                | <input type="checkbox"/> Noise                     |
| <input type="checkbox"/> Population/Housing       | <input type="checkbox"/> Public Services                  | <input type="checkbox"/> Recreation                |
| <input type="checkbox"/> Transportation/Traffic   | <input type="checkbox"/> Utilities / Service Systems      | <input type="checkbox"/> Findings of Significance  |

### 3.3 - Determination

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable

standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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Judy Holwell, Development Services Director

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Date

### **3.4 - Evaluation of Environmental Impacts**

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. the significance criteria or threshold, if any, used to evaluate each question; and
  - b. the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.1 - AESTHETICS

Would the project:

a.	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

#### Impact #3.4.1a – Would the Project have a substantial adverse effect on a scenic vista?

As seen in Figure 2-4, the project is located in undeveloped land and is surrounded by either vacant land or light industry. It is at the northeast corner of Idaho Avenue and SR 41 in the western region of Lemoore.

The City of Lemoore 2030 General Plan states there are currently no buildings or structures listed in the National Register of Historic Places or as California Historic Landmarks. However, there are 37 sites listed as having local historic significance located within the downtown district (City of Lemoore , 2008). There are no local historic resources within the vicinity of the Project site. The Project is not located in an area that would result in substantial adverse effects on any scenic vistas and no impact would occur.

#### MITIGATION MEASURE(S)

No mitigation is required.

#### LEVEL OF SIGNIFICANCE

There would be *no impact*.

**Impact #3.4.1b – Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

There are no listed State scenic highways within Kings County; therefore, the site would not damage scenic resources within a state scenic highway (California Department of Transportation, 2011).

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.1c – Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?**

The proposed project would be similar in nature to the existing light industrial development next to the site. The project is consistent with zoning and land use designations for the area and would not result in a substantial degradation to the existing visual character or quality of the site and its surroundings.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.1d – Would the Project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?**

The proposed development would comply with all lighting standards established in the City's Zoning Ordinance (Title 9, Chapter 5, Article B, Section 4), and therefore impacts would be less than significant.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.



Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.2 - AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

**Impact #3.4.2a – Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?**

The proposed project will not convert any farmland. According to the Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), the project site is

classified as 'Vacant or Disturbed Land' (see Figure 3.4.2-1). (CA Department of Conservation, 2016) Therefore, the proposed project will have no impact on conversion of agricultural resources.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.2b – Would the Project conflict with existing zoning for agricultural use or a Williamson Act Contract?**

The project site is currently zoned Light Industrial within both the *City of Lemoore 2030 General Plan* and the City of Lemoore's Zoning Ordinance. The project site is not under Williamson Act Contract and does not conflict with any current Williamson Act Contract (see Figure 3.4.2-2).

**MITIGATION MEASURE(S)**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.2c – Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

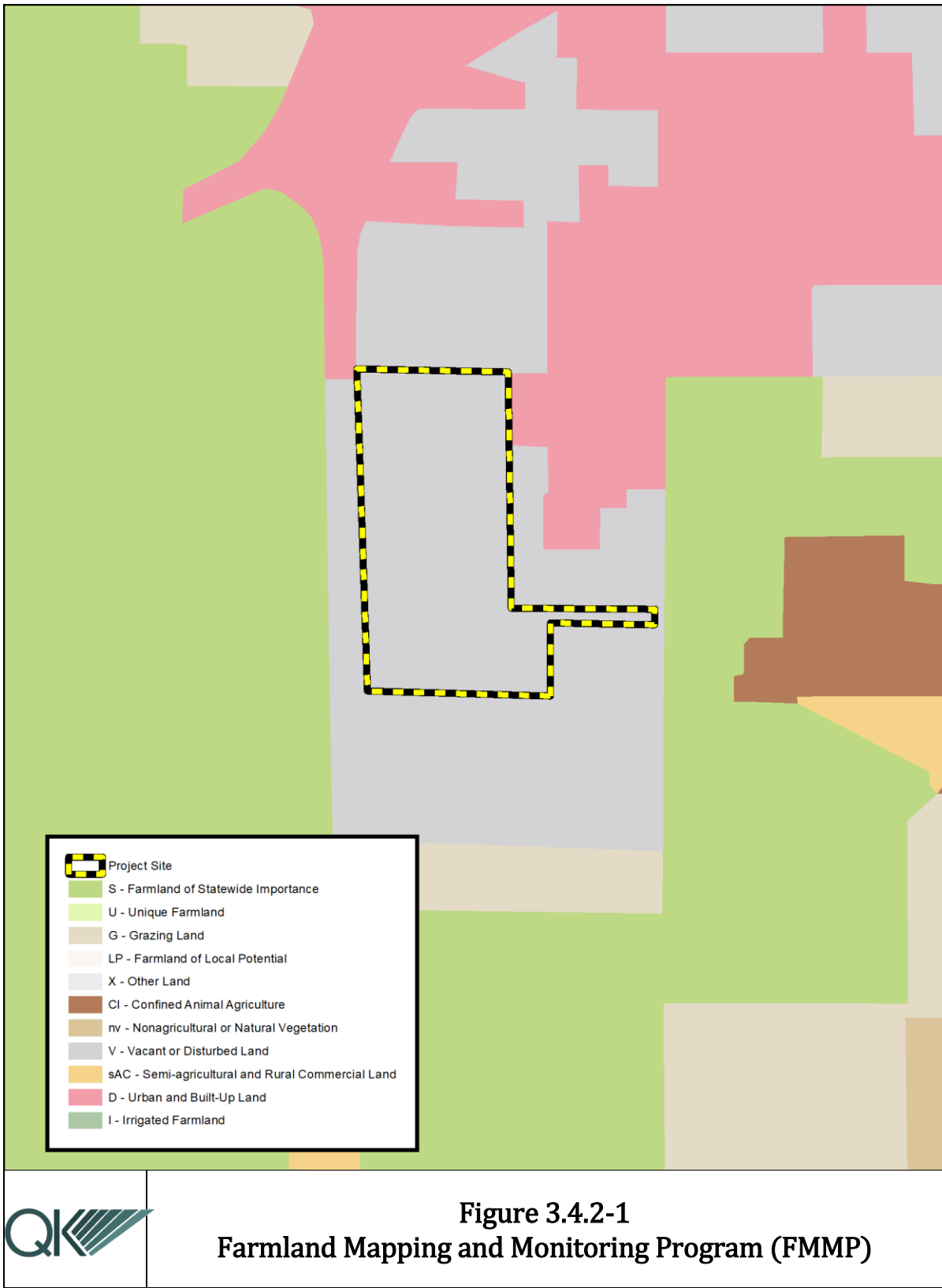
The project site and the surrounding areas are not zoned for forest land or timberland by the City of Lemoore Zoning Map. The site is zoned Light Industrial (ML), which allows for this type of industrial development. The project will have no impact on land designated for forest land use.

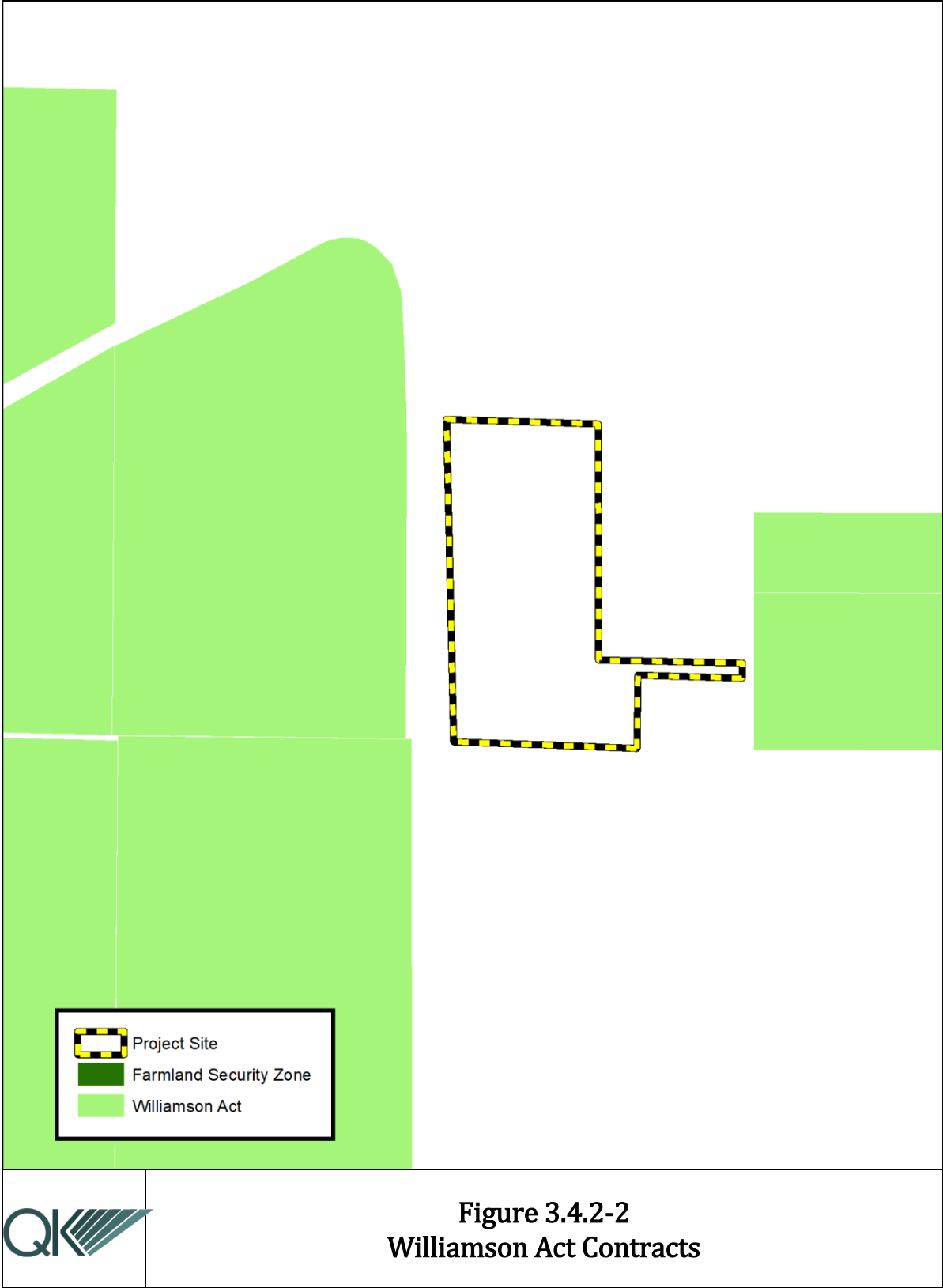
**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.





**Impact #3.4.2d – Would the Project result in the loss of forest land or conversion of forest land to non-forest use?**

The proposed project site is not considered to be forest land or timberland. The project is considered an industrial use within the existing zone district. It is currently undeveloped and surrounded by either undeveloped land or light industrial development. Further development of the associated use would be consistent with the existing zoning and would not result in the conversion of forest land to non-forest use. The proposed project will have no impact.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.2e – Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

The proposed project will allow for the development of a light industrial complex. The project site is zoned Light Industrial (ML), for which light industry is an allowable use. The project will not change the existing zoning of the site; therefore, the project would not involve changes in the existing environment that could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

The properties to the east and west of the project site are currently used for agricultural production and are under a Williamson Act contract. Though some development pressure on surrounding properties could result from this development, it is unlikely. The agricultural land to the east and west is outside of the current city limits. The proposed project is expected to develop slowly over a number of years and focuses development onto land that is not farmland or forest land. State Route 41 is in between the project site and the agricultural land to the west of the site, so the agricultural land is further protected from development pressures. The impacts to surrounding agricultural land would be deemed less than significant, as the project will contain development to the predetermined boundaries shown in Figure 2-1.

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.3 - AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a.	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

#### Impact #3.4.3a – Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The SJVAB is designated nonattainment of state and Federal health-based air quality standards for ozone and PM2.5. The SJVAB is designated nonattainment of state PM10. To meet Federal Clean Air Act (CAA) requirements, the SJVAPCD has multiple air quality attainment plan (AQAP) documents, including:

- 2016 Ozone Plan;
- 2007 PM10 Maintenance Plan and Request for Redesignation; and
- 2016 PM2.5 Plan.

The SJVAPCD's AQAPs account for projections of population growth and vehicle miles traveled (VMT) provided by the Council of Governments (COG) in the SJVAB and identify strategies to bring regional emissions into compliance with federal and State air quality standards. It is assumed that the existing and future pollutant emissions computed in the

AQAPs were based on land uses from area general plans that were prepared prior to the AQAP's adoption. Because population growth and VMT projections are the basis of the AQAPs' strategies, a project would conflict with the plans if it results in more growth or VMT than the plans' projections. The proposed Project would result in the construction and operation of a light industrial development. This development will result in new vehicle trips per day in the area and only temporary vehicle trips during the construction period. Additionally, the proposed Project is consistent with the current General Plan designation for the site. Therefore, if the proposed Project's VMT are consistent with the General Plan, then the proposed Project is consistent with the growth assumptions used in the applicable AQAPs. In conclusion, the proposed Project is consistent with the General Plan and would not require a general plan amendment. Therefore, the proposed Project is consistent with the applicable AQAPs.

**MITIGATION MEASURE(S)**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.3b – Would the Project Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

The proposed Project is located within the San Joaquin Valley Air Basin (SJVAB). The proposed Project consists of the construction and operation of a light industrial development. The Project is consistent with the City of Lemoore 2030 General Plan and Zoning Ordinance and therefore, an allowable use at the Project site.

The General Plan analyzed activities that disturb the soil, such as grading and excavation, infrastructure construction, building demolition, and a variety of construction activities. The General Plan also analyzed operational air quality impacts that would likely occur based on the various land use designations and possible resultant land uses that could occur during buildout of the City in compliance with the General Plan. Because the proposed Project is consistent with the General Plan, construction and operational air emissions as a result have already been analyzed in the General Plan EIR.

The General Plan EIR requires that all new development that is consistent with the General Plan land use designations, such as the proposed Project, be subject to Best Management Practices to reduce dust and other air pollutant emissions, as well as mandatory compliance with all applicable SJVAPCDs rules and regulations. These rules and regulations include, but are not limited to, Rule 2201 (New and Modified Station Source Review), Rule 4002 (National Emission Standards for Hazardous Air Pollutants), Regulation VIII (Fugitive PM10 Prohibitions), and Rule 9510 (Indirect Source Review [ISR]). The construction and operation of the proposed Project would also be subject to SJVAPCD's Regulation VIII (Fugitive PM10 Prohibitions). Implementation of Mitigation Measures MM AQ-1 through MM AQ-3 requires

that the proposed Project comply with applicable SJVAPCD rules and regulations to reduce construction and operational impacts as described in the mitigation.

With implementation of this mitigation, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts would be less than significant.

***MITIGATION MEASURE(S)***

**MM AQ-1:** Construction and operation of the proposed project shall be conducted in compliance with applicable rules and regulations set forth by the San Joaquin Valley Air Pollution Control District. Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged.

- d. Land Preparation, Excavation, and/or Demolition. The following dust control measures shall be implemented:
  7. All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall take place a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
  8. All clearing, grading, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over 1 hour), if disturbed material is easily windblown, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property.
  9. All fine material transported on-site a freeboard limit of at least 6 inches shall be maintained and fine material shall be either sufficiently watered or securely covered to prevent excessive dust.
  10. Areas disturbed by clearing, earth moving, or excavation activities shall be minimized at all times.
  11. Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.
  12. Where acceptable to the Fire Department, weed control shall be accomplished by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.
- e. Site Construction. After clearing, grading, earth moving, and/or excavating, the following dust control practices shall be implemented:
  5. Once initial leveling has ceased, all inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.



6. All active disturbed soil areas shall be sufficiently watered at least twice daily to prevent excessive dust.
  7. The project proponent and/or its contractor(s) shall comply with the provisions of SJVAPCD Rule 4601 - Architectural Coatings, during the construction of all buildings and facilities. Application of architectural coatings shall be completed in a manner that poses the least emissions impacts whenever such application is deemed proficient.
  8. The project proponent and/or its contractor(s) shall comply with the provisions of SJVAPCD Rule 4641 during the construction and pavement of all roads and parking areas within the project area. Specifically, the applicant shall not allow the use of rapid cure cutback asphalt, medium cure cutback, or slow cure cutback or emulsified asphalt.
- f. Vehicular Activities. During all phases of construction, the following vehicular control measures shall be implemented:
5. On-site vehicle speed shall be limited to 15 miles per hour.
  6. All areas with vehicle traffic shall be paved, treated with dust palliatives, or watered a minimum of twice daily.
  7. Streets adjacent to the project site shall be kept clean, and project-related accumulated silt shall be removed.
  8. Access to the site shall be by means of an apron into the project site from adjoining surfaced roadways. The apron shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly or other such device shall be used on the road exiting the project site, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires.

**MM AQ-2:** The project proponent and/or its contractor(s) shall implement the following measures during construction of the proposed project:

- k. All equipment shall be maintained as recommended by manufacturer manuals.
- l. Equipment shall be shut down when not in use for extended periods of time.
- m. Construction equipment shall operate no longer than eight cumulative hours per day.
- n. Electric equipment shall be used whenever possible in lieu of diesel- or gasoline-powered equipment.
- o. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO<sub>x</sub> emissions.
- p. On- and off-road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines.
- q. On- and off-road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines.
- r. All construction workers shall be encouraged to shuttle (car-pool) to retail establishments or to remain on-site during lunch breaks.
- s. All construction activities within the project area shall be discontinued during the first stage smog alerts.

- t. Construction and grading activities shall not be allowed during first stage ozone alerts. First stage ozone alerts are declared when the ozone level exceeds 0.20 ppm (1-hour average).

**MM AQ-3:** Prior to the issuance of building and grading permits, the project proponent shall provide the City of Lemoore Development Services Department with proof that an Indirect Source Review application has been approved by the San Joaquin Valley Air Pollution Control District, if applicable.

**MM AQ-4:** Prior to the issuance of demolition permits, the project proponent shall provide the City of Lemoore Development Services Department with proof that a Demolition Permit has been issued by the San Joaquin Valley Air Pollution Control District, if applicable

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated.*

**Impact #3.4.3c – Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

See Response (b), above.

**MITIGATION MEASURE(S)**

Implement MM AQ-1 through MM AQ-4.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated.*

**Impact #3.4.3d – Would the Project Expose sensitive receptors to substantial pollutant concentrations?**

As noted in Response (b), the proposed Project is consistent with the surrounding land uses and would not create or expose sensitive receptors to substantial pollutant concentrations or emissions. With implementation of MM AQ-1 through MM AQ-4, impacts would be considered less than significant.

**MITIGATION MEASURE(S)**

Implement MM AQ-1 through MM AQ-4.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated.*

**Impact #3.4.3e – Would the Project Create objectionable odors affecting a substantial number of people?**

According to the 2015 SJVAPCD's *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI), analysis of potential odor impacts should be conducted for the following two situations:

- Generators – projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate; and
- Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

As proposed, the Project would not generate odors that would impact sensitive receptors. With implementation of MM QA-1 through MM AQ-4, odor impacts that may be generated during temporary construction activities would be reduced to less than significant levels.

***MITIGATION MEASURE(S)***

Implement MM AQ-1 through MM AQ-4.

***LEVEL OF SIGNIFICANCE***

Impacts would be *less than significant with mitigation incorporated*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.4 - BIOLOGICAL RESOURCES

Would the project:

- |    |  |                          |                                     |                          |                                     |
|----|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a. | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| b. | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| c. | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. | Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. | Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Discussion

The analysis presented in this section is based on literature reviews, database searches, and a biological reconnaissance-level survey that was conducted by QK Environmental Scientist Alex Single at the proposed Project on June 20, 2018.

This section focuses on the impacts of the Project on sensitive biological resources including sensitive natural communities, special-status plants and wildlife, riparian habitat, aquatic resources, and the potential interference with wildlife movement corridors. The Project was also evaluated for consistency with locally adopted environmental policies, habitat conservation plans, and recovery plans.

### ***Methodology***

Literature reviews and database searches were conducted to determine if the Project site has historically been occupied by special-status species (Figures 3.4.4-1 through 3.4.4-5). The California Natural Diversity Database (CNDDB; 2018), California Native Plants Society (CNPS) database (CNPS 2018), U.S. Fish and Wildlife Service (USFWS) Threatened and Endangered Species List (USFWS 2018a), and USFWS Critical Habitat database (USFWS 2018b) were reviewed to identify State and federal special-status species that have been historically documented within the Lemoore 7.5-minute U.S. Geological Survey (USGS) quadrangle. The search also included the eight surrounding quadrangles: Burrel, Riverdale, Laton, Vanguard, Hanford, Westhaven, Stratford, and Guernsey. Wildlife species designated as “Fully Protected” by the California Fish and Game Code Sections 5050 (Fully Protected reptiles and amphibians), 3511 (Fully Protected birds), 5515 (Full Protected Fish), and 4700 (Fully Protected mammals) were added to the list.

Additional databases that were accessed included the USFWS National Wetlands Inventory (NWI) Map (NWI 2018), the USGS topographical maps, National Hydrography Dataset (NHD; 2018), Federal Emergency Management Agency (FEMA) 100-year floodplain database (FEMA 2018), the Recovery Plan for Upland Species of the San Joaquin Valley (USFWS 1998), and Essential Connectivity Habitat Areas for wildlife corridors (Spencer 2010).

A reconnaissance-level survey was conducted on the Project site and within a 250-foot survey buffer surrounding all sides of the site, where access was available (Figure 3.4.4-1). Access was prohibited in areas where the survey buffer encroached on fenced commercial properties. Pedestrian transects were walked at approximately 50-foot intervals, which provided a 100 percent visual coverage of the Project and survey buffer. The survey focused on mapping the extent of habitats including wetlands and other waters, completing a species inventory, and evaluating the potential for sensitive natural communities, special-status species, and other sensitive biological resources to occur.



Potential impacts to biological resources were determined by analyzing the change(s) to the existing setting and associated disturbances that would be anticipated from the Project and relating those changes in conditions to effects to biological resources. Potential impacts that on sensitive biological resources of concern are described and discussed below based on the following topics:

- a. Each potentially affected special-status species that could be subject to Project impacts are addressed individually and breeding and/or foraging migratory birds are addressed as a group;
- b. Each potentially affected riparian habitat or other sensitive natural community that could be subject to Project impacts are addressed individually;
- c. Potentially affected federal or State waters or wetlands are addressed;
- d. Potentially affected wildlife corridor, migratory fish habitat, or native wildlife nursery that could be subject to Project impacts are addressed individually;
- e. Potentially affected local policy or ordinance related to biological resources are addressed individually; and
- f. Potentially affected adopted habitat conservation plan, natural community conservation plan, or other approved habitat conservation plan are addressed individually.

This section includes a general description of the plant and wildlife observed on the Project site, historic records of special-status species that were obtained from the database searches, and the evaluation and findings for species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW or USFWS.

## **Results**

### **DATABASE RESULTS**

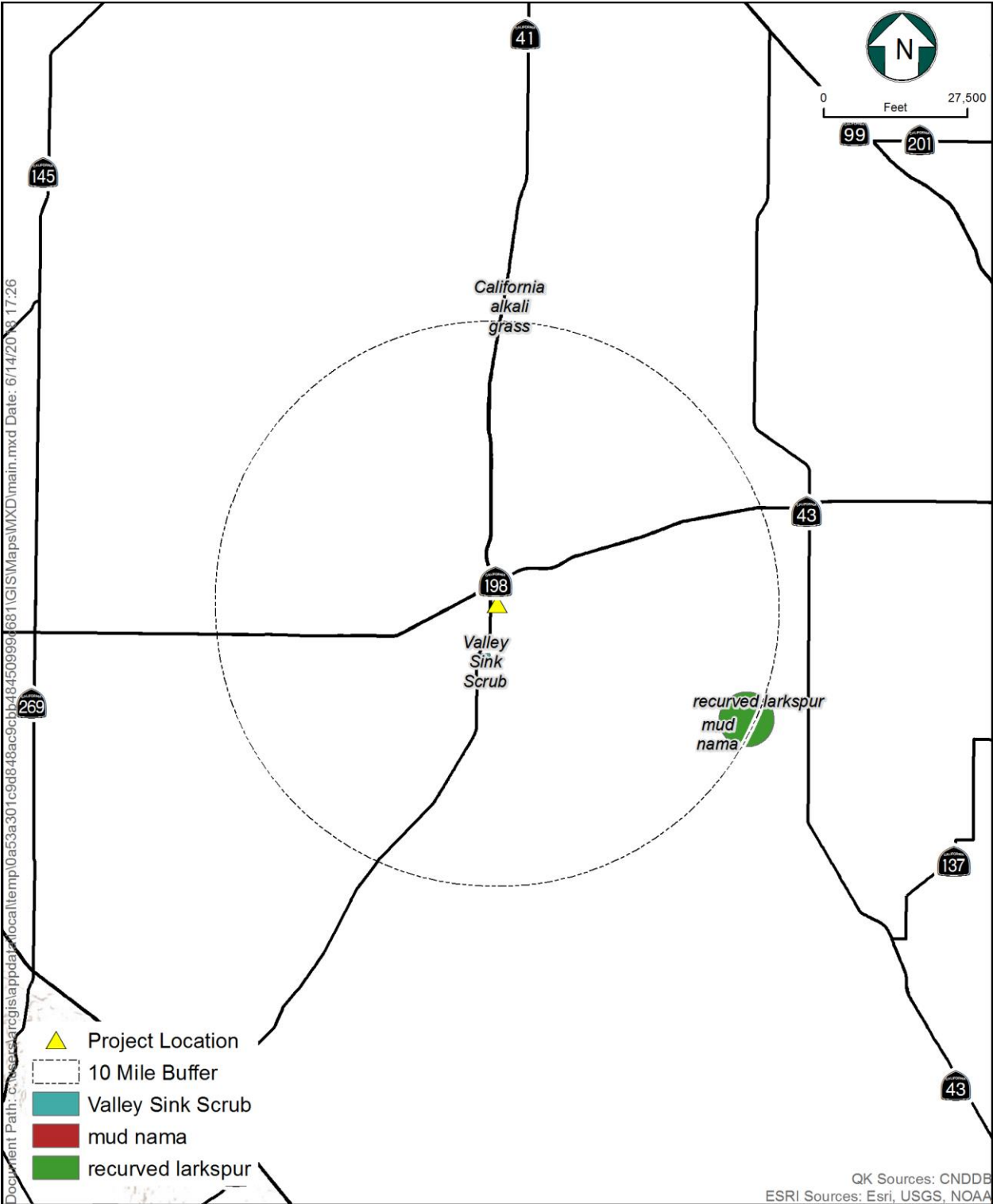
Database searches listed historical occurrences of seven special-status plant species and one sensitive natural community within the nine USGS 7.5-minute quadrangles that were queried. Of the seven special-status plant species, none are federally-listed species and one is a State-listed species. Five species were listed as 1B by the CNPS and two were listed as rank 2 or 3 by CNPS. The sensitive natural community was Valley Sink Scrub.

No records of plants or sensitive natural communities were located on the project site. One sensitive natural community and three plants have historic CNDDDB records within a 10-mile radius of the Project. A record of the sensitive natural community Valley Sink Scrub is located one mile south of the project, records of recurved larkspur (*Delphinium recurvatum*) and mud nama (*Nama stenocarpa*) are located approximately 9 miles southeast of the Project, and a record of California alkali grass (*Puccinellia simplex*) is located approximately 10 miles north of the Project.

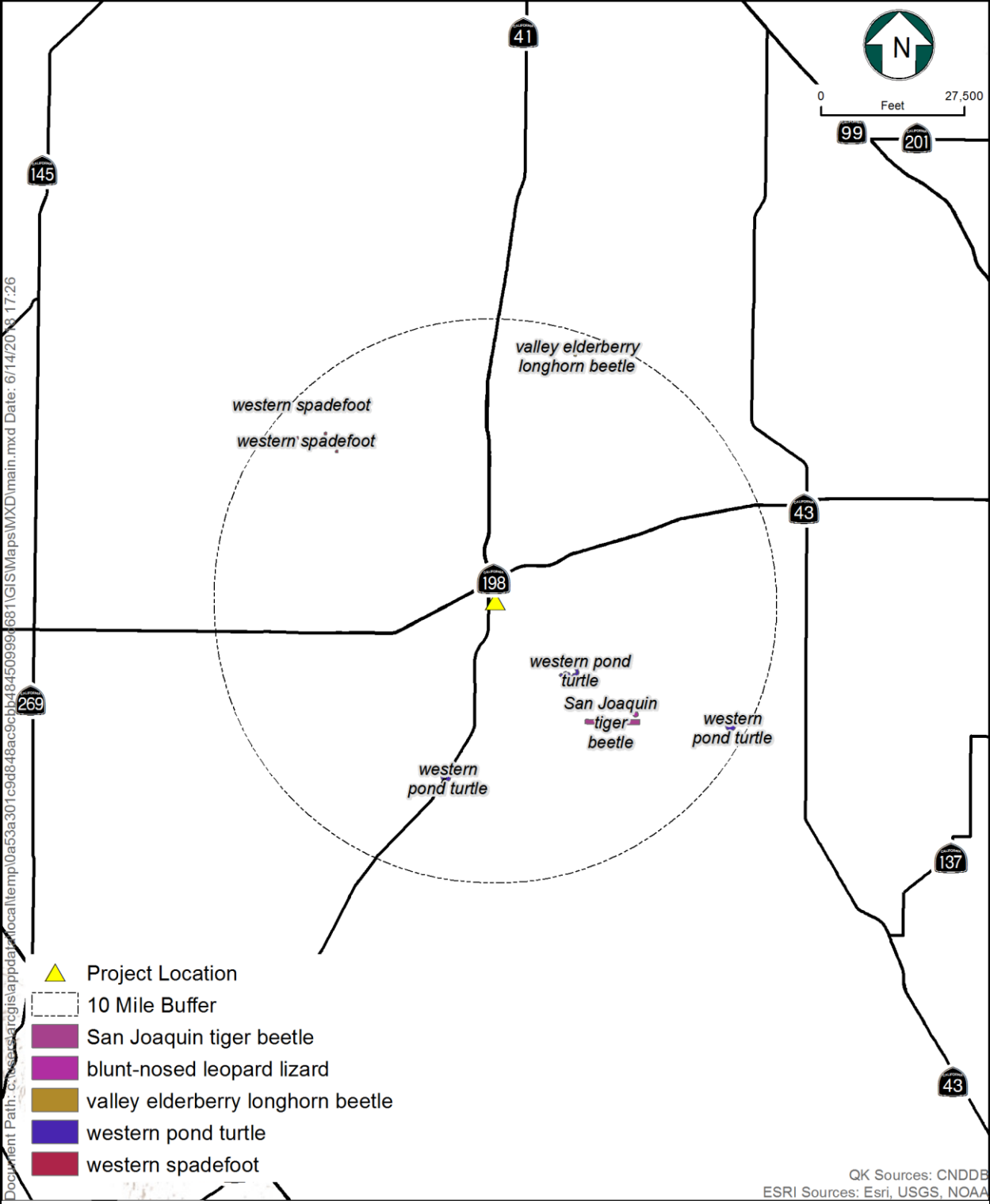
Database searches listed historic occurrences of 24 special-status wildlife species within the nine USGS 7.5-minute quadrangles queried, including five invertebrates, one fish, three amphibians, four reptiles, six birds, and five mammals. Two additional species, one bird and one mammal, were added to the table. The white-tailed kite (*Elanus leucurus*) was added due to recent records not included in CNDDDB, and the Buena Vista Lake ornate shrew (*Sorex ornatus relictus*) was added due to the presence of Critical Habitat for the species within ten miles of the Project. This brought the total number of special-status animals considered in this report to 26. Eight of these wildlife species are federally- and State- listed species, seven are federally-listed, two are State-listed, seven are California species of special concern, and two are CDFW Fully Protected. The remaining three have no special status but are tracked by the CNDDDB and included in the list of special-status wildlife species.

There are 14 special-status wildlife species with historical CNDDDB records that occurred within 10 miles of the Project (Figures 3.4.4-2, 3.4.4-3, and 3.4.4-4). Of these, 3 species are not federally-listed, State-listed or State species of concern, but are tracked by CNDDDB. No CNDDDB records for wildlife occurred on the Project site. The nearest CNDDDB records of special-status wildlife include records of the Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*) one mile south of the project, San Joaquin kit fox (*Vulpes macrotis mutica*) approximately three miles northwest and five miles southeast of the Project, and western pond turtle (*Emys marmorata*).

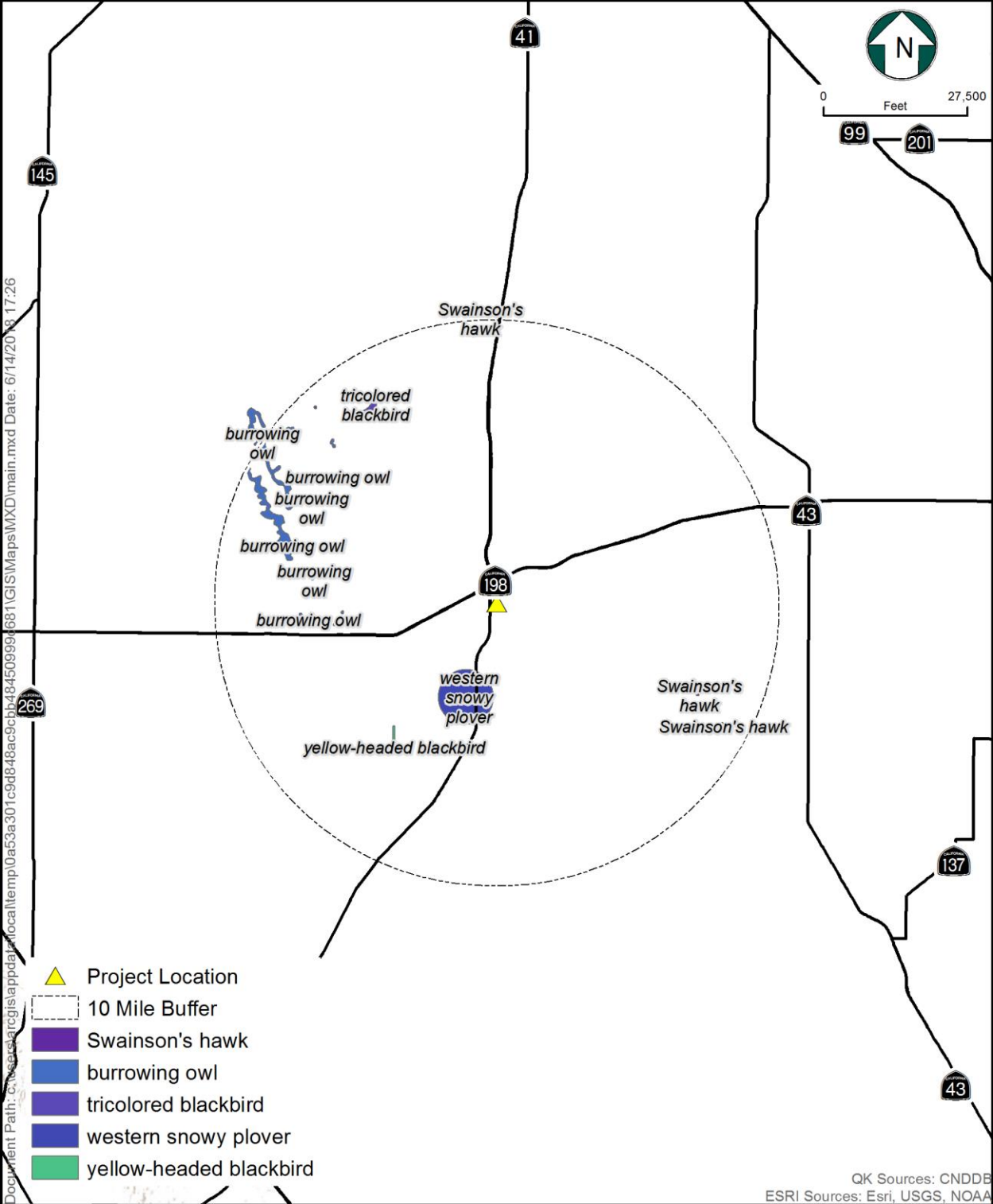




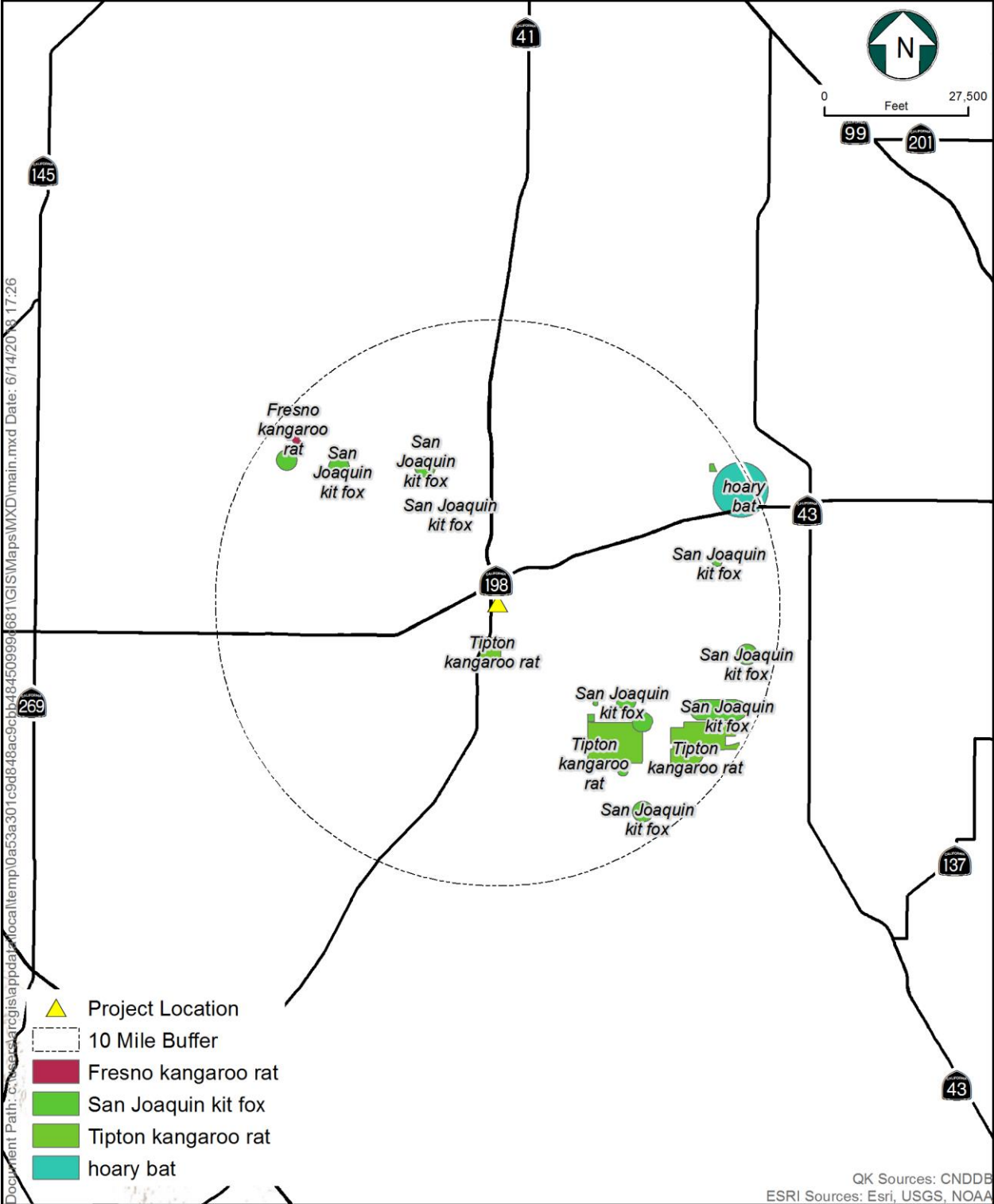
**Figure 3.4.4-2**  
**CNDDB Sensitive Natural Communities and Special-Status Plant Species, Lemoore Industrial Project, Lemoore, California**



**Figure 3.4.4-3**  
**CNDDB Special-Status Reptile, Amphibian, and Invertebrate Species, Lemoore Industrial Project, Lemoore, California**



**Figure 3.4.4-4**  
**CNDDB Special-Status Bird Species, Lemoore Industrial Project,**  
**Lemoore, California**



**Figure 3.4.4-5**  
**CNDDDB Special-Status Mammal Species, Lemoore Industrial Project, Lemoore, California**

### Plant Communities Occurring on the Project Site

The Project and surrounding survey buffer contain a matrix of disturbed Non-native Grassland (Holland Code 42200) and Valley Sink Scrub (Holland Code 36210) vegetation associations (Holland 1986). Past disturbances to the on-site habitat on the Project site have occurred through disking of the site, resulting in the conversion of Valley Sink Scrub to Non-native Grassland, although many bush seepweed (*Suaeda nigra*) and some scattered quailbush (*Atriplex lentiformis*) and iodine bush (*Allenrolfea occidentalis*) remain. The Valley Sink Scrub in the area surveyed lies in the eastern portion of the Project and surrounding buffer, where the project extends through a thin corridor to allow road access to South 19<sup>th</sup> Avenue. In this area, the Project extends east in a narrow corridor (Figure 3.4.4-6). This corridor is covered by a dirt road and is not habitat, but Valley Sink Scrub habitat exists south of this road within the Project buffer. Dominant plant species identified on the Project site (Table 3.4.4-1) included Bermuda grass (*Cynodon dactylon*), Russian thistle (*Salsola tragus*), and black mustard (*Brassica nigra*), with smaller amounts of Iodine bush present only on the eastern section of the Project. Willow (*Salix* sp.) were present primarily on a canal and drainage basin on the southern edge of the Project and were the dominant vegetation in that small area. The canal banks on the south side of the Project were not vegetated. Representative photographs of the Project site and surrounding area are presented in Appendix A.

**Table 3.4.4-1**  
**Plants Observed on the Lemoore Industrial Project, Lemoore, California**

<i>Scientific Name</i>	<i>Common Name</i>
<i>Ailanthus altissima</i>	tree of heaven
<i>Allenrolfea occidentalis</i>	iodine bush
<i>Asclepias fascicularis</i>	narrow leaf milkweed
<i>Atriplex lentiformis</i>	quailbush
<i>Bassia hyssopifolia</i>	fivehook bassia
<i>Brassica nigra</i>	black mustard
<i>Bromus diandrus</i>	ripgut brome
<i>Cuscuta</i> sp.	dodder sp.
<i>Cynodon dactylon</i>	Bermuda grass
<i>Helianthus annuus</i>	common sunflower
<i>Heliotropium curassavicum</i>	salt heliotrope
<i>Lactuca serriola</i>	prickly wild lettuce
<i>Malva neglecta</i>	common mallow
<i>Medicago sativa</i>	alfalfa
<i>Salix</i> sp.	willow
<i>Salsola tragus</i>	Russian thistle
<i>Suaeda nigra</i>	bush seepweed
<i>Veronica peregrina</i>	neckweed





**Figure 3.4.4-6**  
**Biological Resources, Lemoore Industrial Project,**  
**Lemoore, California**



### Wildlife Occurring on the Project Site

Wildlife observed on the Project included two amphibian species, one reptile species, thirteen bird species, and three mammal species (Table 3.4.4-2). The most common species observed were western kingbird (*Tyrannus verticalis*), house sparrow (*Passer domesticus*), and larval Sierran treefrogs (*Pseudacris sierra*). One inactive stick nest was observed on the Project, and one active house sparrow nest was observed south of the Project within the survey buffer.

**Table 3.4.4-2**  
**Wildlife Observed on the Lemoore Industrial Project, Lemoore, California**

<i>Scientific Name</i>	<i>Common Name</i>
<i>Aphelocoma californica</i>	California scrub jay
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Buteo swainsoni</i>	Swainson's hawk
<i>Canis latrans</i>	coyote
<i>Charadrius vociferus</i>	killdeer
<i>Columba livia</i>	rock pigeon
<i>Eremophila alpestris</i>	horned lark
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Falco sparverius</i>	American kestrel
<i>Haemorhous mexicanus</i>	house finch
<i>Lepus californicus</i> *	black-tailed jackrabbit*
<i>Lithobates catesbeianus</i>	bullfrog
<i>Otospermophilus beecheyi</i>	California ground squirrel
<i>Passer domesticus</i>	house sparrow
<i>Pituophis catenifer</i>	gopher snake
<i>Pseudacris sierra</i>	Sierran treefrog
<i>Streptopelia decaocto</i>	Eurasian collared-dove
<i>Tyrannus verticalis</i>	western kingbird
<i>Zenaida macroura</i>	mourning dove

\*Indicates that only sign (scat, tracks, digs, etc.) of this species was observed and no individuals were observed.

**Impact #3.4.4a – Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

### Special-status Plant Species

Habitat on the Project site could potentially support five special-status plant species, but it is not likely that the species would occur because of the high level of disturbance and low quality of habitat. There are no CNDDDB records for any special-status plant species on the

site or within the survey buffer. Three special-status plant species, recurved larkspur, California alkali grass, and mud nama, were historically present within 10 miles of the Project. One of these species, mud nama, is associated with wetland habitats that do not occur on the Project. Recurved larkspur and California alkali grass are unlikely to occur on the Project because of previous grading, disking for fire control efforts, construction of a flood-control basin, and because of the prevalence of non-native grasses and other invasive plants. It is unlikely that any of these special-status plant species would occur on the Project, and no impacts would occur to special-status plant species.

### **Special-status Wildlife Species**

Based on database searches, 26 wildlife species were found to have the potential to occur in the nine USGS topographic quads surrounding the Project. Of these species, 11 were found not to have a potential to occur on the Project due to the absence of suitable habitat such as vernal pools, streams, and open beaches. Further detail on these species is provided in the species table (Appendix A).

Based upon the database searches, there are 12 special-status wildlife species and three additional wildlife species that are tracked by the CNDDDB that have the potential to be present on the Project site. Federally-listed species with the potential to occur are the western snowy plover (*Charadrius alexandrinus nivosus*) and Buena Vista Lake ornate shrew. Species with the potential to occur on the site with that are both State- and federally-listed are the Fresno kangaroo rat (*Dipodomys nitratoideis exilis*), Tipton kangaroo rat, and San Joaquin kit fox (*Vulpes macrotis mutica*). The State-listed Swainson's hawk and tricolored blackbird (*Agelaius tricolor*) potentially occur on the Project site. The western spadefoot (*Spea hammondi*), California glossy snake (*Arizona elegans occidentalis*), western pond turtle, and western burrowing owl (*Athene cunicularia*), which are CDFW species of special concern could potentially occur. The site could support the white-tailed kite, which is a CDFW Fully Protected species.

Based upon the database searches, there are three non-listed wildlife species which could be present on the Project site. Those are the black-crowned night heron (*Nycticorax nycticorax*), San Joaquin tiger beetle (*Cicindela tranquebarica ssp.*), and hoary bat (*Lasiurus cinereus*). The San Joaquin tiger beetle and hoary bat lack any formal listing or protection, while the black-crowned night heron is protected by the Migratory Bird Treaty Act (MBTA). The tiger beetle and hoary bat require no further analysis because of their lack of listing status. The black-crowned night heron is discussed along with other migratory birds.

Based upon site conditions observed during the field survey of the Project site, the listed species that have potential to occur on this project are ones that can use small amounts of low quality habitat. The San Joaquin kit fox could forage in the ruderal vegetation that is present on most of the Project. Poor potential breeding habitat for the tricolored blackbird is available on the Project in the willow thicket in the southern portion of the Project, but as this is low quality habitat for that species, it is unlikely to inhabit the Project. A pair of Swainson's hawk were observed soaring above the Project. It is possible that this species is nesting near the Project and using the Project as foraging habitat. Suitable nesting trees exist



adjacent to the project, but no nests were observed on the project or in the buffer area that was examined. The Fresno kangaroo rat is likely extinct, but the Tipton kangaroo rat has one CNDDDB occurrence a mile south of the Project. The disked, ruderal land making up the Project is of minimal value to any kangaroo rat, but the presence of a population a mile away makes dispersal of Tipton kangaroo rats to the Project possible. There were no kangaroo rat burrows observed on the Project site thus making it unlikely that this species is present.

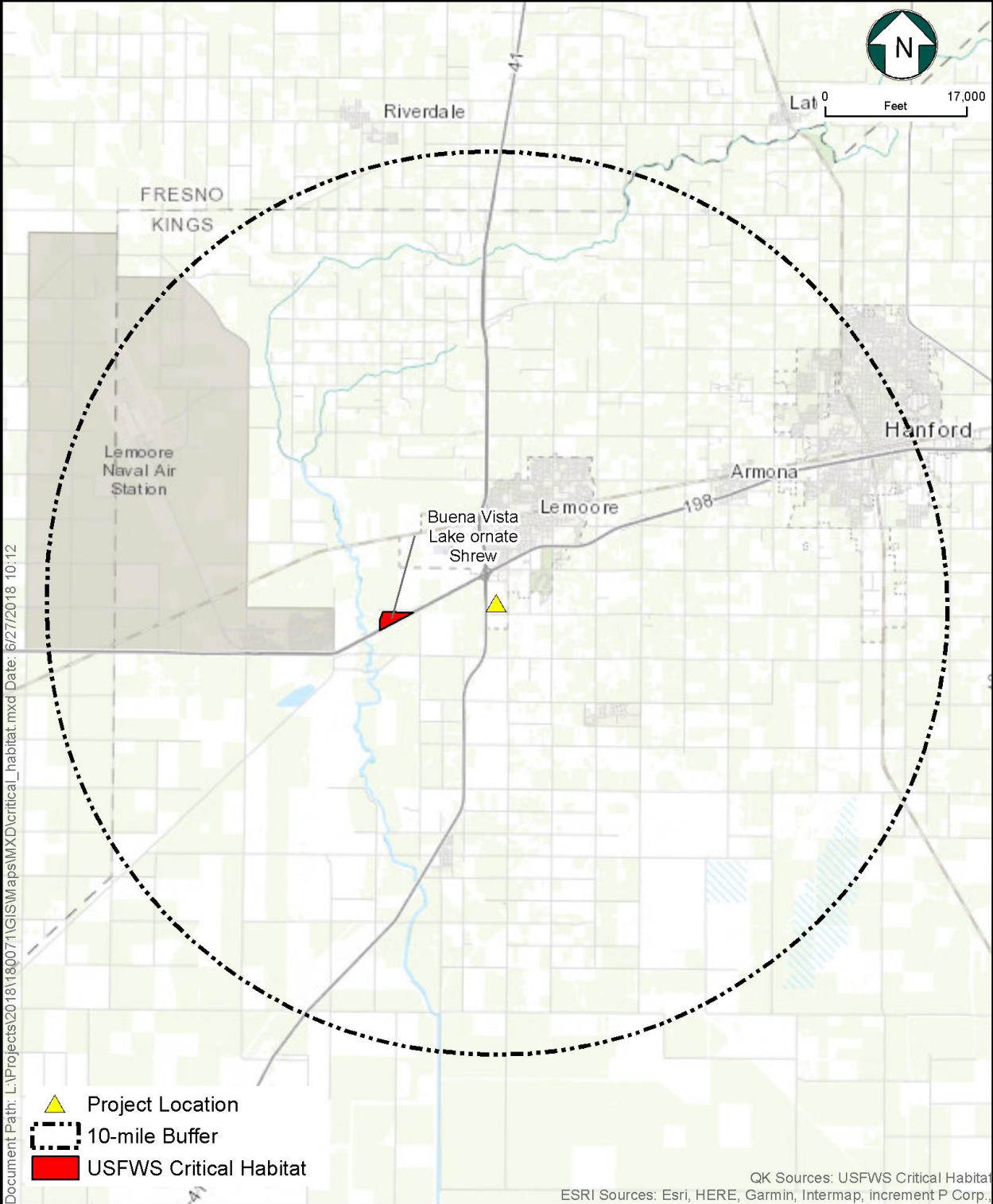
The white-tailed kite and blunt-nosed leopard lizard are the two Fully Protected species that were listed in database searches. The white-tailed kite is possible in any open habitat but is rare in the southern San Joaquin Valley and is unlikely to be present on the Project. None were observed during the site examination. The disked habitat on the Project is not suitable for the blunt-nosed leopard lizard.

Four California species of special concern could make use of the Project. The western spadefoot could potentially breed in temporary pools of water on the Project, including intermittently full ditches and drainage basins on the Project. The California glossy snake lives in arid scrub habitat like that of the Project, and it could pass through the Project while foraging, but the Project is composed of low quality foraging habitat for this species. The western pond turtle is unlikely to live on or near the Project site because the only habitat that could support this species is the irrigation ditch at the south end of the project, which is low-quality habitat for this species. The western burrowing owl could forage and nest in the open ruderal terrain of the Project, but no burrowing owls or burrowing owl sign was observed during the reconnaissance survey.

Removal of the small amount of willows in the middle and on the southern edge of the Project could potentially impact nesting Swainson's hawk or white-tailed kite. Removal of riparian trees and shrubs could potentially impact nesting tricolored blackbird. Loss of tree habitat could also reduce breeding success of other nesting migratory birds.

### ***Critical Habitat***

No Critical Habitat occurs on the Project site. One USFWS Critical Habitat unit is located within 10 miles of the Project (Figure 3.4.4-7). This Critical Habitat is for the Buena Vista Lake ornate shrew.



**Figure 3.4.4-7**  
**Critical Habitat, Lemoore Industrial Project, Lemoore, California**

**MITIGATION MEASURE(S)**

Special-status plant species are unlikely to be impacted by Project activities and no mitigation measures to protect, avoid, or minimize impacts to special-status plant species are warranted. There is the potential for some special-status or protected wildlife species to be impacted by Project activities. Mitigation measures to protect, avoid, and minimize impacts to special-status wildlife species are provided below. When implemented, these measures would reduce impacts to these species to below significant levels.

**MM-BIO-1 (protection of San Joaquin kit fox):** The U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (2011) shall be enacted. These recommendations include but are not limited to:

- Pre-construction surveys shall be conducted no fewer than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities, or any Project activity likely to impact the San Joaquin kit fox at Action Area 2.
- Project-related vehicles shall observe a daytime speed limit of 20-mph throughout the Action Area 2, except on County roads and State and federal highways; this is particularly important at night when kit fox is the most active. Night-time construction shall be minimized to the extent possible. However, if night construction should occur, then the speed limit shall be reduced to 10-mph. Off-road traffic outside of designated project areas shall be prohibited.
- To prevent inadvertent entrapment of kit fox or other animals during the construction phase of a Project, all excavated, steep-walled holes or trenches more than 2-feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals.
- Kit fox are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way.
- All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from the Action Area 2.
- No pets, such as dogs or cats, shall be permitted at the Action Area 2 to prevent harassment, mortality of kit fox, or destruction of dens.
- Use of rodenticides and herbicides in project areas shall be restricted. This is necessary to prevent primary or secondary poisoning of kit fox and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and federal legislation, as well as additional project-related restrictions deemed necessary by the

Service. If rodent control must be conducted, zinc phosphide shall be used because of a proven lower risk to kit fox.

- A representative shall be appointed by the Project proponent who will be the contact source for any employee or contractor who might observe a kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the USFWS.
- An employee education program shall be conducted for any Project that has anticipated impacts to kit fox or other endangered species. The program shall consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the Project. The program shall include the following: A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the previously referenced people and anyone else who may enter the project site.
- In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape, or the USFWS should be contacted for guidance.
- New sightings of kit fox shall be reported to the CNDDB. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the USFWS at the address below.

**MM BIO-2 (protection of Swainson's hawk):** If all Project activities are completed outside of the Swainson's hawk nesting season (February 15 through August 31), no mitigation shall be required. If construction is planned during the nesting season, a preconstruction survey shall be conducted by a qualified biologist to evaluate the site and a 0.5-mile buffer for active Swainson's hawk nests. If potential Swainson's hawk nests or nesting substrates are located within 0.5 mile of the Project sites, then those nests or substrates must be monitored for activity on a routine and repeating basis throughout the breeding season, or until Swainson's hawks or other raptor species are verified to be using them. Monitoring will be conducted according to the protocol outlined in the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). The protocol recommends that ten visits be made to each nest or nesting site: one during January 1-March 20 to identify potential nest sites, three during March 20-April 5, three during April 5-April 20, and three during June 10-July 30. To meet the minimum level of protection for the species, surveys shall be completed for at least the two survey periods immediately prior to Project-related ground disturbance activities. During the nesting period, active Swainson's hawk nests shall be avoided by 0.5 mile unless this avoidance buffer is reduced through consultation with the CDFW and/or USFWS. If an active Swainson's hawk nest is located within 250 feet of the Project or within the Project, including the stick nest located within the Project, CDFW will require an Incidental Take Permit.

**MM BIO-3 (protection of western burrowing owl):** A qualified biologist shall conduct a pre-construction survey on the Project site and within 250 feet of its perimeter where feasible, to identify the presence of the western burrowing owl. The survey should be conducted between 14 and 30 days prior to the start of construction activities. If any burrowing owl burrows are observed during the preconstruction survey, avoidance measures shall be consistent with those included in the CDFW staff report on burrowing owl mitigation (CDFG 2012). If occupied burrowing owl burrows are observed outside of the breeding season (September 1 through January 31) and within 500 feet of proposed construction activities, a passive relocation effort may be instituted in accordance with the guidelines established by the California Burrowing Owl Consortium (1993) and the California Department of Fish and Wildlife (2012). During the breeding season (February 1 through August 31), a 250-foot (minimum) buffer zone should be maintained unless a qualified biologist verifies through noninvasive methods that either the birds have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

**MM BIO-4 (protection of migratory birds and raptors):** If construction is planned outside the nesting period for raptors and migratory birds (February 15 to August 31), no mitigation shall be required. If construction is planned during the nesting season for migratory birds and raptors, a preconstruction survey to identify active bird nests shall be conducted by a qualified biologist to evaluate the site and a 250-foot buffer for migratory birds and a 500-foot buffer for raptors. If nesting birds are identified during the survey, active raptor nests shall be avoided by 500 feet and all other migratory bird nests shall be avoided by 250 feet. Avoidance buffers may be reduced if a qualified on-site monitor determines that encroachment into the buffer area is not affecting nest building, the rearing of young, or otherwise affecting the breeding behaviors of the resident birds.

No construction or earth-moving activity shall occur within a non-disturbance buffer until it is determined by a qualified biologist that the young have fledged (left the nest) and have attained sufficient flight skills to avoid Project construction areas. Once the migratory birds or raptors have completed nesting and young have fledged, disturbance buffers will no longer be needed and can be removed, and monitoring can cease.

**BIO-5 (WEAP training):** Prior to ground disturbance activities, within one week of employment all new construction workers at the Project site shall attend a Construction Worker Environmental Awareness Training and Education Program, developed and presented by a qualified biologist.

The Construction Worker Environmental Awareness Training and Education Program would be presented by the biologist and should include information on the life history wildlife and plant species that may be encountered during construction activities, their legal protections, the definition of “take” under the Endangered Species Act, measures the Project operator is implementing to protect the San Joaquin kit fox and other species, reporting requirements, specific measures that each worker would employ to avoid take of the wildlife species, and penalties for violation of the Act. Identification and information regarding

sensitive or other special status plant species should also be provided to construction personnel.

- An acknowledgement form signed by each worker indicating that environmental training has been completed.
- A sticker that shall be placed on hard hats indicating that the worker has completed the environmental training. Construction workers should not be permitted to operate equipment within the construction area unless they have attended the training and are wearing hard hats with the required sticker;
- A copy of the training transcript and/or training video/CD, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms should be maintain on site for the duration of construction activities.
- The construction crews and contractor(s) would be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by Project permits.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.4b – Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Riparian habitats are defined as vegetative communities that are influenced by a river or stream, specifically the land area that encompasses the water channel and its current or potential floodplain. Some willows and cottonwoods near the canal on the south side of the project compose a riparian are of 0.957 acres, which is the total amount of riparian habitat occurring on the Project site. Three individually standing willow trees also occur in the center of the Project site, but these do not constitute riparian habitat because they are isolated individuals in the middle of ruderal habitat unaffected by streams or rivers. Up to 0.957 acres of riparian habitat may potentially be impacted by the Project. The California Department of Fish and Wildlife may require a Streambed Alteration Agreement for impacts to this riparian habitat and for impacts to the canal e canal on the south side of the Project.

#### **MITIGATION MEASURE(S)**

**MM BIO-6 (riparian vegetation):** It is recommended that the project be designed to avoid the 0.957 acres of riparian habitat. To ensure avoidance, ESA fencing shall be placed around the riparian areas prior to beginning of construction and maintained throughout construction. The Project shall be designed to allow sufficient water to maintain the riparian area.

If it is not possible to avoid the riparian habitat then one of the following two options for mitigating the loss of riparian habitat will be implemented.

3. On-site mitigation: In-kind compensation of 2.871 acres shall be provided within the Project site. Removal of riparian trees equal to or greater than 4 inches in DBH will be mitigated by the replacement of those trees at a 3:1 ratio for each tree type within the mitigation land.
4. Off-site mitigation: In-kind compensation of 2.871 acres shall be provided outside of the Project site. Removal of riparian trees equal to or greater than 4 inches in DBH will be mitigated by the replacement of those trees at a 3:1 ratio for each tree type within the mitigation land.

**MM BIO-7 (water quality):** Best management practices (BMPs) would serve to reduce impacts to waters of the U.S. and waters of the State to less than significant levels. Impacts to the banks of the canal on the south side of the Project will require a Streambed Alteration Agreement from CDFW through Section 1600. Compliance with these permits may require implementation of additional measures.

The Project will employ best management practices (BMPs) to prevent all construction pollutants from contacting storm water, with the intent of keeping sedimentation or any other pollutants from moving offsite and into receiving waters. Some of these BMPs may include the following:

- Construction materials, including topsoil and chemicals, should be stored, covered, and isolated to prevent runoff losses and contamination of storm water and groundwater;
- Topsoil removed during construction should be carefully stored and treated as an important resource. Berms should be placed around topsoil stockpiles to prevent runoff during storm events;
- Fuel and vehicle maintenance areas should be established away from all drainage courses and these areas should be designed to control runoff;
- Disturbed areas should be revegetated after completion of construction activities;
- Sanitary facilities should be provided for construction workers; and
- Hazardous materials should be stored in appropriate and approved containers, maintaining required clearances. Materials should be handled in accordance with applicable federal, state and/or local regulatory agency protocols.

**MM BIO-8 (valley sink scrub):** Construction equipment and vehicles shall not be permitted in the area of Valley Sink Scrub located to the southeast of the Project. This area shall be excluded from the Project by ESA fencing.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.4c – Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Federally protected wetlands will not be affected by the Project, as none occur on the Project site. Note that the intermittent stream shown in the National Wetlands Inventory Map (Figure 3.4.4-8) no longer existent. The drainage has been altered by a ditch running north-south along the eastern side of the Project (Figure 3.4.4-6).

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

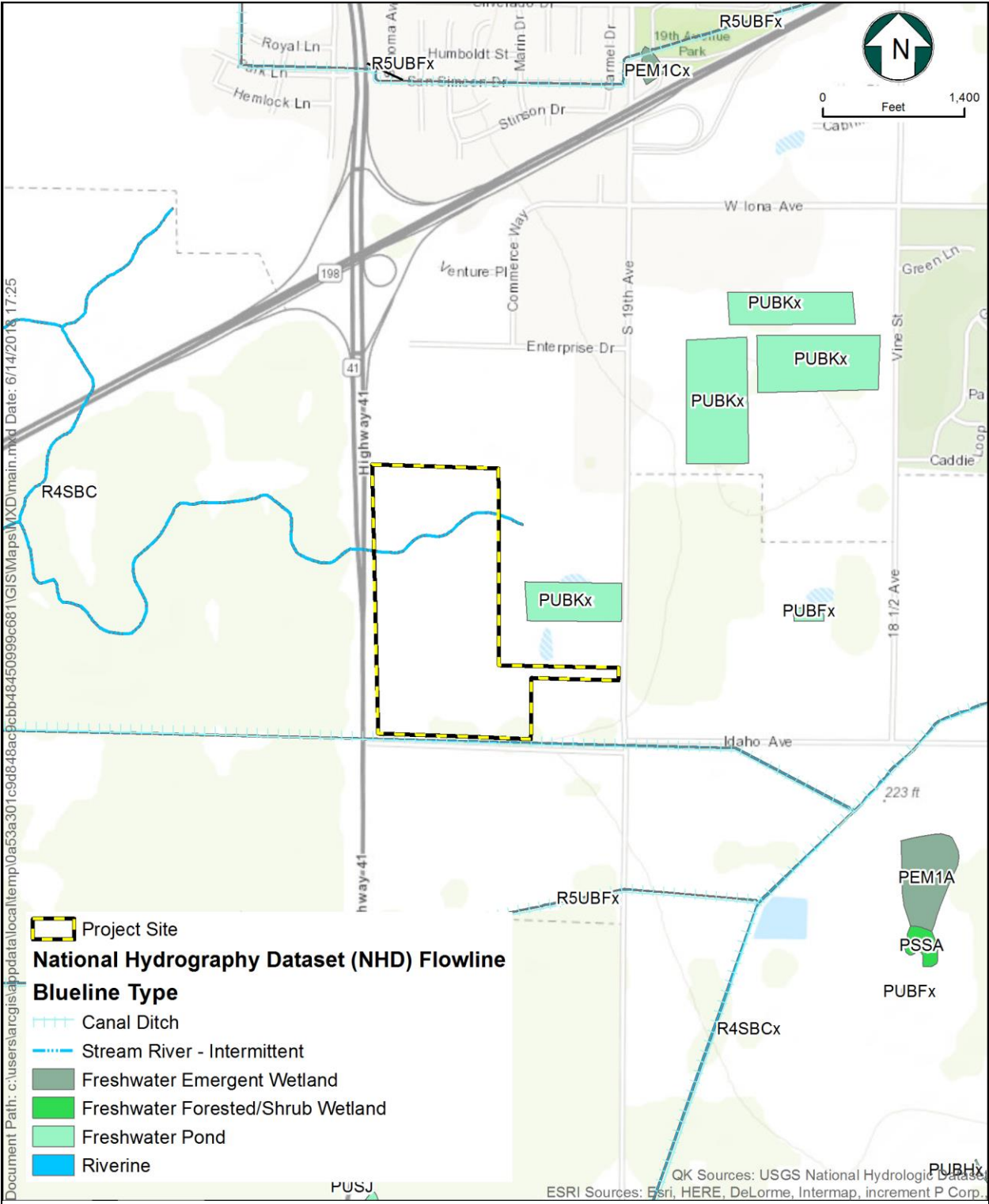
**Impact #3.4.4d – Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Wildlife movement corridors are routes that provide shelter and sufficient food supplies to support regular movements of wildlife species. A movement corridor is a continuous geographic extent of habitat that either spatially or functionally links ecosystems across fragmented, or otherwise inhospitable, landscapes. Faunal movement may include seasonal or migration movement, life cycle links, species dispersal, re-colonization of an area, and movement in response to external pressures. Movement corridors typically include riparian habitats, ridgelines, and ravines, as well as other contiguous expanses of natural habitats. Movement corridors may be functional on regional, sub-regional, or local scales.

The proposed Project and surrounding area does not occur within a known terrestrial migration route, significant wildlife corridor, or linkage area as identified in the Recovery Plan for Upland Species in the San Joaquin Valley (USFWS 1998) or in habitat identified by the Essential Habitat Connectivity Project (Spencer 2010). The survey conducted for the Project did not provide evidence of a wildlife nursery or important migratory habitat being present on the Project site. Migratory birds and raptors could use habitat on or near the Project for foraging and/or as stopover sites during migrations or movement between local areas.

The canal on the south site of the Project may serve as a local movement corridor for frogs, toads, and fish. The Project would not substantially affect migrating birds or other wildlife. The Project will not restrict, eliminate, or significantly alter a wildlife movement corridor, wildlife core area, or Essential Habitat Connectivity area, either during construction or after the Project has been constructed. Project construction will not substantially interfere with wildlife movements or reduce breeding opportunities.





**Figure 3.4.4-8**  
**National Wetlands Inventory and National Hydrography Dataset,**  
**Lemoore Industrial Project, Lemoore, California**

**MITIGATION MEASURE(S)**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.4e and #3.4.4f – Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?**

The City of Lemoore does not have any local policies or ordinances protecting biological resources nor an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, there would be no impact.

**MITIGATION MEASURE(S)**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.5 - CULTURAL RESOURCES

Would the project:

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

#### Impact #3.4.5a – Would the Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

The “Resource Conservation Element” of the 2035 Kings County General Plan states that the county has a number of historical sites, four of which are included on the National Register of Historic Places, three are designated as California Historical Landmarks, and the remaining are identified as being historic sites of local importance (Kings County, 2010). The proposed project is located within an undeveloped area and does not contain any historic resources, nor is it located within an identified historic district. The project would have no impact on registered historic resources.

The records search conducted at the SSJVIC indicated that two previous cultural resource surveys had included small portions (est. 2 acres) in the far northwest and eastern extremities of the project. (Wren 1989; California Department of Transportation 1992). One additional survey was conducted along the western boundary of the property (Leach-Palm et al. 2010). No further cultural resource surveys have been performed within a half mile of the project. No cultural resources have been recorded on or within a half mile of the subject property and it is not known if any exist there.

A SLF record search response was received from the Native American Heritage Commission (NAHC) on June 29 (Appendix B). The NAHC responded that there are no known sacred lands within the APE or a one-mile radius of the project. The County identified the Santa Rosa Rancheria Tachi-Yokut Tribe (Tribe) as being the only Tribe that would be involved in projects within Kings County. The Tribe has been notified of the project, pursuant to Public Resources Code section 21080.3.1.

The project site is in an undeveloped portion of the city and does not contain any structures that could be potentially historic. There are no tribal lands within the vicinity of the project. Although no historic resources have been discovered on the project site, there would be a potentially significant impact if historical resources were uncovered during project construction. Implementation of MM CUL-1 through MM CUL-4 would reduce potential impacts to a less than significant level.

### **MITIGATION MEASURES**

**MM CUL-1 (Archaeological Monitoring):** Prior to any ground disturbance, a surface inspection of the Index Project site shall be conducted by a qualified archeologist. The qualified archeologist shall monitor the site during grading activities. The archeologist shall provide pre-construction briefings to supervisory personnel, any excavation contractor, and any person who will perform unsupervised, ground disturbing work on the project in connection with construction or decommissioning. The briefings will include information on potential cultural material finds and, on the procedures, to be enacted if resources are found.

**MM CUL-2 (Native American Monitoring):** Prior to any ground disturbance, the applicant shall offer interested Tribes the opportunity to provide a Native American Monitor during ground disturbing activities during construction. Tribal participation would be dependent upon the availability and interest of the Tribe.

**MM CUL-3 (Stop Work in the Event of Unanticipated Discoveries):** In the event that cultural resources, paleontological resources or unique geologic features are discovered during construction, operations shall stop within 100 feet of the find, and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall determine the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the CEQA Guidelines. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing, and data recovery, among other options. Any previously undiscovered resources found during construction within the Project area shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance. No further ground disturbance shall occur in the immediate vicinity of the discovery until approved by the qualified archaeologist. Upon discovery of cultural resources, in addition to other procedures described in this mitigation measure, the Kings County Community Development Agency, along with other relevant agency or Tribal officials, shall be contacted to begin coordination on the disposition of the find(s), and treatment of any significant cultural resource shall be

undertaken pursuant to the Plan. In the event of any conflict between this mitigation measure and the Plan, the stipulations of the Plan shall control.

**MM-CUL 4 (Disposition of Cultural Resources):** Upon coordination with the Kings County Community Development Agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.5b – Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?**

See discussion for Impact 3.4.5a above.

Although considered unlikely since there is no indication of any historic resources on the project site, subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered archaeological resources. This is considered a *potentially significant impact*. Mitigation is proposed requiring implementation of standard inadvertent discovery procedures to reduce potential impacts to previously undiscovered subsurface historic and archaeological resources.

**MITIGATION MEASURES**

Implementation of MM CUL-1 through MM CUL-4

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.5c – Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

There are no unique geological features or known fossil-bearing sediments in the vicinity of the project site. It is unlikely that any ground disturbance activities would be of a depth to uncover paleontological resources. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction activities. Therefore, this would be a potentially significant impact. Mitigation is proposed requiring standard inadvertent discovery procedures to be implemented to reduce this impact to a level of less than significant.

**MITIGATION MEASURES**

**MM CUL-5:** During any ground disturbance activities, if paleontological resources are encountered, all work within 25 feet of the find shall halt until a qualified paleontologist as defined by the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010), can evaluate the find and make recommendations regarding treatment. Paleontological resource materials may include resources such as fossils, plant impressions, or animal tracks preserved in rock. The qualified paleontologist shall contact the Natural History Museum of Los Angeles County or other appropriate facility regarding any discoveries of paleontological resources. If the qualified paleontologist determines that the discovery represents a potentially significant paleontological resource, additional investigations and fossil recovery may be required to mitigate adverse impacts from project implementation. If avoidance is not feasible, the paleontological resources shall be evaluated for their significance. If the resources are not significant, avoidance is not necessary. If the resources are significant, they shall be avoided to ensure no adverse effects, or such effects must be mitigated. Construction in that area shall not resume until the resource appropriate measures are recommended or the materials are determined to be less than significant. If the resource is significant and fossil recovery is the identified form of treatment, then the fossil shall be deposited in an accredited and permanent scientific institution. Copies of all correspondence and reports shall be submitted to the Lead Agency.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.5d – Would the Project disturb any human remains, including those interred outside of formal cemeteries?**

As previously noted, a search of the California NAHC Sacred Lands File search revealed no records of known sensitive cultural resources in the vicinity of the project area. Human remains are not known to exist within the project area. However, construction would involve earth-disturbing activities, and it is still possible that human remains may be discovered, possibly in association with archaeological sites. MM CUL-6 has been included in the unlikely event that human remains are found during ground-disturbing activities. Impacts would be less than significant with implementation of mitigation.

**MITIGATION MEASURES**

**MM CUL-6:** If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American

involvement, in the event of discovery of human remains, at the direction of the county coroner.

***LEVEL OF SIGNIFICANCE***

Impacts would be *less than significant with mitigation incorporated*.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.6 - GEOLOGY AND SOILS

Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i.	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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ii.	Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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iii.	Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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iv.	Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b.	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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## **Discussion**

**Impact #3.4.6a(i) – Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The project site is not located within an Alquist-Priolo Earthquake Fault Zone. Per the Department of Conservation, California Geologic Survey Regulatory Maps (Department of Conservation, 2017), the nearest fault line is the Nunez fault, which lies in the Alcade Hills 7.5-minute quadrangle, northwest of Coalinga in Fresno County approximately 35 miles west of the project site. According to the *2035 Kings County General Plan*, there are no known major fault systems within Kings County. The greatest potential for geologic disaster in Kings County is posed by the San Andres Fault, which is located approximately four miles west of the Kings County boundary line with Monterey County (Kings County, 2010). The distance from the nearest active faults precludes the possibility of fault rupture on the project site. Therefore, there would be no impact.

## **MITIGATION MEASURES**

No mitigation is required.

## **LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.6a(ii) – Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?**

According to the Seismic Safety Map contained within the Health and Safety Element of the 2035 Kings County General Plan (Figure HS-2, page HS-10), the project site is located within an area designated as Zone V1 or Valley Zone 1, which is identified as the area of least expected seismic shaking by the Kings County Seismic Zone Description in the 2035 General Plan (Kings County, 2010). The potential for ground shaking is discussed in terms of the percent probability of exceeding peak ground acceleration (% g) in the next 50 years (Kings County, 2010). The project site's exceedance probability in the next 50 years is between 20-30%, which is the lowest within the county. Although the project area could potentially experience ground shaking, the magnitude of the hazard would not be severe as indicated by the Health and Safety Element of the 2035 Kings County General Plan. Therefore, a less than significant impact would occur.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.6a(ii) – Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?**

The project site is illustrated in Figure HS-2 Seismic Safety Map of the 2035 Kings County General Plan as an area subject to potential liquefaction. Liquefaction could result in local areas during a strong earthquake or seismic ground shaking where unconsolidated sediments and a high-water table coincide. The soils within the project area have been identified as having an extremely high-water table ranging from two to four feet below ground surface (United States Department of Agriculture, 1986).

Structures constructed as part of the project would be required by State law to be constructed in accordance with all applicable International Building Code (IBC) and California Building Code (CBC) earthquake construction standards, including those relating to soil characteristics. Adherence to all applicable regulations would avoid any potential impacts to structures resulting from liquefaction at the project site.

Since the project includes the construction of structures and residences the potential for liquefaction is considered significant. Implementation of MM GEO-1 would require the preparation of a geotechnical study that would include recommendations to engineer the site's soils to prevent potential liquefaction in the future. With implementation of this mitigation measure, the project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure including liquefaction. Therefore, the impact would be less than significant with mitigation incorporated.

**MITIGATION MEASURES**

**MM GEO-1:** Prior to final design, a geotechnical study shall be prepared for the project site and recommendations of the study shall be incorporated into final design of the project. A copy of the report shall be submitted to the Kings County Community Development Agency for review.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.6a(ii) – Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?**

The project site currently consists of undeveloped land and the surrounding area is essentially flat. The site's topography would not change substantially as a result of project development. The project site is illustrated in Figure HS-3 California Landslide Hazards Map of the *2035 Kings County General Plan* as having "Low" (less than 1.5 percent of area involved) for landslide incidents. Since the site is essentially flat in nature from the previous agricultural activities with no surrounding slopes and it is not considered to be prone to landslides, the project would not expose people or structures to potential substantial adverse effects from landslides. Therefore, there would be no impact.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.6b – Would the Project result in substantial soil erosion or the loss of topsoil?**

There are three types of soils found within the project site (Figure 3.4.6-1). The three soils include Lakeside loam, Grangeville sandy loam, and Lemoore sandy loam. The project site currently consists of undeveloped land and the surrounding area is essentially flat. The site's topography would not change substantially as a result of project development.

**MITIGATION MEASURES**

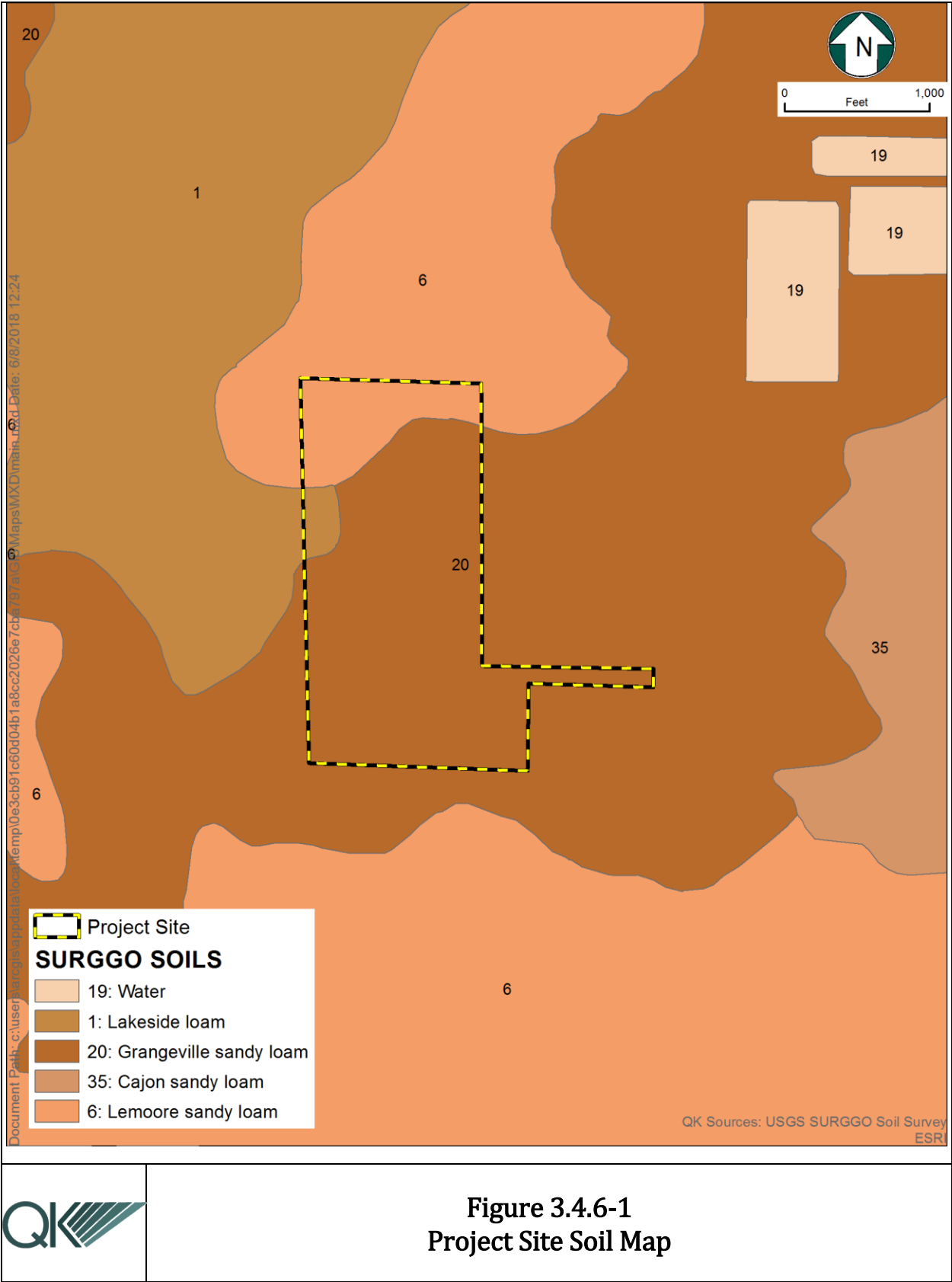
None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.6c – Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?**

As previously discussed, the site soils are considered stable in that there is not a potential of on- or offsite landslides, lateral spreading, subsidence or collapse. However, as discussed in Impact #3.4.6a(iii), the project site soils are subject to potential liquefaction as identified in the 2035 General Plan. The project is potentially located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in liquefaction. Furthermore, the structures would be subject to all applicable ordinances of the Kings County Building Ordinance (Chapter 5), as well as all applicable IBC and CBC earthquake construction standards, including those relating to soil characteristics (Kings County, 2015). In addition, the implementation of MM GEO-1, which requires the preparation of a geotechnical study, would reduce project impacts to a less-than-significant impact.



**MITIGATION MEASURES**

Implementation of MM GEO-1 and MM HYD-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.6d – Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Expansive clay soils are subject to shrinking and swelling due to changes in moisture content over the seasons. These changes can cause damage or failure of foundations, utilities, and pavements. During periods of high moisture content, expansive soils under foundations can heave and result in structures lifting. In dry periods, the same soils can collapse and result in settlement of structures. According to Table 15 – Physical and Chemical Properties of the Soils in the USDA Kings County Soil Survey, the upper 5 feet of onsite soils are considered to have low to moderate shrink-swell or expansion potential. In addition, the site is not located in an area of expansive soils as shown in Figure HS-4 of the Health and Safety Element of the 2035 Kings County General Plan (Kings County, 2010). Compliance with the policies of the Kings County General Plan, Development Code, and the CBC, as well as implementation of MM GEO-1, would reduce potential site-specific impacts to less than significant levels.

**MITIGATION MEASURES**

Implementation of MM GEO-1.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.6e – Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?**

The proposed Project does not include the development of septic tanks or alternative wastewater disposal systems as the Project would hook up to the City's existing sewer system.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.7 - GREENHOUSE GAS EMISSIONS

Would the project:

- |    |   |                          |                                     |                                     |                          |
|----|---|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a. | Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?        | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. | Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

### Discussion

There have been significant legislative and regulatory activities that directly and indirectly affect climate change and GHGs in California. The primary climate change legislation in California is AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and Nitrogen trifluoride. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The California Air Resources Board (ARB) is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming in order to reduce emissions of GHGs. SB 32 was signed by the Governor in 2016, which would require the state board to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030.

**Impact #3.4.7a – Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

The San Joaquin Valley Air Pollution Control District (SJVAPCD) has adopted the Final Draft Staff Report, addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act (November 5, 2009), that included a recommended methodology for determining significance for stationary source projects and traditional development projects (such as residential, commercial, or industrial projects).

The proposed project would emit greenhouse gases such as carbon dioxide (CO<sub>2</sub>), methane, and nitrous oxide from the exhaust of equipment and the exhaust of vehicles for employees and hauling trips. The increased rate of greenhouse gas emissions would not be considered cumulatively significant per the California Global Warming Solutions Act of 2006. As stated in the *San Joaquin Valley Unified Air Pollution Control District Guidance for Assessing and Mitigating Air Quality Impacts*, projects whose emissions have been reduced or mitigated

consistent with the *California Global Warming Solutions Act of 2006* should be considered to have a less than significant impact on global climate change.

The *City of Lemoore 2030 General Plan* has analyzed greenhouse gas emissions for the city based on land use designations, including emissions for areas designated as Light Industrial. Because the proposed project is consistent with its General Plan, construction and operational greenhouse gas emissions as a result have already been analyzed in the General Plan EIR. With implementation of these and other applicable City policies, as well as mandatory compliance with the applicable San Joaquin Valley Unified Air Pollution Control District rules and regulations, as required in MM GHG-1, Project GHG emissions will be reduced to less than significant levels.

#### **MITIGATION MEASURES**

**MM GHG-1:** Prior to the issuance of building or grading permits, and continually throughout Project operations, the Project proponent shall comply with applicable policies of the City of Lemoore General Plan, as well as all applicable rules and regulations set forth by San Joaquin Valley Air Pollution Control District.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.7b – Would the Project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

As previously mentioned, the proposed project falls within the jurisdiction of the San Joaquin Valley Unified Air Pollution Control District and the *City of Lemoore 2030 General Plan*. Both of these entities take into account baseline emissions inventory for light industrial uses for the City of Lemoore. Since the proposed project is consistent with the applicable General Plan designation of Light Industrial, it can be concluded that the proposed project would also be in conformance with the approved General Plan.

Because the proposed Project is consistent with the *City of Lemoore 2030 General Plan*, construction and operational GHG emissions as a result have already been analyzed in the General Plan EIR. With implementation of these and other applicable City policies, as well as mandatory compliance with all applicable San Joaquin Valley Unified Air Pollution Control District rules and regulations, as required in MM GHG-1, Project GHG emissions will be reduced to less than significant levels

#### **MITIGATION MEASURES**

**MM GHG-2:** Prior to the issuance of building or grading permits, and continually throughout Project operations, the Project proponent shall comply with applicable policies of the City of Lemoore General Plan, as well as all applicable rules and regulations set forth by San Joaquin Valley Air Pollution Control District.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>3.4.8 - HAZARDS AND HAZARDOUS MATERIALS</b>				
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Impact #3.4.8a, #3.4.8b, and #3.4.8c – Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

The proposed project includes the construction of industrial buildings that will house various industrial uses such as warehousing, manufacturing, and processing. The transport use and storage of hazardous materials would be required to comply with all applicable state and federal regulations, such as requirements that spills would be cleaned up immediately and all wastes and spills control materials would be properly disposed of at approved disposal facilities. Compliance with CCR Title 23, Chapter 16 would also be required for maintenance and monitoring of the USTs for potential leaks. Mitigation Measure HYD-1 in *Section 3.12 - Hydrology and Water Quality* requires the preparation of a Stormwater Pollution Prevention Program (SWPPP), which includes a list of Best Management Practices (BMPs) to be implemented on the site both during and after construction to minimize potential impacts from accidental spills. With compliance of the SWPPP as well as all local, State, and Federal regulations regarding hazardous materials, impacts associated with the use or accidental spill of hazardous materials would be less than significant.

Engvall Elementary School is located approximately 1.15-mile northeast of the proposed Project site. Given the proximity and the intervening uses there is a very limited potential for the project to affect Engvall Elementary School. The proposed Project would not emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing school.

#### **MITIGATION MEASURES**

Implement Mitigation Measure HYD-1.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.8d – Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Per the Cortese List, there are no hazardous waste and substances sites in the vicinity of the Project site (Cal EPA, 2017). Additionally, the State Water Resources Control Board GeoTracker compiles a list of Leaking Underground Storage Tank (LUST) Sites. There are two LUST Cleanup Sites within the vicinity of the Project site (California Water Resources Board, 2017). Both LUST Cleanup Sites were for gasoline spills; however, have been cleaned up and are closed. The proposed Project site is not located on a site that is included on a list

of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would therefore not create a significant hazard to the public or the environment.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.8e and #3.4.8f – Would the Project for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area; or for a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

There are two private airstrips and no public airports within the Lemoore area including Reeves Field at the Naval Air Station and Stone Airstrip. There is no adopted airport land use plan for the City of Lemoore. Both are located outside of the City's limits and would not impact the proposed Project.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.8g – Would the Project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan**

The City of Lemoore published an Emergency Operations Plan in 2005, which provides guidance to City staff in the event of extraordinary emergency situation associated with natural disaster and technological incidents (City of Lemoore , 2008). The proposed Project would not interfere with the City's adopted emergency response plan; therefore, there would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.8h – Would the Project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

The proposed Project site is in an unzoned area of the Kings County Fire Hazard Severity Zone Map Local Responsibility Area (LRA). However, Cal Fire has determined that portions of the City of Lemoore are categorized as a Moderate Fire Hazard Severity Zone in LRA. The Project site is not within a wildland area nor is there within the vicinity of the Project site. The Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, there would be no impact.

***MITIGATION MEASURES***

None are required.

***LEVEL OF SIGNIFICANCE***

There would be *no impact*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>3.4.9 - HYDROLOGY AND WATER QUALITY</b>				
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a federal flood hazard boundary or flood insurance rate map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| i. | Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| j. | Contribute to inundation by seiche, tsunami, or mudflow?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

## Discussion

### Impact #3.4.9a – Would the Project violate any water quality standards or waste discharge requirements?

Project construction would cause ground disturbance that could result in soil erosion or siltation and subsequent water quality degradation offsite, which is a potentially significant impact. Construction-related activities would also involve the use of materials such as vehicle fuels, lubricating fluids, solvents, and other materials that could result in polluted runoff, which is also a potentially significant impact. However, the potential consequences of any spill or release of these types of materials are generally small due to the localized, short-term nature of such releases because of construction. The volume of any spills would likely be relatively small because the volume in any single vehicle or container would generally be anticipated to be less than 50 gallons.

As required by the State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit (No. 2012-0006-DWQ) for storm water discharges associated with construction and land disturbance activities, the City must develop and implement a SWPPP that specifies BMPs to prevent construction pollutants from contacting storm water, with the intent of keeping all products of erosion from moving offsite. The City is required to comply with the Construction General Permit because Project-related construction activities result in soil disturbances of least 1 one acre of total land area. Mitigation Measure MM HYD-1 below requires the preparation and implementation of a SWPPP to comply with the Construction General Permit requirements.

With implementation of Mitigation Measures MM HYD-1, the Project would not violate any water quality standards or waste discharge requirements (WDRs) during the construction period, and impacts would be less than significant.

Project operation would not violate any water quality standards or WDRs because it: 1) does not result in point-source pollution (e.g., outfall pipe) discharges into surface waters that require WDRs and 2) would be developed in compliance with the General Permit for the Discharge of Storm water from Small MS4s (No. 2013-0001-DWQ) in which the City is one of the permittees. Operators of MS4s<sup>1</sup>, like the City, serve urbanized areas with populations fewer than 100,000. To comply with the MS4 General Permit, the Project would have to

<sup>1</sup> MS4s are defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains): 1) designed or used for collecting and/or conveying storm water; 2) which is not a combined sewer; and 3) which is not part or a Publicly Owned Treatment Works.

comply with City design standards to maximize the reduction of pollutant loading in runoff to the maximum extent practicable. The City Building Department would review grading and site plans to ensure compliance before approving such plans. The site plan review process ensures that operations of the Project would not violate water quality standards outlined in the MS4 General Permit, and operational impacts would be less than significant.

### **MITIGATION MEASURES**

**MM HYD-1:** Prior to ground-disturbing activities, the City shall prepare and implement a Storm water Pollution Prevention Plan (SWPPP) that specifies best management practices (BMP), with the intent of keeping all products of erosion from moving offsite. The SWPPP shall include contain a site map that shows the construction site perimeter, existing and proposed man-made facilities, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the Project site. Additionally, the SWPPP shall contain a visual monitoring program and a chemical monitoring program for non-visible pollutants to be implemented (if there is a failure of best management practices). The requirements of the SWPPP and BMPs shall be incorporated into design specifications and construction contracts. Recommended best management practices for the construction phase may include the following:

- Stockpiling and disposing of demolition debris, concrete, and soil properly;
- Protecting any existing storm drain inlets and stabilizing disturbed areas;
- Implementing erosion controls;
- Properly managing construction materials; and
- Managing waste, aggressively controlling litter, and implementing sediment controls.

### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.9b – Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?**

The City of Lemoore currently utilizes local groundwater as its sole source of supply from underground aquifers via ten active groundwater wells. The groundwater basin underlying the City is the Tulare Lake Basin and the City of Lemoore is immediately adjacent to the south boundary of the Kings subbasin. Water for construction and operation would come from the City of Lemoore's existing water system. Per the City's Urban Water Management Plan, the City's existing system has a total supply capacity of 21,674,000 gallons per day with an average day demand of 8,769,000 gallons (City of Lemoore, 2013). The proposed Project would make a minor contribution to the City's current demand and would comply with the City's water conservation measures and regulations. Since the proposed Project would have minimal impacts on the City's water supply, impacts would be less than significant.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.9c – Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?**

The Project site is relatively flat, and the project grading would be minimal and consist of mostly grubbing the site to remove vegetation. The topography of the site would not appreciably change because of grading activities. The site does not contain any blue-line water features, including streams or rivers. Impacts would be less than significant.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.9d – Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?**

Please see response (c) above. Therefore, the project would not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or offsite. Impacts would be less than significant.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.9e – Would the Project create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**



Please see response (a) above. Therefore, the project would not otherwise substantially degrade water quality. With implementation of MM HYD-1, impacts would be less than significant.

**MITIGATION MEASURES**

Implementation of MM HYD-1

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.9f – Would the Project otherwise substantially degrade water quality?**

Please see response (a) above. Therefore, the project would not otherwise substantially degrade water quality. With implementation of MM HYD-1, impacts would be less than significant.

**MITIGATION MEASURES**

Implementation of MM HYD-1

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.9g – Would the Project place housing within a 100-year flood hazard area as mapped on a federal flood hazard boundary or flood insurance map or other flood hazard delineation map?**

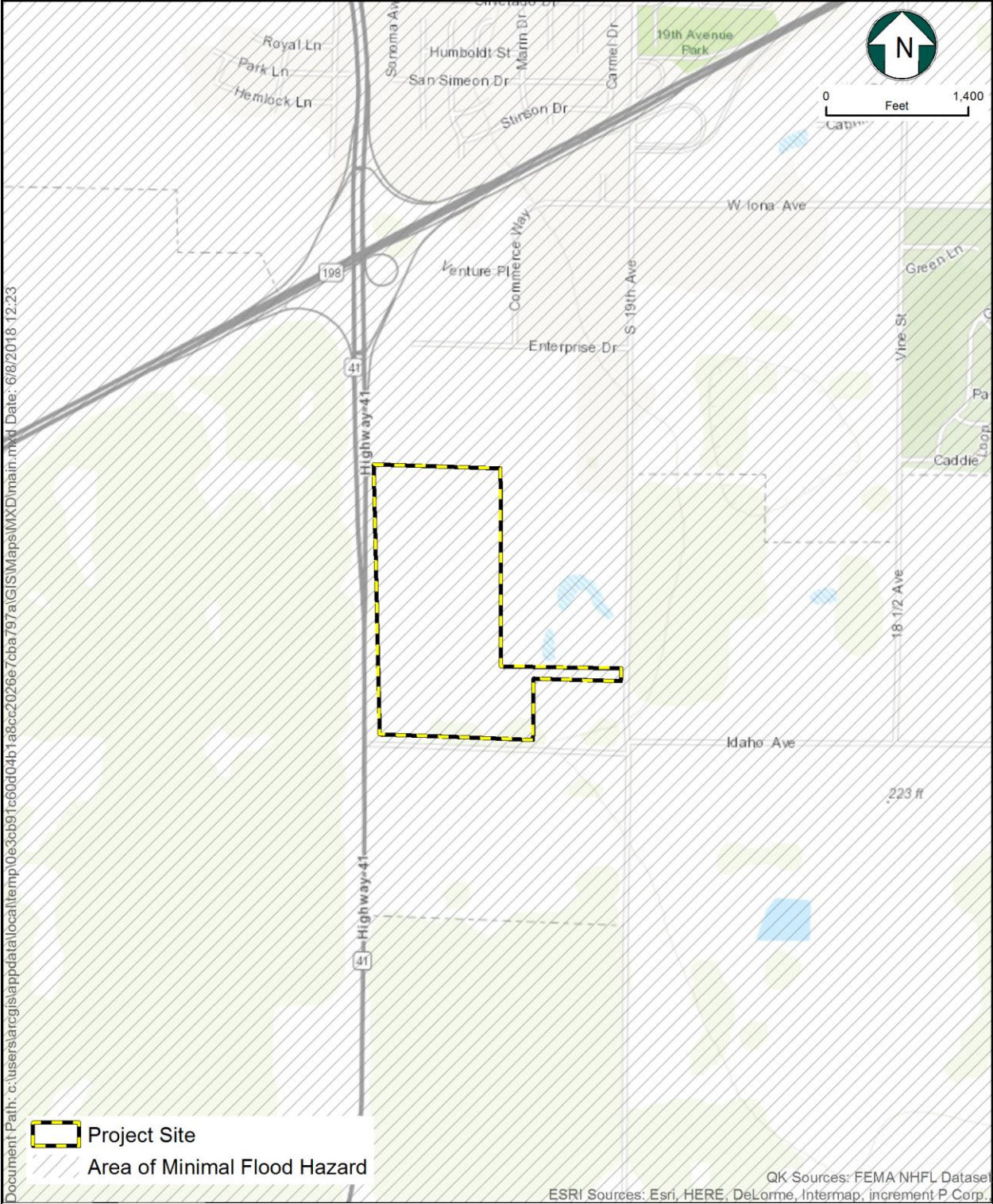
As shown in Figure 3.4.9-1, the Project is not located within a FEMA 100-year floodplain. According to FEMA, the site is located in an 'area of minimal flood hazard. As this project does not include any housing development, the project would not place housing within a 100-year flood hazard area as mapped on a federal flood hazard boundary or flood insurance rate map or other flood hazard delineation map. There would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.



**Figure 3.4.9-1**  
**100-Year Floodplain**

**Impact #3.4.9h – Would the Project place within a 100-year flood hazard area structures that would impede or redirect flood flows?**

See response to Impact #3.4.9g above. Therefore, the project would not place within a 100-year flood hazard area structures that would impede or redirect flood flows. There would be no impact.

**MITIGATION MEASURES**

No mitigation is required

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.9i – Would the Project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?**

According to the Flood Hazards Area map (Figure HS-7, page HS-16) included in the Health and Safety Element of the *2035 Kings County General Plan*, the project site is located within the Pine Flat Dam inundation zone (Kings County, 2010). If Pine Flat Dam failed while at full capacity, its floodwaters would arrive in Kings County within approximately five hours (Kings County 2010). Dam failure has been adequately planned for through the Kings County Multi-Hazard Mitigation Plan, which identifies a dam failure hazard to be of medium significance and unlikely to occur in the City of Lemoore (Kings County, 2007). With the implementation of the Kings County Multi-Hazard Mitigation Plan, impacts related to dam failure would be less than significant.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.9j – Would the Project contribute to inundation by seiche, tsunami, or mudflow?**

The project site is not located near the ocean or a steep topographic feature (i.e., mountain, hill, bluff, etc.). Therefore, there is no potential for the site to be inundated by seiche, tsunami or mudflow. There would be no impact.

**MITIGATION MEASURES**

None are required.

***LEVEL OF SIGNIFICANCE***

There would be *no impact*.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.10 - LAND USE AND PLANNING

Would the project:

- |    |   |                          |                          |                          |                                     |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Physically divide an established community?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal Program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. | Conflict with any applicable habitat conservation plan or natural community conservation plan?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Discussion

#### Impact #3.4.10a – Would the Project physically divide an established community?

The project is in a rural undeveloped area. The project complies with the zoning of the General Plan and Zoning Ordinance. The project does not include the construction of roads or any other physical barrier that would divide a community. The project would not result in any surrounding land use change; therefore, there would be no impact.

#### MITIGATION MEASURES

No mitigation is required.

#### LEVEL OF SIGNIFICANCE

There would be *no impact*.

#### Impact #3.4.10b – Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project site has a General Plan land use designation of Light Industrial (ML) and is zoned Light Industrial. The project involves the development of a light industrial complex. The

proposed project would not conflict with the goals and policies of the Lemoore General Plan because the proposed uses are consistent with the General Plan land use designation and zoning.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.10c – Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?**

The project site is not within the boundaries of an adopted habitat or natural community conservation plan. Therefore, there would be no impact.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.11 - MINERAL RESOURCES

Would the project:

- |    |   |                          |                          |                          |                                     |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

#### Discussion

**Impact #3.4.11a – Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

The City of Lemoore and the surrounding area are designated as Mineral Resources Zone 1 (MRZ-1) by the State Mining and Geology Board (SMGB). MRZ-1 areas are described as those for which adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. The project site is not being used for mineral extraction. Additionally, per the California Division of Oil, Gas, and Geothermal Resources (DOGGR), there are no active, inactive, or capped oil wells located within the Project site, and it is not within a DOGGR-recognized oilfield. Therefore, there would be no impact.

#### MITIGATION MEASURES

None are required.

#### LEVEL OF SIGNIFICANCE

There would be *no impact*.

**Impact #3.4.11b – Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

The Kings County General Plan states that few commercial mining and mineral extraction activities occur in the county and currently, only limited excavation of soil, sand, and some gravel is used for commercial purposes (Kings County, 2010). Additionally, the General Plan does not designate the site for mineral and petroleum resources activities. The project site

and surrounding lands are zoned for light industrial uses. No mining occurs in the project area or in the nearby vicinity, and there are no anticipated mineral extraction activities to be conducted in the future as a result of the project. The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan and would therefore have no impact.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.12 - NOISE

Would the project result in:

a.	Exposure of persons to, or generate, noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Exposure of persons to or generate excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion:

**Impact #3.4.12a – Would the Project result in exposure of persons to, or generate, noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?**

Project construction would generate temporary increases in noise levels. Title 5, Chapter 6 of the City's Municipal Code establishes regulations and enforcement procedures for noise generated in the city. The regulations do not apply to the operation on days other than Sunday of construction equipment or of a construction vehicle, or the performance on days other than Sunday of construction work, between the hours of 7:00 A.M. and 8:00 P.M., provided that all required permits for the operation of such construction equipment or

construction vehicle or the performance of such construction work have been obtained from the appropriate city department (Lemoore Municipal Code 5-6-1-C.4). The City of Lemoore 2030 General Plan (City of Lemoore , 2008) has objectives to minimize residential development noise levels. The proposed Project would comply with all regulations, standards and policies within the City's General Plan and Municipal Code. Therefore, the Project would not result in the exposure of persons to, or generate, noise levels more than standards established in a local general plan or noise ordinance or applicable standards of other agencies. Impacts would be less than significant.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.12b – Would the Project result in exposure of persons to or generate excessive groundborne vibration or groundborne noise levels?**

Construction of the project would generate temporary ground borne vibrations. However, like construction noise, such vibrations would be attenuated over distance to the point where they would not be felt by the nearest receptors. The impacts would be less than significant.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.12c – Would the Project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

As shown in Figure 2-4, the project would be consistent with the surrounding land uses and would not cause out of the ordinary noise levels than what is currently established in the area. The construction noise would be attenuated over distance to the point where it would not be bothersome to the nearest receptors. The noise levels would not result in a substantial permanent increase in ambient noise levels above the existing environment. The impacts would be less than significant.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.12d – Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

Construction of the project would generate temporary noise levels. However, construction would be done during the daylight hours and would be temporary so that the surrounding land uses would not be affected by construction of the new development. The project is consistent with the surrounding land uses and would not cause out of the ordinary noise levels than what is currently established in the area. The impacts would be less than significant.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.12e – Would the Project result in for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

There are no airports within two miles of the Project site. The project would not expose people residing or working in the project area to excessive noise levels. There would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.12f – Would the Project result in for a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

The project is not within the vicinity of a private airstrip. The project would not expose people residing or working in the project area to excessive noise levels. There would be no impact.

***MITIGATION MEASURES***

None are required.

***LEVEL OF SIGNIFICANCE***

There would be *no impact*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less- than Significant Impact	No Impact
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### 3.4.13 - POPULATION AND HOUSING

Would the project:

- |    |  |                          |                          |                          |                                     |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. | Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Discussion

**Impact #3.4.13a – Would the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The proposed project does not include plans for the development of housing or other habitable structures, nor does it propose extensions of other infrastructure that would support each structure. The proposed project would not result in substantial population growth.

### MITIGATION MEASURES

None are required.

### LEVEL OF SIGNIFICANCE

There would be *no impact*.

**Impact #3.4.13b – Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

The proposed project would not require demolition of any housing, as the project site is currently vacant. Therefore, there would be no need to construct replacement housing elsewhere. There would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.13c – Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

The project would not require the displacement of substantial numbers of people due to the fact that there are currently no people on the project site to displace. As no housing currently exists, there would be no need to construct replacement housing elsewhere. There would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.14 - PUBLIC SERVICES

Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services:

i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Discussion:

**Impact #3.4.14a(i) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – Fire Protection?**

Construction and operation of the proposed project would not be expected to result in an increase in demand of fire protection services leading to the construction of new or physically altered facilities. Fire suppression support is provided by the City of Lemoore Volunteer Fire Department (LVFD). The LVFD has is located at 210 Fox Street, approximately 3.4 miles from the project site. The proposed project would result in the construction and operation of a light industrial complex in Lemoore. The City of Lemoore will ensure that construction activities would be in accordance with local and State fire codes. Services are adequately planned for within the City's General Plan through policies to ensure the City maintains Fire Department performance and response standards by allocating the appropriate resources. As stated, the project applicant is responsible for constructing any

infrastructure needed to serve the project and pay the appropriate impact fees, which would reduce impacts to less than significant.

State building codes require that all commercial/industrial buildings over 5,000 square feet must include sprinklers.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.14a(ii) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – Police protection?**

Law enforcement and public protection are provided by the City of Lemoore Police Department. The City's police station is located at 657 Fox Street on the northwest corner of Fox Street and Cinnamon Drive. The station is approximately 4.4 miles northeast of the Project site. As discussed, the proposed Project would not induce population growth, and therefore would not increase demands for public safety protection. As stated, the Project applicant is responsible for constructing any infrastructure needed to serve the project and pay the appropriate impact fees. Impacts on police protection services related to population growth would therefore be considered less than significant.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.14a(iii) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – Schools?**

The project would not result in population growth for the City and would not increase demand for public services or require construction of new school facilities. There would be no impact to existing schools.



**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.14a(iv) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – Parks?**

The proposed Project would not result in population growth for the City and would not increase demand for public parks. The City is currently maintaining a 5-acre to 1,000 residents park ratio, which exceeds current City Park Standards and Quimby Act requirements (City of Lemoore, 2008). The Project would have no impact to the City park system.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.14a(v) – Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services – Other public facilities?**

The proposed project does not include any other impacts to public facilities.

In general, impacts to public services from implementation of a Project are due to its ability to induce population growth and, in turn, result in a greater need for fire and police protection, etc. to serve the increased population. The proposed Project does not include plans for the development of housing or other habitable structures and would not be inducing population growth; however, the project would require amenities provided by public services. Additionally, the Project would require the relocation of a ponding basin. The new ponding basin will be located on undeveloped urban land, similar to the project site. Impacts will be less than significant.

***MITIGATION MEASURES***

None are required.

***LEVEL OF SIGNIFICANCE***

Impacts would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>3.4.15 - RECREATION</b>				
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

**Impact #3.4.15a – Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

As stated in *Section 3.18.a.iv*, the proposed Project would not induce population growth or affect the City's park system. The City's General Plan indicates that the City is continuing to maintain its parkland dedication standard of 5 acres of park land per 1,000 residents. There would be no increase to the use of existing parks or the need to construct or expand existing recreational facilities. There would be no impact.

### MITIGATION MEASURES

None are required.

### LEVEL OF SIGNIFICANCE

There would be *no impact*.

**Impact #3.4.15b – Would the Project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

The project does not include construction of any recreational facility; therefore, it would not generate an adverse physical effect on the environment. There would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.16 - TRANSPORTATION AND TRAFFIC

Would the project:

- |    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. | Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. | Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. | Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e. | Result in inadequate emergency access?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f. | Conflict with adopted policies, plans, or Programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Discussion

Potential transportation and circulation impacts that may result from the proposed project primary involves determining whether a net change would occur in traffic generated by

personnel commuting to or from the project site and by truck trips related to the development of facility operations.

Site access will be provided by the construction of a roadway within in the project site. The road will extend west of South 19<sup>th</sup> Avenue for approximately 0.38 miles and then turn north for approximately 0.35 miles, continuing outside of the project boundaries to eventually connect with Enterprise Drive. The Lemoore General Plan designates 19<sup>th</sup> Avenue and Idaho Avenue as truck routes. These roadways, along with Highway 198 and Highway 41 will serve the project.

The City's General Plan includes a table of Existing and Buildout Traffic Volumes and Levels of Service for Roadway Segments. The roadway segments surrounding the project are currently operating at a level of service A or B. The table includes the future lanes and capacities for these road segments. At buildout of the planning area, the surrounding road segments are expected to operate at a level of service of C or better. The proposed project is consistent with the General Plan and the buildout of this site was anticipated in this traffic table.

**Impact #3.4.16a – Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The City's transportation policies and requirements are incorporated in its General Plan. The only such policy which is affected by this Project is that requiring that no Level of Service violations be engendered by a project. Per the City's Circulation Element of the City of Lemoore 2030 General Plan Update (City of Lemoore , 2008), the "City of Lemoore does not currently have any adopted level of service (LOS) standard. However, recent traffic studies have used level of service D as the standard for evaluating project impacts at intersections." A LOS of D is characterized by congestion with average vehicle speeds decreasing below the user's desired level for two and four lane roads.

The proposed Project was considered in the buildout of the 2030 General Plan. The buildout was evaluated by the General Plan table of Existing and Buildout Traffic Volumes and Levels of Service for Roadway Segments and shows surrounding roadways operating at a level of service of a C or better. Therefore, operational traffic impacts will be less than significant. Additionally, trips to bring materials for construction to the site would be temporary. Therefore, the Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Impacts would be less than significant.

#### **MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.16b – Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

Neither the City of Lemoore or Kings County has an adopted congestion management program. Therefore, there would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.16c – Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

There are no public airports or private airstrips within the vicinity of the Project site and the Project does not include the construction of any structures that would interfere with air traffic patterns. Therefore, there would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.16d – Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

The project would not involve design features that would increase hazards or involve the development of incompatible uses. All new roads would be designed according to all applicable City and County safety regulations and standards. Therefore, there would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.16e – Would the Project result in inadequate emergency access?**

Construction and operation of the proposed project would not interfere with emergency access for emergency vehicles or nearby uses as all activities would be done on the site and would not interfere with the adjacent street traffic. The project design includes road connection to Enterprise Drive and Idaho Avenue, which would allow for improved access to the proposed industrial development. No facilities are proposed as part of the proposed project that would change emergency access to the site or that would affect access to nearby uses. The project would not result in inadequate emergency access and would therefore result in no impact.

The Project would not involve design features that would increase hazards or involve the development of incompatible uses. It would also not result in inadequate emergency access. Therefore, there would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.16f – Would the Project conflict with adopted policies, plans, or Programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

The Project would not affect existing pedestrian and bicycle facilities within the surrounding area. There is no conflict with the Kings County's 2005 Regional Bicycle Plan; therefore, there would be no impact.

**MITIGATION MEASURES**

None are required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.



Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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### 3.4.17 - TRIBAL CULTURAL RESOURCES

Would the project:

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Discussion

Impact #3.4.17a(i) - Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Please see Impacts #3.4.5a and #3.4.5b above. With implementation of Mitigation Measures MM CUL-2 through MM CUL-4, and MM CUL-6 the project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources.

**MITIGATION MEASURES**

Implementation of MM CUL-2 through MM CUL-4, and MM CUL-6.

**LEVEL OF SIGNIFICANCE**

Impact would be *less than significant with mitigation incorporated*.

**Impact #3.4.17a(ii) - Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

Please see Impacts #3.4.5a and #3.4.5b above. With implementation of Mitigation Measures MM CUL-2 through MM CUL-4, and MM CUL-6, the project would not cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

**MITIGATION MEASURES**

Implementation of MM CUL-2 through MM CUL-4, and MM CUL-6.

**LEVEL OF SIGNIFICANCE**

Impact would be *less than significant with mitigation incorporated*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>3.4.18 - UTILITIES AND SERVICE SYSTEMS</b>				
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

**Impact #3.4.18a – Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

Please see Section 3.4.9 (Hydrology and Water Quality) for a discussion of poultry wastewater disposal and compliance with RWQCB requirements. The project would not

necessitate the Regional Water Quality Control Board (RWQCB) to expand their facilities because of the project. The project would not exceed wastewater treatment requirements of the applicable RWQCB.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.18b – Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The project can hook up to the existing water line on Enterprise Drive, north of the site. The generation of wastewater and water would be consistent with the City requirements. The proposed increase in water and wastewater usage at the project site is not anticipated to require the construction of new water or wastewater treatment facilities or the expansion of existing facilities. Impacts would be less than significant.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.18c – Would the Project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The project can hook up to the existing storm drain line on Enterprise Drive, north of the site. The project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities. Therefore, there is no impact.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

There would be *no impact*.

**Impact #3.4.18d – Would the Project have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?**

No surface water entitlements are needed to service the project as the existing groundwater resources are available and adequate to serve the site. The impact would be less than significant.

**MITIGATION MEASURES**

No mitigation is required

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.18e – Would the Project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

The City's wastewater treatment plant has capacity for, or are planned to maintain capacity for, community growth in accord with the adopted General Plan. As this project is in accordance with the General Plan, the impacts would be less than significant.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.18f – Would the Project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

The City's solid waste disposal program has capacity for, or are planned to maintain capacity for, community growth in accord with the adopted General Plan. As this project is in accordance with the General Plan, the impacts would be less than significant.

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

**Impact #3.4.18g – Would the Project comply with federal, state, and local statutes and regulations related to solid waste?**

The project is subject to the solid disposal ordinance of the City of Lemoore as well as the rules of the contracted waste franchise. The project is also subject to Chapter 1 of Title 4 of the Lemoore Municipal Code that regulates all solid waste activities from disposal, sorting, and recycling of materials. According to CalRecycle, the implementation of the local requirements has led to Kings County meeting their required diversion and disposal targets. Therefore, the implementation and compliance with the local regulations would lead to a less than significant impact for the project (California Department of Resources Recycling and Recovery, 2017).

**MITIGATION MEASURES**

No mitigation is required.

**LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant*.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>3.4.19 - MANDATORY FINDINGS OF SIGNIFICANCE</b>				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

**Impact #3.4.19a - Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

As evaluated in this IS/MND, the proposed Project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory. Mitigation measures have been included to lessen the significance of

potential impacts. Similar mitigation measures would be expected of other projects in the surrounding area, most of which share a similar cultural paleontological and biological resources. Consequently, the incremental effects of the proposed project, after mitigation, would not contribute to an adverse cumulative impact on these resources. Therefore, the Project would have a less-than-significant impact with mitigation incorporated.

#### **MITIGATION MEASURES**

Implement Mitigation Measures MM AQ-1 through MM AQ-4, MM BIO-1 through MM BIO-8, MM CUL-1 through MM CUL-6, MM GEO-1, MM GHG-1, and MM HYD-1.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.19b - Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

As described in the impact analyses in Sections 3.4.1 through 3.4.18 of this IS/MND, any potentially significant impacts of the proposed Project would be reduced to a less-than-significant level following incorporation of the mitigation measures listed in the Mitigated Negative Declaration of this IS/MND. All planned projects in the vicinity of the proposed Project would be subject to review in separate environmental documents and required to conform to the City of Lemoore General Plan, zoning, mitigate for project-specific impacts, and provide appropriate engineering to ensure the development meets are applicable federal, State and local regulations and codes. As currently designed, and with compliance of the recommended mitigation measures, the proposed Project would not contribute to a cumulative impact. Thus, the cumulative impacts of past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

#### **MITIGATION MEASURES**

Implement Mitigation Measures MM CUL-1 thru MM CUL-6, MM GEO-1, MM HYD-1, and MM GHG-1.

#### **LEVEL OF SIGNIFICANCE**

Impacts would be *less than significant with mitigation incorporated*.

**Impact #3.4.19c - Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?**

All of the Project’s impacts, both direct and indirect, that are attributable to the Project were identified and mitigated to a less than significant level. As shown in the Mitigated Negative Declaration, the Project proponent has agreed to implement mitigation substantially



reducing or eliminating impacts of the Project. All planned projects in the vicinity of the proposed Project would be subject to review in separate environmental documents and required to conform to the City of Lemoore General Plan, zoning, mitigate for project-specific impacts, and provide appropriate engineering to ensure the development meets applicable federal, State and local regulations and codes. Thus, the cumulative impacts of past, present, and reasonably foreseeable future projects would be less than cumulatively considerable. Therefore, the proposed Project would not either directly or indirectly cause substantial adverse effects on human beings because all potentially adverse direct impacts of the proposed Project are identified as having no impact, less than significant impact, or less than significant impact with mitigation incorporated.

***MITIGATION MEASURES***

Implement Mitigation Measures MM CUL-1 thru MM CUL-6, MM GEO-1, MM HYD-1, and MM GHG-1.

***LEVEL OF SIGNIFICANCE***

Impacts would be *less than significant with mitigation incorporated*.

## SECTION 4 - REFERENCES

- CA Department of Conservation. (2016). *FMMP*. Retrieved from [http://www.conservation.ca.gov/dlrp/Pages/qh\\_maps.aspx](http://www.conservation.ca.gov/dlrp/Pages/qh_maps.aspx)
- Cal EPA. (2017, May 8). *Superfund Cleanup Site List*. Retrieved from Cortese List: <https://www.envirostor.dtsc.ca.gov/public/>
- Cal Fire. (2006). *California Wildland Hazard Severity Zone Map Update*. Retrieved from Local Responsibility Area (LRA) Map: [http://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland\\_statewide](http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_statewide)
- California Department of Transportation. (2011). *California Scenic Highway Mapping System*.
- California Water Resources Board. (2017, May 8). *GeoTracker*. Retrieved from <https://geotracker.waterboards.ca.gov/>
- Caltrans. (2017). California Scenic Highway Mapping System . California, United States of America.
- City of Lemoore . (2008). *2030 General Plan*.
- City of Lemoore. (2007). *2030 General Plan*.
- City of Lemoore. (2013). *Urban Water Management Plan*.
- Department of Conservation. (2014). *California Important Farmland Finder*. Retrieved from California Department of Conservation: <http://maps.conservation.ca.gov/ciff/ciff.html>
- Department of Conservation. (2017, May 9). CGS Information Warehouse. California, United States of America.
- Kings County. (2007). *Kings County Multi-Hazard Mitigation Plan*.
- Kings County. (2010). *2035 General Plan* . Hanford: Kings County Community Development Agency.
- Kings County. (2016). *2016-2024 Housing Element of Kings County and the Cities of Avenal, Corcoran, Hanford and Lemoore*.
- United States Department of Agriculture. (1986). *Soil Survey of Kings County California*.

**APPENDIX A**  
**BIOLOGICAL ANALYSIS**

**APPENDIX A**  
**REPRESENTATIVE PHOTOS**

*[Type here]*



**Photograph 1:** Canal on southern edge of Project with ruderal vegetation in the background. 36.2622, -119.8074, facing north. Photographed on 6/20/2018 by Alex Single.



**Photograph 2:** Ruderal vegetation in disced land. 36.2712, -119.8068, facing east. Photographed on 6/20/2018 by Alex Single.



**Photographs 1 and 2**  
**Lemoore Industrial Project, Lemoore, California**

*[Type here]*



**Photograph 3:** Riparian vegetation on left and flood control basin on right. 36.2695, -119.802, facing west. Photographed on 6/20/2018 by Alex Single.



**Photograph 4:** Drainage ditch. 36.2715, -119.8034, facing north. Photographed on 6/20/2018 by Alex Single.



**Photographs 3 and 4**  
**Lemoore Industrial Project, Lemoore, California**

[Type here]





**Photograph 5:** Ruderal vegetation on north side of Project. 36.2749, -119.8061, facing west.  
Photographed on 6/20/2018 by Alex Single.



**Photograph 6:** Valley Sink Scrub southeast of Project. 36.271, -119.8006, facing south.  
Photographed on 6/20/2018 by Alex Single.



**Photographs 5 and 6**  
**Lemoore Industrial Project, Lemoore, California**

*[Type here]*



**Photograph 7:** Lone willow with industrial park in background. 36.2726, -119.8047, facing northeast. Photographed on 6/20/2018 by Alex Single.



**Photograph 8:** Road access on eastern part of Project. 36.2711, -119.7989, facing west. Photographed on 6/20/2018 by Alex Single.



**Photographs 7 and 8**  
**Lemoore Industrial Project, Lemoore, California**

[Type here]



Special-Status Species Table

Scientific Name	Common Name	Status	Habitat Requirements	Probability of Occurrence and Assessment of Impacts
<b>SENSITIVE NATURAL COMMUNITIES</b>				
Valley Sink Scrub	Valley Sink Scrub	G1, S1.1	This community consists of low, open to dense succulent shrublands dominated by alkali-tolerant <i>Chenopodiaceae</i> , especially <i>Allenrolfea occidentalis</i> or several <i>Sueda</i> species. Understories usually are lacking, though sparse herbaceous cover dominated by <i>Bromus rubens</i> develop occasionally. Also consists of saline or alkaline clays.	<b>Absent.</b> Valley Sink Scrub is present adjacent to but not within the eastern portion of the Project. The Project will not impact this community.
<b>SPECIAL-STATUS PLANTS</b>				
<i>Atriplex depressa</i>	brittlescale	1B.2	This annual herb occurs in Chenopod scrubland, grassland, and alkali sink habitats, but it also is known to occur in wet areas. It flowers between April and October, and it ranges in elevation from 1 to 1050 feet.	<b>Unlikely.</b> Marginal habitat for this species occurs on the Project, but no CNDDB records exist within 10 miles of the Project. The Project is not expected to impact this species.
<i>Delphinium recurvatum</i>	recurved larkspur	1B.2	This perennial plant is commonly found in chenopod scrub, valley and foothill grassland and cismontane woodland. It is most common on sandy or clay alkaline soils. It flowers from March to May, and it ranges in elevation from 10 to 2,592 feet.	<b>Unlikely.</b> Marginal habitat to support this species occurs on the Project. One CNDDB record is located within 10 miles of the Project, approximately 9 miles to the southeast. The Project is not expected to impact this species.
<i>Hordeum intercedens</i>	vernal barley	3.2	This annual plant occurs in coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), and vernal pools. It flowers between March and June and its elevation ranges from 15 to 3,280 feet.	<b>Unlikely.</b> Marginal habitat for this species occurs on the Project, but no CNDDB records exist within 10 miles of the Project. The Project is not expected to impact this species.
<i>Lepidium jaredii</i> ssp. <i>album</i>	Panoche pepper-grass	1B.2	This annual herb occurs in valley and foothill grassland on steep slopes and usually in clay soils, sometimes in alkaline soils. It flowers between February and June and it ranges in elevation from 605 to 2,445 feet.	<b>Absent.</b> The Project is located well outside of the elevational and geographic range of this species. The Project will not impact this species.

Scientific Name	Common Name	Status	Habitat Requirements	Probability of Occurrence and Assessment of Impacts
<i>Monolopia congdonii</i>	San Joaquin woollythreads	CE, 1B.2	This annual herb prefers chenopod scrub, and/or valley and foothill grassland. It flowers between February and May, and it ranges in elevation from 197 to 2,625 feet.	<b>Unlikely.</b> Marginal habitat for this species occurs on the Project, but no CNDDB records exist within 10 miles of the Project. The Project is not expected to impact this species.
<i>Nama stenocarpa</i>	mud nama	2B.2	This annual herb occurs in marshes and swamps such as lake margins and riverbanks. It flowers between January and July and it ranges in elevation from 15 to 1,640 feet.	<b>Absent.</b> Appropriate habitat to support this species does not occur on the Project. One CNDDB record is located within 10 miles of the Project, approximately 9 miles to the southeast. The Project will not impact this species.
<i>Puccinellia simplex</i>	California alkali-grass	1B.2	This annual herb occurs in Chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools, including alkaline, vernal mesic habitat, sinks, flats, and lake margins. It occurs in alkaline, vernal mesic soil, and in sinks, flats, and lake margins. It flowers between March and May, and it ranges in elevation from 6 to 3,051 feet.	<b>Unlikely.</b> Marginal habitat for this species occurs on the Project. One CNDDB record is located within 10 miles of the Project, approximately 10 miles to the north. The Project is not expected to impact this species.
<b>INVERTEBRATES</b>				
<i>Branchinecta conservatio</i>	Conservancy fairy shrimp	FE	This fairy shrimp species occurs in and is endemic to the grasslands of the northern two-thirds of the central valley. It is found in large, turbid pools and inhabits astatic pools located in swales formed by old, braided alluvium filled by winter/spring rains.	<b>Absent.</b> Vernal pool habitat that could support this species is absent from the Project. No CNDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT	This fairy shrimp species occurs in a variety of vernal pool habitats from small, clear sandstone rock pools to large, turbid, alkaline, grassland valley floor pools.	<b>Absent.</b> Vernal pool habitat that could support this species is absent from the Project. No CNDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.
<i>Cicindela tranquebarica</i> ssp.	San Joaquin tiger beetle	G5 S1	This beetle species is a spring/fall species that occurs in a wide variety of open sandy habitats. It prefers sandy substrates with sparse to moderate	<b>Possible.</b> Habitat occurs on the Project, and there is one CNDDB record within 10 miles of the Project. Impacts are not expected with appropriate mitigation measures.

Scientific Name	Common Name	Status	Habitat Requirements	Probability of Occurrence and Assessment of Impacts
			vegetation. It is a gregarious species and can be found along road side ditches, sandy washes, edges of sandy lakes and rivers, blowouts, and sand dunes.	
<i>Desmocerus californicus dimorphus</i>	Valley elderberry longhorn beetle	FT	This beetle species is associated with and entirely dependent on elderberry bushes ( <i>Sambucus</i> spp.). Its range extends throughout the San Joaquin Valley, except in Fresno, Kern, Kings, and Tulare Counties.	<b>Absent.</b> Large elderberry bushes that could support this species are absent from the Project. One CNDDDB record of this species occurs 10 miles of the Project, approximately nine miles north of the Project. The Project will not impact this species.
<i>Lepidurus packardii</i>	vernal pool tadpole shrimp	FE	This fairy shrimp species occurs in vernal pools with clear to high turbidity.	<b>Absent.</b> Vernal pool habitat that could support this species is absent from the Project. No CNDDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.
<b>FISH</b>				
<i>Hypomesus transpacificus</i>	Delta smelt	FE, CT	This species occurs in the Sacramento and San Joaquin estuaries of the San Francisco Bay. Occurs primarily in main water bodies and sloughs of the Delta and Suisun Bay. Not directly associated with small stream systems.	<b>Absent.</b> Aquatic habitat that could support this species is absent from the Project. No CNDDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.
<b>AMPHIBIANS</b>				
<i>Ambystoma californiense</i>	California tiger salamander	FT, CT	This species occurs in natural ephemeral pools or ponds that mimic them, and that remain inundated for 12 weeks or more. It requires nearby upland habitat containing small mammal burrows or crevices that provide refugia.	<b>Absent.</b> Vernal pool habitat that could support this species is absent from the Project. No CNDDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.
<i>Rana draytonii</i>	California red-legged frog	FT, CSC	This species occurs in small streams, ponds and marshes, preferably with dense shrubby vegetation such as cattails and willows near deep water pools.	<b>Absent.</b> No aquatic habitat with emergent vegetation that could support this species is present on the Project. No CNDDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.

Scientific Name	Common Name	Status	Habitat Requirements	Probability of Occurrence and Assessment of Impacts
<i>Spea hammondi</i>	western spadefoot	CSC	This species occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	<b>Possible.</b> Habitat occurs on the Project, and there are two CNDDDB records within 10 miles of the Project. Impacts are not expected with appropriate mitigation measures.
<b>REPTILES</b>				
<i>Arizona elegans occidentalis</i>	California glossy snake	CSC	This species occurs in arid scrub habitat, rocky washes, grasslands, and chaparral. It prefers open areas with loose soil for easy burrowing.	<b>Unlikely.</b> Adequate habitat occurs on the Project, but there are no CNDDDB records within 10 miles of the Project. Impacts are not expected with appropriate mitigation measures.
<i>Emys marmorata</i>	western pond turtle	CSC	This species occurs in ponds and small lakes with abundant vegetation; also found in marshes, slow moving streams, reservoirs, and brackish water. Require basking sites.	<b>Unlikely.</b> Poor habitat occurs on the Project, and there are two CNDDDB records within 10 miles of the Project. Impacts are not expected with appropriate mitigation measures.
<i>Gambelia sila</i>	blunt-nosed leopard lizard	FE, CE, FP	This species occurs in sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. It seeks cover in mammal burrows, under shrubs, or structures such as fence posts.	<b>Absent.</b> Habitat on the Project is too overgrown to support this species. One CNDDDB records of this species occurs within 10 miles of the Project, approximately 7 miles southeast of the Project. The Project will not impact this species.
<i>Thamnophis gigas</i>	giant garter snake	FT, CT	This species primarily occurs in permanent or semi-permanent marshes and sloughs, drainage canals, and irrigation ditches, particularly around rice fields. It prefers to reside in sloughs that are flooded in summer and dry in winter. It can occasionally be found in slow-moving creeks. It prefers locations with vegetation close to the water for basking.	<b>Absent.</b> No aquatic habitat with emergent vegetation that could support this species is present on the Project. No CNDDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.
<b>BIRDS</b>				
<i>Agelaius tricolor</i>	tricolored blackbird	CT, MBTA	This species occurs near fresh water, and prefer emergent wetland vegetation with tall, dense cattails or tules, but is also	<b>Unlikely.</b> Potential foraging habitat is present near the Project and poor breeding habitat is present in the patch of willows on

Scientific Name	Common Name	Status	Habitat Requirements	Probability of Occurrence and Assessment of Impacts
			found in thickets of willow, blackberry, wild rose, and tall herbs. It has been found to nest and forage in grassland and agricultural fields (pastures, dairies, rice fields). A highly social nester, it occurs in large colonies.	the southern portion of the site. One CNDDDB record of this species occurs within 10 miles of the Project, approximately eight miles to the northwest. With appropriate mitigation, the Project will not impact this species.
<i>Athene cunicularia</i>	burrowing owl	CSC, MBTA	This species occurs in open annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	<b>Possible.</b> Adequate habitat is present on the Project, and several CNDDDB records occur within 10 miles of the Project. Impacts are not expected with appropriate mitigation measures.
<i>Buteo swainsoni</i>	Swainson's hawk	CT, MBTA	This species occurs in riparian forests and other forested areas. It roosts in a variety of trees and forage widely over forests, grasslands, and shrublands. It is easily disturbed by human activities.	<b>Present.</b> This species was observed during a site survey. Impacts are not expected with appropriate mitigation measures.
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT, CSC, MBTA	This species occurs along sandy beaches, salt pond levees and shores of large alkali lakes. It needs sandy, gravelly or friable soils for nesting.	<b>Absent.</b> Open beach habitat that could support this species is absent from the Project. One CNDDDB record of this species occur within 10 miles of the Project, approximately four miles south of the Project. The Project will not impact this species.
<i>Elanus leucurus</i>	white-tailed kite	FP, MBTA	This species occurs in savanna, open woodlands, marshes, desert grassland, partially cleared lands, and cultivated fields. It nests in the upper third of trees, which can be open-country trees growing in isolation, or at the edge of or within a forest. Nests have been reported in more than 20 tree species.	<b>Possible.</b> Appropriate habitat exists on the Project but no CNDDDB records occur within 10 miles of the Project. Impacts are not expected with appropriate mitigation measures.
<i>Nycticorax nycticorax</i>	Black-crowned night heron	G5, S3S4, MBTA	This species occurs in wetlands, including saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal mudflats, canals, reservoirs, and wet agricultural fields. The species requires aquatic habitat for	<b>Unlikely.</b> This species may use the southern portion of the site where appropriate habitat exists. No CNDDDB records occur within 10 miles of the Project. Impacts are not expected with appropriate mitigation measures.

Scientific Name	Common Name	Status	Habitat Requirements	Probability of Occurrence and Assessment of Impacts
			foraging and terrestrial vegetation for cover, and may use mangroves, marshes, swamps, lagoons, and flooded rice fields.	
<i>Xanthocephalus xanthocephalus</i>	yellow-headed Blackbird	CSC, MBTA	This species nests in fresh emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds. It forages in emergent wetlands and moist, open areas, especially cropland and muddy shores of lacustrine habitat. It has a restricted distribution in the Central Valley in the winter, occurring mainly in the western portion.	<b>Absent.</b> No aquatic habitat with emergent vegetation that could support this species is present on the Project. No CNDDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.
<b>MAMMALS</b>				
<i>Dipodomys ingens</i>	giant kangaroo rat	FE, CE	This species is associated with annual grasslands on the western side of the San Joaquin valley and have marginal habitat in alkali scrub. It requires level terrain and sandy loam soils for burrowing.	<b>Absent.</b> No CNDDDB records of this species occur within 10 miles of the Project. The Project will not impact this species.
<i>Dipodomys nitratooides exilis</i>	Fresno kangaroo rat	FE, CE	This species historically occurred in alkali sink and open grassland habitats on the valley floor in Fresno County and portions of Tulare, Kings, and Madera counties. The last confirmed specimen was captured in 1992 and it may be extinct.	<b>Unlikely.</b> Habitat that could support this species is present on and adjacent to the Project, and a CNDDDB occurrence is located approximately 9 miles to the northwest of the Project. Impacts are not expected with appropriate mitigation measures.
<i>Dipodomys nitratooides nitratooides</i>	Tipton kangaroo rat	FE, CE	This species occurs in saltbrush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin valley. It needs soft friable soils which escape seasonal flooding to dig burrows in elevated soil mounds at the base of shrubs.	<b>Possible.</b> Habitat that could support this species is present on and adjacent to the Project, and a CNDDDB occurrence is located one mile south of the Project. Impacts are not expected with appropriate mitigation measures.

Scientific Name	Common Name	Status	Habitat Requirements	Probability of Occurrence and Assessment of Impacts
<i>Lasiurus cinereus</i>	hoary bat	G5, S4	This species occurs in deciduous and coniferous forests and woodlands, including areas altered by humans. Roost sites usually occur in tree foliage with dense foliage above and open flying room below, often at the edge of a clearing and commonly in hedgerow trees. Sometimes it roosts in rock crevices, but rarely in caves. When hibernating, it has been found on tree trunks, in a tree cavity, in a squirrel's nest, and in a clump of Spanish-moss.	<b>Absent.</b> Habitat that could support this species is absent from the Project site. There was one CNDDDB record of this species occurring within 10 miles of the Project site, approximately 9 miles to the northeast. The Project will not impact this species.
<i>Sorex ornatus relictus</i>	Buena Vista Lake shrew	FE	This species occurs in areas with a dense mesophytic cover and an abundant layer of litter. Historically, it occupied Valley Freshwater Marsh near Buena Vista Lake. It has been identified in areas with dense wetland vegetative cover and an abundant layer of detritus.	<b>Absent.</b> The areas of moist and dense cover and leaf litter required by this species does not exist on the Project. The Project will not impact this species.
<i>Vulpes macrotis mutica</i>	San Joaquin Kit fox	FE, CT	This species occurs in annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	<b>Possible.</b> Habitat that could support this species is present on and adjacent to the Project, and a CNDDDB occurrence is located one mile south of the Project. Impacts are not expected with appropriate mitigation measures.

Sources:

California Department of Fish and Wildlife. 2018. California Natural Diversity Data Base

California Native Plant Society (CNPS). 2018. Inventory of Rare and Endangered Plants, Rare Plant Scientific Advisory Committee.

United States Fish and Wildlife Service (USFWS). 2018. Critical Habitat Portal, Critical Habitat Map, United States Fish and Wildlife Service, Sacramento, CA.

United States Fish and Wildlife Service (USFWS). 2018. Federal Endangered and Threatened Species List, Sacramento Fish and Wildlife Office.

Abbreviations:

FD Federal Delisted Species

FE Federal Endangered Species

FT Federal Threatened Species

FP Fully Protected (CDFW code)

MBTA Species Protected Under the Auspices of the Migratory Bird Treaty Act

MMPA Species Protected Under the Auspices of the Marine Mammal Protection Act

CE California Endangered Species

CT California Threatened Species

CSC California Department of Fish and Game Species of Special Concern

1B California Native Plant Society List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere

1B.1 California Native Plant Society List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere; Seriously Threatened in California

1B.2 California Native Plant Society List 1B Species-Plants Categorized as Rare, Threatened, or Endangered in California and Elsewhere; Fairly Threatened in California

### **CDFW State Rating System**

The *state rank* (S-rank) is assigned much the same way as the global rank, but state ranks refer to the imperilment status only within California's state boundaries.

**S1 = Critically Imperiled**—Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or

because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

**S2 = Imperiled**—Imperiled in the state because of rarity due to very restricted range, very few populations (often 20

or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.

**S3 = Vulnerable**—Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer),

recent and widespread declines, or other factors making it vulnerable to extirpation from the state.

**S4 = Apparently Secure**—Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.

**S5 = Secure**—Common, widespread, and abundant in the state.

### **CDFW Global Ranking System**

**G1 = Critically Imperiled**—At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

**G2 = Imperiled**—At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

**G3 = Vulnerable**—At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.

**G4 = Apparently Secure**—Uncommon but not rare; some cause for long-term concern due to declines or other factors.

**G5 = Secure**—Common; widespread and abundant.



Potential Occurrence Definitions:

Present: Species or sign of their presence observed on site at time of the field survey.

Likely: Species not observed on site, but may reasonably be expected to occur there on a regular basis. Or, species not observed on the site, exceptional habitat exists, and additional surveys needed to verify presence.

Possible: Species not observed on site, but could occur there from time to time. Or, species not observed on the site, suitable habitat exists, and additional surveys needed to verify presence.

Unlikely: Species not observed on site, and would not be expected to occur there except, perhaps, as a transient. Or, species not observed on the site, marginally suitable habitat exists, and additional surveys needed to verify presence.

Absent: Species or sign of their presence not observed on site, and precluded from occurring there because habitat requirements are not met.

**APPENDIX B**  
**CULTURAL RESOURCES RECORDS**



June 22, 2018

**RE: Cultural Resource Records Search for Kashian Industrial Development project, Lemoore, CA**

A cultural resources records search (RS# 18-278) was conducted at the Southern San Joaquin Valley Information Center, CSU Bakersfield, for the Kashian Industrial Development project, located in incorporated Lemoore, Kings County, CA. The proposed project consists of roughly 85 acres of land located south of the community of Lemoore.

The records search covered an area within one half mile of the subject property and included a review of the National Register of Historic Places, California Points of Historical Interest, California Registry of Historic Resources, California Historical Landmarks, California State Historic Resources Inventory, and a review of cultural resource reports on file.

The records search indicated that two previous cultural resource surveys had included small portions (approximately 2 acres) in the far northwest and eastern extremities of the project. (Wren 1989; California Department of Transportation 1992). One additional survey was conducted along the western boundary of the property (Leach-Palm et al. 2010). No further cultural resource surveys have been performed within a half mile of the project. No cultural resources have been recorded on or within a half mile of the subject property.

No cultural resources were identified within the footprint of the project site as a result of the study and no further cultural resource work is recommended for the project at this time. With implementation of standard mitigation measures, impacts of the proposed project to cultural resources is anticipated to be less than significant.

*Robert E. Parr*

Robert E. Parr, MS, RPA  
Senior Archaeologist

**References**

California Department of Transportation

1992 Historic Property Survey Report 6-Kin-41 39.4/42.0 293500 for the Construction of a Four Lane Expressway in Lemoore. (KI-68)

Leach-Palm, Laura, Paul Brandy, Jay King, Pat Mikkelsen, Libby Seil, Lindsay Hartman and Jill Bradeen

2010 Cultural Resources Inventory of Caltrans District 6 Rural Conventional Highways in Fresno, Western Kern, Kings, Madera, and Tulare Counties. Report prepared for California Department of Transportation District 6, Fresno. (KI-196)

Wren, Donald G.

1989 An Archaeological Reconnaissance for a Proposed Tomato Paste Plant, Lemoore, California.  
Report prepared for Michael Paoli & Associates, Fresno, CA. (KI-68)

**NATIVE AMERICAN HERITAGE COMMISSION**

Environmental and Cultural Department  
1550 Harbor Blvd., Suite 100  
West Sacramento, CA 95691  
(916) 373-3710



June 29, 2018

Jaymie Brauer  
QK Inc.

Sent by Email: Jaymie.brauer@qkinc.com  
Number of Pages: 2

RE: Kashian Industrial Development, Lemoore, Kings County

Dear Ms. Brauer:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. **Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.**

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult.** If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: Sharaya.Souza@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sharaya Souza".

Sharaya Souza  
Staff Services Analyst  
(916) 573-0168



711 West Cinnamon Drive • Lemoore, California 93245 • (559) 924-6700 • Fax (559) 924-6708

## Staff Report

**Item No: 5-1**

**To: Lemoore City Council**

**From: Jason Glick, Parks and Recreation Director**

**Date: October 30, 2018**

**Meeting Date: November 4, 2018**

**Subject: Award Contract for Geotechnical Engineering Services for Athletic Field Lights for the Lemoore Youth Sports Complex**

### **Strategic Initiative:**

- |  |  |
|--|--|
| <input type="checkbox"/> Safe & Vibrant Community            | <input type="checkbox"/> Growing & Dynamic Economy         |
| <input type="checkbox"/> Fiscally Sound Government           | <input checked="" type="checkbox"/> Operational Excellence |
| <input type="checkbox"/> Community & Neighborhood Livability | <input type="checkbox"/> Not Applicable                    |

### **Proposed Motion:**

Approve contract with BSK Associates for \$7,500 to perform Geotechnical Engineering investigation and Geologic/Seismic hazard evaluation for athletic field lights located at the Lemoore Youth Sports Park softball fields, and authorize the City Manager to sign.

### **Subject/Discussion:**

California Building Code requires that a soils investigation report be performed for all new structures in order to determine specific foundation, slab and drainage requirements for the structure and site.

BSK Associates has submitted proposal GF18-17464 for \$7,500. This proposal includes all testing that must be performed per the California Building Code.

### **Financial Consideration(s):**

This contract will be funded by the Parks impact fee account number 074-4310. This fund has a reserve balance of \$1,075,000.00, due to the fact that this service is for expansion of recreational facilities and will not be used for maintenance of existing facilities.

### **Alternatives or Pros/Cons:**

*"In God We Trust"*

None noted.

**Commission/Board Recommendation:**

Not applicable.

**Staff Recommendation:**

Staff recommends that council approve, by motion, the BSK contract to perform Geotechnical service, and authorize the City Manager to sign.

**Attachments:**

- ☐ Resolution:
- ☐ Ordinance:
- ☐ Map
- ☒ Contract
- ☐ Other
- List:

**Review:**

- ☒ Asst. City Manager
- ☒ City Attorney
- ☒ City Clerk
- ☒ City Manger
- ☒ Finance

**Date:**

- 10/31/18
- 11/01/18
- 11/02/18
- 10/31/18
- 10/31/18



550 West Locust Avenue  
Fresno CA 93650  
P 559.497.2880  
F 559.497.2886  
[www.bskassociates.com](http://www.bskassociates.com)

Sent via email: [rgreenlee@lemoore.com](mailto:rgreenlee@lemoore.com)

October 29, 2018

BSK Proposal GF18-17464

Mr. Ray Greenlee  
Parks and Buildings Superintendent  
City of Lemoore  
711 W. Cinnamon Drive  
Lemoore, California 93245

**SUBJECT: Proposal for Geotechnical Engineering Investigation  
Proposed Ballfield Lighting  
Lemoore Sports Complex  
500 N. 19<sup>th</sup> Avenue  
Lemoore, California 93245**

Dear Mr. Greenlee:

At your request, BSK Associates (BSK) is pleased to submit this proposal to perform a geotechnical engineering investigation for the proposed ballfield lighting at the referenced sports complex in Lemoore, California. This proposal is based on our October 29, 2018 telephone conversation and review of conceptual site plan prepared by Musco Lighting.

Our understanding of the project, proposed scope of services, schedule, fees, and general conditions are provided below. BSK understands that this project **will** be subject to prevailing wages as determined by California Director of Industrial Relations.

This proposed investigation specifically excludes the assessment of environmental characteristics particularly those involving hazardous substances. If needed, BSK can outline a scope of services for an environmental assessment in a separate proposal.

## **PROJECT UNDERSTANDING AND BACKGROUND**

BSK understands that the project consists of the design and installation of eleven (11) ballfield lights at the referenced facility. The light poles will utilize Musco standard foundations consisting of round precast, pre-stressed concrete. The precast foundations will be installed in approximately 30-inch diameter pier excavations. We assume the foundations will be embedded less than 20 feet below ground surface (bgs). Other improvements are anticipated to include underground utilities.



If the project description differs significantly from that anticipated above, we should be notified so that we can review our scope of work for applicability.

## **SCOPE OF SERVICES**

The objectives of the geotechnical investigation will be to assess the soil conditions at the project site and provide geotechnical engineering recommendations that can be used during the preparation of the plans and specifications for the project. Based upon the above project understanding, BSK proposes the following scope of services, which will include field exploration, laboratory and field testing program, engineering analyses, and report preparation.

### **Field Exploration**

In addition to performing a site reconnaissance, the field exploration would include drilling five (5) test boring to a maximum depth of 25 feet bgs or refusal.

The test boring will be drilled using a truck-mounted drill rig equipped with 8-inch diameter hollow stem augers. The sampling of bulk and intact soil specimens for purposes of laboratory testing, performing standard penetration tests (SPT sampling), and visually classifying soils exposed during the drilling process will be performed by a BSK engineer or geologist. At the completion of drilling and sampling, the drill holes will be backfilled with soil cuttings. Excess soil cuttings will be disposed of/spread on-site.

In order for BSK to complete the field investigation as described above, the project site must be readily accessible by a truck-mounted drill rig. Access limitations due to existing improvements, inclement weather, etc., may result in time delays and/or additional charges. It is the owner's responsibility to ensure that proper site access is available prior to commencement of the field investigation.

Prior to commencement of drilling operations, BSK will visit the site to mark the test boring locations, evaluate site accessibility, and contact Underground Service Alert (USA) to determine if the test borings may conflict with underground utilities. BSK will not be responsible for damage to underground utilities or other installations unless they are accurately marked on the ground surface and/or on plans made available to us prior to beginning of field operations. It is the responsibility of the owner to verify that the proposed drilling locations are free of underground utilities or other obstructions not identified and located by USA.

In the event that obviously hazardous materials are encountered visually or by odor in the geotechnical test borings, the boring(s) will be immediately terminated and backfilled. BSK will notify you as soon as possible of such an occurrence, and we will both mutually decide whether to continue, modify, or cease the remainder of the investigation program. All added cost incurred as a result of suspected hazardous substances would be charged on a time and expense basis as an addition to our fee quotation below.

## **Laboratory Testing**

The proposed laboratory testing program will incorporate physical and chemical tests to evaluate the soil density, moisture content, gradation, shear strength, collapse/consolidation potential, and corrosion potential (pH, minimum resistivity, sulfate, and chloride content).

## **Analysis and Report Preparation**

Based on the results of the field exploration and laboratory testing program, engineering analyses will be performed to evaluate site conditions and develop recommendations for site preparation and foundations for the proposed construction. Specifically, the geotechnical report will incorporate the following items:

- Vicinity Map and Site Plan with boring locations
- Subsurface Conditions, Soil Boring Logs, Groundwater Depth
- Summary of Laboratory Tests
- Corrosion and expansion characteristics of on-site soils
- Seismic Design Criteria (2016 California Building Code)
- Recommendations for site preparation and earthwork
- Recommended allowable bearing pressure for CIDH pier foundations
- Allowable lateral bearing pressure and skin friction
- Trench excavation stability and backfill
- Recommendations for site drainage
- Recommendations for construction observations and testing

The geotechnical report will be prepared under the supervision of a California Licensed Geotechnical Engineer.

## **SCHEDULE**

BSK will mark the proposed boring location and contact USA to clear utilities upon receipt of client's formal authorization. We anticipate that the drilling will be completed within one day, depending upon any delays experienced due to site access or equipment break downs. We estimate that the laboratory testing will be completed within one week following completion of the field exploration. Based on this timeline, the geotechnical report will be submitted approximately two weeks after completion of laboratory testing, however, preliminary recommendations will be provided prior to the completion of the Report.

## FEE

BSK proposes to complete the Geotechnical Engineering Investigation for a lump sum fee of **\$6,000**, which would not be exceeded without your prior approval. Invoices will be submitted monthly based on the percentage of the project completed. If you should require any additional services during the design phase of this project, including review of plans and specifications, we will prepare a contract amendment with the scope, schedule, and cost of the requested services at that time. Fees for additional services and rates not specifically quoted will be charged per our current Schedule of Fees. The fees for providing the services described above are itemized in the following table.

### ESTIMATED FEE

USA/Utility Clearance	\$ 400
Field Exploration	\$ 2,800
Laboratory Testing	\$ 900
Project Management, Engineering Analysis, and Report Preparation	\$ 1,900
<b>Estimated Fee</b>	<b>\$ 6,000</b>

### ONSITE PRIVATE UTILITY LOCATE (Optional)

Private Utility Locate	\$ 1,500
<b>Estimated Fee</b>	<b>\$1,500</b>

## GENERAL CONDITIONS AND AGREEMENT

Enclosed is a copy of BSK's Agreement for Geotechnical Engineering Services and BSK's General Conditions for Geotechnical Engineering Services. Please have an authorized representative sign, date, and return the Agreement as our authorization to perform the above scope of services. A signed copy of the agreement will be mailed to you for your records. If changes occur in the design of the project, BSK should be notified in writing.

BSK will perform its services consistent with that level of care and skill ordinarily exercised by other consultants practicing in the same discipline and locale at the time the services are performed. No other warranty, express or implied are provided.

## CLOSURE

BSK appreciates the opportunity to submit this proposal for your consideration and we look forward to working with you on this project. If you have questions concerning this proposal or require additional information or services, please contact the undersigned at (559) 497-2880.

Respectfully submitted,  
**BSK Associates**



Han Ngo, PE  
Senior Engineer  
CE 74615



On Man Lau, PE, GE  
South Valley Regional Manager  
GE 2644

HN/OML/cc

Enclosures: Agreement for Geotechnical Engineering Services  
General Conditions for Geotechnical Engineering Services

Distribution: Mr. Ray Greenlee, City of Lemoore(pdf)  
BSK (pdf)

## AGREEMENT FOR GEOTECHNICAL ENGINEERING SERVICES

**THIS AGREEMENT**, effective as of this \_\_\_\_\_ day of \_\_\_\_\_ 2018, is by and between The City of Lemoore ("Client") and BSK Associates ("Consultant").

**THE PROJECT** is generally described as Proposed Ballfield Lighting at Lemoore Sports Complex in Lemoore, California ("Project Site").

**THIS AGREEMENT** consists of the following documents which are incorporated herein by reference:

- General Conditions for Geotechnical Engineering Services;
- Company's Scope of Services and Schedule of Charges presented in BSK's proposal GF17-17464, dated October 29, 2018 and referred to as Exhibit A.

Consultant agrees to perform the Services set forth in this Agreement and in accordance with its terms, including all attachments incorporated herein by reference. This Agreement may not be modified or altered, except in writing as specifically described in this Agreement.

	CLIENT	CONSULTANT
<b>Signature:</b>	_____	_____
<b>Print Name:</b>	_____	On Man Lau
<b>Title:</b>	_____	South Valley Regional Manager
<b>Company:</b>	City of Lemoore	BSK Associates
<b>Address:</b>	711 W. Cinnamon Drive	550 West Locust Avenue
	Lemoore, California 93245	Fresno, California 93350
<b>Date:</b>	_____	_____

# GENERAL CONDITIONS FOR GEOTECHNICAL ENGINEERING SERVICES

## 1. DEFINITIONS

**1.1. Contract Documents.** Plans, specifications, and agreements between Client and Contractors, including addenda, amendments, supplementary instructions, and change orders.

**1.2. Contractor.** The contractor or contractors retained to construct the Project for which Company is providing Services under this Agreement.

**1.3. Day(s).** Calendar day(s) unless otherwise stated.

**1.4. Hazardous Materials.** The term Hazardous Materials means any toxic substances, chemicals, radioactivity, pollutants or other materials, in whatever form or state, known or suspected to impair the environment in any way whatsoever. Hazardous Materials include, but are not limited to, those substances defined, designated or listed in any federal, state or local law, regulation or ordinance concerning hazardous wastes, toxic substances or pollution.

**1.5. Services.** The Services provided by Company as set forth in this Agreement, the SCOPE OF SERVICES and any written amendment to this Agreement.

**1.6. Work.** The labor, materials, equipment and services required to complete the work described in the Contract Documents.

## 2. SCOPE OF SERVICES

Company will perform the Services set forth in the attached SCOPE OF SERVICES.

**2.1. Changes in Scope.** If Company provides Client with a writing confirming a change in the SCOPE OF SERVICES, it will become an amendment to this Agreement unless Client objects in writing within 5 business days after receipt. All Services performed by Company on the Project are subject to the terms and limitations of this Agreement. If Services are performed, but the parties do not reach agreement concerning modifications to the SCOPE OF SERVICES or compensation, then the terms and limitations of this Agreement apply to such Services, except for the payment terms. The parties agree to resolve disputes concerning modifications to scope or compensation pursuant to Section 19, "Disputes."

**2.2. Licenses.** Company will procure and maintain business and professional licenses and registrations necessary to provide its Services.

**2.3. Excluded Services.** Company's Services under this Agreement include only those Services specified in the SCOPE OF SERVICES.

**2.3.1. General.** Client expressly waives any claim against Company resulting from its failure to perform recommended additional Services that Client has not authorized Company to perform, and any claim that Company

failed to perform services that Client instructs Company not to perform.

**2.3.2. Biological Pollutants.** Company's SCOPE OF SERVICES specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, viruses, and/or any of their byproducts. Company's SCOPE OF SERVICES will not include any interpretations, recommendations, findings, or conclusions pertaining to Biological Pollutants. Client agrees that Company has no liability for any claims alleging a failure to investigate, detect, prevent, assess, or make recommendations for preventing, controlling, or abating Biological Pollutants. Furthermore, Client agrees to defend, indemnify, and hold harmless Company from all claims by any third party concerning Biological Pollutants, except for damages caused by Company's sole negligence.

## 3. PAYMENTS TO COMPANY

**3.1. Basic Services.** Company will perform all Services set forth in the attached SCOPE OF SERVICES AND SCHEDULE OF CHARGES for the amount(s) set forth therein.

**3.2. Additional Services.** Any Services performed under this Agreement, except those Services expressly identified in the attached SCOPE OF SERVICES, will be provided on a time and materials basis unless otherwise specifically agreed to in writing by both parties.

**3.3. Estimate of Fees.** To the best of its ability, Company will perform the Services and accomplish the objectives of this Agreement within any written cost estimate provided by it. Client recognizes that changes in scope and schedule, and unforeseen circumstances can all influence the successful completion of Services within the estimated cost. The use of an estimate of fees or of a "not to exceed" limitation is not a guarantee that the Services will be completed for that amount; rather, it indicates that Company shall not incur fees and expenses in excess of the estimate or limitation amount without obtaining Client's agreement to do so.

**3.4. Rates.** Client will pay Company at the rates set forth in the SCHEDULE OF CHARGES.

**3.4.1. Changes to Rates.** Client and Company agree that the SCHEDULE OF CHARGES is subject to periodic review and amendment, as appropriate to reflect Company's then-current fee structure. Company will give Client at least 30 days advance notice of any changes. Unless Client objects in writing to the proposed amended fee structure within 30 days of notification, the amended fee structure will be incorporated into this Agreement and will then supersede any prior fee structure. If Client timely objects to the amended fee structure, and Company and Client cannot agree upon a new fee structure within 30 days after notice, Company may terminate

this Agreement and be compensated as set forth under Section 18, "Termination."

**3.4.2. Prevailing Wages.** Unless Client specifically informs Company in writing that prevailing wage regulations cover the Project and the SCOPE OF SERVICES identifies it as covered by such regulations, Client will reimburse, defend, indemnify and hold harmless Company from and against any liability resulting from a subsequent determination that prevailing wage regulations cover the Project, including all costs, fines and attorneys' fees.

**3.5. Payment Timing; Late Charge.** All invoices are due upon receipt. All amounts unpaid 30 days after the invoice date will include a late payment charge from the date of the invoice, at the rate of 1-1/2% per month or the highest rate permitted by law.

#### **4. STANDARD OF PERFORMANCE; DISCLAIMER OF WARRANTIES**

**4.1. Level of Service.** Company offers different levels of geotechnical engineering Services to suit the desires and needs of different clients. Although the possibility of error can never be eliminated, more detailed and extensive Services yield more information and reduce the probability of error, but at increased cost. Client must determine the level of Services adequate for its purposes. Client has reviewed the SCOPE OF SERVICES and has determined that it does not need or want a greater level of Services than that being provided.

**4.2. Standard of Care.** Subject to the limitations inherent in the agreed SCOPE OF SERVICES as to the degree of care, the amount of time and expenses to be incurred, and subject to any other limitations contained in this Agreement, Company will perform its Services consistent with that level of care and skill ordinarily exercised by other professional engineers practicing in the same locale and under similar circumstances at the time the Services are performed.

**4.3. No Warranty.** No warranty, express or implied, is included or intended by this Agreement.

#### **5. ESTIMATE OF CONSTRUCTION COSTS**

Client acknowledges that construction and Project development are subject to many influences that are not subject to precise forecasting and are outside of Company's control. Client further acknowledges that actual costs incurred may vary substantially from the estimates prepared by Company and that Company does not warrant or guaranty the accuracy of construction or development cost estimates.

#### **6. CONSTRUCTION PHASE SERVICES**

If Company's SCOPE OF SERVICES includes observation and/or testing during the course of construction, Company may:

##### **6.1. Construction Observation.**

**6.1.1. Site Meetings & Visits.** Company will participate in job site meetings as requested by Client, and, unless otherwise requested by Client, visit the site at times specified in the SCOPE OF SERVICES or, if not specified in the SCOPE OF SERVICES, at intervals as Company deems appropriate to the various stages of construction to observe the geotechnical conditions encountered by Contractor and the progress and quality of the geotechnical aspects of the Work. Based on information obtained during such visits and on such

observations, Company may inform Client of the progress of the geotechnical aspects of the Work. Client understands that Company may not be on site continuously; and, unless expressly agreed otherwise, Company will not observe all of the Work.

**6.1.2. Contractor's Performance.** Company does not, and cannot, warrant or guarantee that all of the geotechnical Work performed by Contractor meets the requirements of Company's geotechnical recommendations or the plans and specifications for such geotechnical Work; nor can Company be responsible for Contractor's failure to perform the Work in accordance with the plans, specifications or the recommendations of Company.

**6.1.3. Contractor's Responsibilities.** Company will not supervise, direct or have control over the Work nor will Company have authority over or responsibility for the means, methods, techniques, sequences or procedures of construction selected by Contractor for the geotechnical aspects of the Project; for safety precautions and programs incident to the Work; nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor furnishing and performing its Work.

**6.1.4. Final Report.** At the conclusion of Construction Phase Services, Company will provide Client with a written report summarizing the tests and observations, if any, made by Company.

**6.2. Review of Contractor's Submittals.** If included in the SCOPE OF WORK, Company will review and take appropriate action on the Contractor's submittals, such as shop drawings, product data, samples, and other required submittals. Company will review such submittals solely for general conformance with Company's design, and will not include review for the following, all of which will remain the responsibility of the Contractor: accuracy or completeness of details, quantities or dimensions; construction means, methods, sequences or procedures; coordination among trades; or construction safety.

**6.3. Tests.** Tests performed by Company on finished Work or Work in progress are taken intermittently and indicate the general acceptability of the Work on a statistical basis. Company's tests and observations of the Work are not a guarantee of the quality of Work and do not relieve other parties from their responsibility to perform their Work in accordance with applicable plans, specifications and requirements.

#### **7. CLIENT'S RESPONSIBILITIES**

In addition to payment for the Services performed under this Agreement, Client agrees to:

**7.1. Cooperation.** Assist and cooperate with Company in any manner necessary and within its ability to facilitate Company's performance under this Agreement.

**7.2. Representative.** Designate a representative with authority to receive all notices and information pertaining to this Agreement, communicate Client's policies and decisions, and assist as necessary in matters pertaining to the Project and this Agreement. Client's representative will be subject to change by written notice.

**7.3. Rights of Entry.** Provide access to and/or obtain permission for Company to enter upon all property, whether or not owned by Client, as required to perform and complete the Services. Company will operate with reasonable care to minimize damage to the Project Site(s). However, Client recognizes that Company's operations and the use of investigative equipment may unavoidably alter conditions or affect the environment at the existing Project Site(s). The cost of repairing such damage will be borne by Client and is not included in the fee unless otherwise stated.

**7.4. Relevant Information.** Supply Company with all information and documents in Client's possession or knowledge which are relevant to Company's Services. Client warrants the accuracy of any information supplied by it to Company, and acknowledges that Company is entitled to rely upon such information without verifying its accuracy. Prior to the commencement of any Services in connection with a specific property, Client will notify Company of any known potential or possible health or safety hazard existing on or near the Project Site, with particular reference to Hazardous Materials or conditions.

**7.5. Subsurface Structures.** Correctly designate on plans to be furnished to Company, the location of all subsurface structures, such as pipes, tanks, cables and utilities within the property lines of the Project Site(s), and be responsible for any damage inadvertently caused by Company to any such structure or utility not so designated. Company is not liable to Client for any losses, damages or claims arising from damage to subterranean structures or utilities that were not correctly shown on plans furnished by Client to Company.

## **8. CHANGED CONDITIONS**

If Company discovers conditions or circumstances that it had not contemplated at the commencement of this Agreement ("Changed Conditions"), Company will notify Client in writing of the Changed Conditions. Client and Company agree to that they will then renegotiate in good faith the terms and conditions of this Agreement. If Company and Client cannot agree upon amended terms and conditions within 30 days after notice, Company may terminate this Agreement and be compensated as set forth in Section 18, "Termination."

## **9. HAZARDOUS MATERIALS**

Client understands that Company's Services under this Agreement are limited to geotechnical engineering and that Company has no responsibility to locate, identify, evaluate, treat or otherwise consider or deal with Hazardous Materials. Client is solely responsible for notifying all appropriate federal, state, municipal or other governmental agencies, including the potentially affected public, of the existence of any Hazardous Materials located on or in the Project site, or located during the performance of this Agreement. The existence or discovery of Hazardous Materials constitutes a Changed Condition under this Agreement.

## **10. CERTIFICATIONS**

Client agrees not to require that Company execute any certification with regard to Services performed or Work tested and/or observed under this Agreement unless: 1) Company believes that it has performed sufficient Services to provide a sufficient basis to issue the certification; 2) Company believes that the Services performed or Work tested and/or observed

meet the criteria of the certification; and 3) Company has reviewed and approved in writing the exact form of such certification prior to execution of this Agreement. Any certification by Company is limited to an expression of professional opinion based upon the Services performed by Company, and does not constitute a warranty or guaranty, either expressed or implied.

## **11. ALLOCATION OF RISK**

**11.1. Limitation of Remedies.** The total cumulative liability of Company, its subconsultants and subcontractors, and all of their respective shareholders, directors, officers, employees and agents (collectively "Company Entities"), to Client arising from Services under this Agreement, including attorney's fees due under this Agreement, will not exceed the gross compensation received by Company under this Agreement or \$50,000, whichever is less; provided, however, that such liability is further limited as described below. This limitation applies to all lawsuits, claims or actions that allege errors or omissions in Company's Services, whether alleged to arise in tort, contract, warranty, or other legal theory. Upon Client's written request, Company and Client may agree to increase the limitation to a greater amount in exchange for a negotiated increase in Company's fee, provided that they amend this Agreement in writing as provided in Section 20.

### **11.2. Indemnification.**

**11.2.1. Indemnification of Client.** Subject to all otherwise applicable statutes of limitations and repose and the limitations of this Agreement, Consultant will indemnify and hold harmless Client, its shareholders, officers, directors, employees, and agents from and against any and all claims, suits, liabilities, damages, expenses (including without limitation reasonable attorney's fees and defense costs) and other losses (collectively "Losses") to the extent caused by Consultant's negligence in performance of this Agreement. Consultant's defense obligation under this indemnity paragraph is limited to the reimbursement of reasonable defense costs to the extent of the Consultant's actual indemnity obligation hereunder.

**11.2.2. Indemnification of Company.** Client will indemnify and hold harmless Company Entities from and against any and all Losses to the extent caused by the negligence of Client, its employees, agents and contractors. In addition, except to the extent caused by Company's sole negligence, Client expressly agrees to defend, indemnify and hold harmless Company Entities from and against any and all Losses arising from or related to the existence, disposal, release, discharge, treatment or transportation of Hazardous Materials, or the exposure of any person to Hazardous Materials, or the degradation of the environment due to the presence, discharge, disposal, release of or exposure to Hazardous Material.

**11.3. Consequential Damages.** Neither Client nor Company will be liable to the other for any special, consequential, incidental or penal losses or damages including but not limited to losses, damages or claims related to the unavailability of property or facilities, shutdowns or service interruptions, loss of use, profits, revenue, or inventory, or for use charges, cost of capital, or claims of the other party or its customers.

**11.4. Continuing Agreement.** The indemnity obligations and the limitations of liability established under this



Agreement will survive the expiration or termination of this Agreement. If Company provides Services to Client that the parties do not confirm through execution of an amendment to this Agreement, the obligations of the parties to indemnify each other and the limitations on liability established under this Agreement apply to such Services as if the parties had executed an amendment.

## **12. INSURANCE**

**12.1. Company's Insurance.** Company will obtain, if reasonably available, the following coverages:

**12.1.1.** Statutory Workers' Compensation/Employer's Liability Insurance;

**12.1.2.** Commercial General Liability Insurance with a combined single limit of \$1,000,000;

**12.1.3.** Automobile Liability Insurance, including liability for all owned, hired and non-owned vehicles with minimum limits of \$1,000,000 for bodily injury per person, \$1,000,000 property damage, and \$1,000,000 combined single limit per occurrence; and,

**12.1.4.** Professional Liability Insurance in amounts of \$1,000,000 per claim and annual aggregate.

**12.2. Contractor's Insurance.** Client will require that all Contractors and subcontractors for the Project name Company as an additional insured under their General Liability and Automobile Liability insurance policies. If Client is not the Project owner, Client will require the Project owner to require the owner's Contractor to purchase and maintain General Liability, Builder's Risk, Automobile Liability, Workers' Compensation, and Employer's Liability insurance with limits no less than as set forth above, and to name Company and its subcontractors and subconsultants as additional insureds on the General Liability insurance.

**12.3. Certificates of Insurance.** Upon request, Company and Client will each provide the other with certificate(s) of insurance evidencing the existence of the policies required herein. Except for Professional Liability and Workers' Compensation Insurance, all policies required herein shall contain a waiver of subrogation.

## **13. OWNERSHIP AND USE OF DOCUMENTS**

**13.1. Client Documents.** All documents provided by Client will remain the property of Client. Company will return all such documents to Client upon request, but may retain file copies of such documents.

**13.2. Company's Documents.** Unless otherwise agreed in writing, all documents and information prepared by Company or obtained by Company from any third party in connection with the performance of Services, including, but not limited to, Company's reports, boring logs, maps, field data, field notes, drawings and specifications, laboratory test data and other similar documents (collectively "Documents") are the property of Company. Company has the right, in its sole discretion, to dispose of or retain the Documents.

**13.3. Use of Documents.** All Documents prepared by Company are solely for use by Client and will not be provided by either party to any other person or entity without Company's prior written consent.

**13.3.1. Use by Client.** Client has the right to reuse the Documents for purposes reasonably connected with the Project for which the Services are provided, including without limitation design and licensing requirements of the Project.

**13.3.2. Use by Company.** Company retains the right of ownership with respect to any patentable concepts or copyrightable materials arising from its Services and the right to use the Documents for any purpose.

**13.4. Electronic Media.** Company may agree at Client's request to provide Documents and information in an electronic format. Client recognizes that Documents or other information recorded on or transmitted as electronic media are subject to undetectable alteration due to (among other causes) transmission, conversion, media degradation, software error, or human alteration. Accordingly, all Documents and information provided by Company in electronic media are for informational purposes only and not as final documentation. Unless otherwise defined in the Scope of Services, Company's electronic Documents and media will conform to Company's standards. Company will provide any requested electronic Documents for a 30-day acceptance period, and Company will correct any defects reported by Client to Company during this period. Company makes no warranties, either express or implied, regarding the fitness or suitability of any electronic Documents or media.

**13.5. Unauthorized Reuse.** No party other than Client may rely, and Client will not represent to any other party that it may rely on Documents without Company's express prior written consent and receipt of additional compensation. Client will not permit disclosure, mention, or communication of, or reference to the Documents in any offering circular, securities offering, loan application, real estate sales documentation, or similar promotional material without Company's express prior written consent. Client waives any and all claims against Company resulting in any way from the unauthorized reuse or alteration of Documents by itself or anyone obtaining them through Client. Client will defend, indemnify and hold harmless Company from and against any claim, action or proceeding brought by any party claiming to rely upon information or opinions contained Documents provided to such person or entity, published, disclosed or referred to without Company's prior written consent.

## **14. SAMPLES AND CUTTINGS**

**14.1. Sample Retention.** If Company provides laboratory testing or analytic Services, Company will preserve such soil, rock, water, or other samples as it deems necessary for the Project, but no longer than 45 days after issuance of any Documents that include the data obtained from these samples. Client will promptly pay and be responsible for the removal and lawful disposal of all contaminated samples, cuttings, Hazardous Materials, and other hazardous substances.

**14.2. Monitoring Wells.** Client will take custody of all monitoring wells and probes installed during any investigation by Company, and will take any and all necessary steps for the proper maintenance, repair or closure of such wells or probes at Client's expense.

## 15. ASSIGNMENT AND SUBCONTRACTS

Client and Consultant, respectively, each binds itself and its successors and assigns to the other and its successors and assigns with respect to all covenants of this Agreement. Neither Client nor Consultant shall assign, sublet or transfer any rights under or interest in this Agreement without the prior written consent of the other party, including but not limited to, (a) any interest in the proceeds of this Agreement, or any proceeds of claims arising from or under this Agreement; (b) any claims, causes of action or rights against the other party arising from or under this Agreement; (c) the control of claims or causes of action against the other party arising from or under this Agreement; and (d) any proceeds from claims or causes of action as security, collateral or the source of payment for any notes or liabilities to any third party. This section shall not, however, apply to any subrogation rights (if any) of any insurer of either party. This section shall survive the completion or termination of this Agreement for any reason and shall remain enforceable between parties.

## 16. RELATIONSHIP OF THE PARTIES

Company will perform Services under this Agreement as an independent contractor.

## 17. SUSPENSION AND DELAYS

**17.1. Procedures.** Client may, at any time by 10 days written notice suspend performance of all or any part of the Services by Company. Company may terminate this Agreement if Client suspends Company's Services for more than 60 days and Client will pay Company as set forth under Section 18, "Termination." If Client suspends Company's Services, or if Client or others delay Company's Services, Client and Company agree to equitably adjust: (1) the time for completion of the Services; and (2) Company's compensation in accordance with Company's then current SCHEDULE OF CHARGES for the additional labor, equipment, and other charges associated with maintaining its workforce for Client's benefit during the delay or suspension, or charges incurred by Company for demobilization and subsequent remobilization.

**17.2. Liability.** Company is not liable to Client for any failure to perform or delay in performance due to circumstances beyond Company's control, including but not limited to pollution, contamination, or release of hazardous substances, strikes, lockouts, riots, wars, fires, flood, explosion, "acts of God," adverse weather conditions, acts of government, labor disputes, delays in transportation or inability to obtain material and equipment in the open market.

## 18. TERMINATION

**18.1. Termination for Convenience.** Company and Client may terminate this Agreement for convenience upon 30 days written notice delivered or mailed to the other party.

**18.2. Termination for Cause.** In the event of material breach of this Agreement, the party not breaching the Agreement may terminate it upon 10 days written notice delivered or mailed to the other party. The termination notice shall state the basis for the termination. The Agreement may not be terminated for cause if the breaching party cures the breach within the 10-day period.

**18.3. Payment on Termination.** Following termination other than for Company's material breach of this Agreement, Client will pay Company for Services performed prior to the termination notice date, and for any necessary Services and expenses incurred in connection with the termination of the Project, including but not limited to, the costs of completing analysis, records and reports necessary to document job status at the time of termination and costs associated with termination of subcontractor contracts in accordance with Company's then current SCHEDULE OF CHARGES.

## 19. DISPUTES

**19.1. Mediation.** All disputes between Company and Client are subject to mediation. Either party may demand mediation by serving a written notice stating the essential nature of the dispute, amount of time or money claimed, and requiring that the matter be mediated within 45 days of service of notice.

**19.2. Precondition to Other Action.** No action or suit may be commenced unless the mediation did not occur within 45 days after service of notice; or the mediation occurred but did not resolve the dispute; or a statute of limitation would elapse if suit was not filed prior to 45 days after service of notice.

**19.3. Choice of Law; Venue.** This Agreement will be construed in accordance with and governed by the laws of the state in which the Project is located. Unless the parties agree otherwise, any mediation or other legal proceeding will occur in the state in which the Project is located.

**19.4. Statutes of Limitations.** Any applicable statute of limitations will be deemed to commence running on the earlier of the date of substantial completion of Company's Services under this Agreement or the date on which claimant knew, or should have known, of facts giving rise to its claims.

## 20. MISCELLANEOUS

**20.1. Integration and Severability.** This Agreement reflects the entire agreement of the parties with respect to its terms and supersedes all prior agreements, whether written or oral. If any portion of this Agreement is void or voidable, such portion will be deemed stricken and the Agreement reformed to as closely approximate the stricken portions as the law allows.

**20.2. Modification of this Agreement.** This Agreement may not be modified or altered, except by a written agreement signed by authorized representatives of both parties and referring specifically to this Agreement.

**20.3. Notices.** Any and all notices, requests, instructions, or other communications given by either party to the other must be in writing and either hand delivered to the recipient or delivered by first-class mail (postage prepaid) or express mail (billed to sender) at the addresses given in this Agreement.

**20.4. Headings.** The headings used in this Agreement are for convenience only and are not a part of this Agreement.

**20.5. Waiver.** The waiver of any term, conditions or breach of this Agreement will not operate as a subsequent waiver of the same term, condition, or breach.

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***End of General Conditions***



711 West Cinnamon Drive • Lemoore, California 93245 • (559) 924-6700 • Fax (559) 924-6708

## Staff Report

**Item No: 5-2**

**To: Lemoore City Council**

**From: Frank Rivera, Public Works Director**

**Date: October 24, 2018**

**Meeting Date: November 6, 2018**

**Subject: Budget Amendment - Agreement with IG Services for a Refuse Rate Study**

**Strategic Initiative:**

- |   |  |
|---|--|
| <input type="checkbox"/> Safe & Vibrant Community             | <input type="checkbox"/> Growing & Dynamic Economy |
| <input checked="" type="checkbox"/> Fiscally Sound Government | <input type="checkbox"/> Operational Excellence    |
| <input type="checkbox"/> Community & Neighborhood Livability  | <input type="checkbox"/> Not Applicable            |

**Proposed Motion:**

Approve a refuse rate study in an amount not to exceed \$20,740 and authorize the City Manager to execute an agreement with IG Services to conduct the study.

**Subject/Discussion:**

Refuse rates were last changed in February 2009. Newly implemented costs associated with meeting more stringent state regulations and service mandates requires the City to establish new rates and charges for commercial commingled recycling and commercial food-waste collection programs. AB 1826 which goes into effect January 1, 2019, requires businesses that generate 4 cubic yards or more of commercial solid waste per week to arrange for organic waste recycling services. The City will be providing that service.

The refuse rate study will take into account all increases in operational and maintenance expenditures since the last rate increase and determine future needs for expanded services and anticipated expenses. Rates will be set for services such that fees collected are consistent with the costs of each service (landfill, recycle, green waste and organics).

Upon completion of the rate study, IG Services will present the information to City Council.

*"In God We Trust"*

**Financial Consideration(s):**

Staff is recommending a budget amendment of \$20,740 from the refuse reserves fund.

**Alternatives or Pros/Cons:****Pros:**

- Ensure revenues are collected for newly implemented state regulations

**Cons:**

- Additional cost was not budgeted

**Commission/Board Recommendation:**

Not applicable.

**Staff Recommendation:**

Staff recommends that Council approve a refuse rate study in an amount not to exceed \$20,740 and authorize the City Manager to execute an agreement with IG Services to conduct the study.

**Attachments:**

- ☐ Resolution:
- ☐ Ordinance:
- ☐ Map
- ☒ Contract
- ☒ Other
  - List: Estimate
  - Budget Amendment

**Review:**

- ☒ Asst. City Manager
- ☒ City Attorney
- ☒ City Clerk
- ☒ City Manger
- ☒ Finance

**Date:**

- 10/29/18
- 11/01/18
- 11/02/18
- 10/31/18
- 10/29/18

## **CITY OF LEMOORE CONSULTANT SERVICES AGREEMENT**

This Consultant Services Agreement ("Agreement") is entered into between the City of Lemoore, a California municipal corporation ("City") and Interstate Gas Services, Inc. (DBA IGSservice and IGS) ("Consultant") with respect to the following recitals, which are a substantive part of this Agreement. This Agreement shall be effective on the date signed by City, which shall occur after execution by Consultant ("Effective Date").

### **RECITALS**

- A. City desires to obtain services for a Refuse Rate Study, as further set forth in the proposals from Consultant attached as **Exhibit A** ("Proposal") and incorporated herein by reference ("Services"). If there is a conflict between the terms of the Proposal and this Agreement, this Agreement shall control.
- B. Consultant is engaged in the business of furnishing the Services and hereby warrants and represents that it is qualified, licensed, and professionally capable of performing the Services.
- C. City desires to retain Consultant, and Consultant desires to provide the City with the Services, on the terms and conditions as set forth in this Agreement.

NOW, THEREFORE, in consideration of the promises and mutual agreements herein, City and Consultant agree as follows:

### **AGREEMENT**

- 1. Scope of Services. Consultant shall perform the Services described in the Exhibit A.
- 2. Commencement of Services; Term of Agreement. Consultant shall commence the Services upon City's execution and approval of this Agreement and shall continue with the Services until Consultant, as determined by City, has satisfactorily performed and completed the Services, or until such time as the Agreement is terminated by either party pursuant to Section 16 herein, whichever is earlier.
- 3. Payment for Services. City shall pay Consultant a sum not to exceed the total set forth in **Exhibit A** or \$20,740 for the Services performed pursuant to this Agreement. Consultant shall submit monthly invoices to City containing detailed billing information regarding the Services provided and unless otherwise specified in **Exhibit A**, City shall tender payment to Consultant within thirty (30) days after receipt of invoice.
- 4. Independent Contractor Status. Consultant and its subcontractors shall perform the Services as independent contractors and not as officers, employees, agents or volunteers of City. Nothing contained in this Agreement shall be deemed to create any contractual relationship between City and Consultant's employees or subcontractors, nor shall anything contained in this Agreement be deemed to give any third party, including but not limited to Consultant's employees or subcontractors, any claim or right of action against City.

5. Standard of Care. Consultant expressly represents it is qualified in the field for which Services are being provided under this Agreement and that to the extent Consultant utilizes subcontractors, employees, volunteers or agents, such subcontractors, employees, volunteers or agents are, and will be, qualified in their fields. Consultant also expressly represents that both Consultant and its subcontractors, employees, volunteers or agents, if any, are now, and will be throughout their performance of the Services under this Agreement, properly licensed or otherwise qualified and authorized to perform the Services required and contemplated by this Agreement. Consultant and its subcontractors, if any, shall utilize the standard of care and skill customarily exercised by members of their profession, shall use reasonable diligence and best judgment while performing the Services, and shall comply with all applicable laws and regulations.
6. Identity of Subcontractors and Sub-Consultants. No subcontractors shall be used.
7. Subcontractor Provisions. Not applicable.
8. Power to Act on Behalf of City. Consultant shall not have any right, power, or authority to create any obligation, express or implied, or make representations on behalf of City except as may be expressly authorized in advance in writing from time to time by City and then only to the extent of such authorization.
9. Record Keeping; Reports. Consultant shall keep complete records showing the type of Services performed. Consultant shall be responsible and shall require its subcontractors to keep similar records. City shall be given reasonable access to the records of Consultant and its subcontractors for inspection and audit purposes. Consultant shall provide City with a working draft of all reports and five (5) copies of all final reports prepared by Consultant under this Agreement.
10. Ownership and Inspection of Documents. All data, tests, reports, documents, conclusions, opinions, recommendations and other work product generated by or produced for Consultant or its subcontractors, employees, volunteers or agents in connection with the Services, regardless of the medium, including written proposals and materials recorded on computer discs ("Work Product"), shall be and remain the property of City. City shall have the right to use, copy, modify, and reuse the Work Product as it sees fit. Upon City's request, Consultant shall make available for inspection and copying all such Work Product and all Work Product shall be turned over to City promptly at City's request or upon termination of this Agreement, whichever occurs first. This obligation shall survive termination of this Agreement and shall survive for four (4) years from the date of expiration or termination of this Agreement.
11. Confidentiality. All data, reports, conclusions, opinions, recommendations and other Work Product prepared and performed by and on behalf of Consultant in connection with the Services performed pursuant to this Agreement shall be kept confidential and shall be disclosed only to City, unless otherwise provided by law or expressly authorized by City. Consultant shall not disclose or permit the disclosure of any confidential information acquired during performance of the Services, except to its agents, employees and subcontractors who need such confidential information in order to properly perform their duties relative to this Agreement. Consultant shall also require its subcontractors, employees, volunteers or agents to be bound to these confidentiality provisions.

12. City Name and Logo. Consultant shall not use City's name or insignia, photographs relating to the City projects for which Consultant's services are rendered, or any publicity pertaining to the Consultant's services under this Agreement in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of City.

13. Conflicts of Interest. Consultant warrants that neither Consultant nor any of its employees have an interest, present or contemplated, in the Services. Consultant further warrants that neither Consultant nor any of its employees have real property, business interests or income that will be affected by the Services. Consultant covenants that no person having any such interest, whether an employee or subcontractor, shall perform the Services under this Agreement. During the performance of the Services, Consultant shall not employ or retain the services of any person who is employed by the City or a member of any City Board or Commission.

14. Non-liability of Officers and Employees. No officer or employee of City shall be personally liable to Consultant, or any successors in interest, in the event of a default or breach by City for any amount which may become due Consultant or its successor, or for any breach of any obligation under the terms of this Agreement.

15. City Right to Employ Other Consultants. This Agreement is non-exclusive with Consultant. City reserves the right to employ other consultants in connection with the Services.

16. Termination of Agreement. This Agreement shall terminate upon completion of the Services, or with 30 days notice by the City.

Upon receipt of a termination notice (or completion of this Agreement), Consultant shall: (i) promptly discontinue all Services affected (unless the notice directs otherwise); and (ii) deliver or otherwise make available to the City, without additional compensation, all data, documents, procedures, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Consultant in performing this Agreement, whether completed or in process. Following the termination of this Agreement for any reason whatsoever, City shall have the right to utilize such information and other documents, or any other works of authorship fixed in any tangible medium of expression, including but not limited to written proposals, data magnetically or otherwise recorded on computer disks, or other writings prepared or caused to be prepared under this Agreement by Consultant. Consultant may not refuse to provide such writings or materials for any reason whatsoever.

17. Insurance. Consultant shall satisfy the insurance requirements set forth in **Exhibit B**.

18. Indemnity and Defense. Consultant hereby agrees to indemnify, defend and hold the City, City Council members, employees, volunteers, agents and city officials harmless from and against all claims, demands, causes of action, actions, damages, losses, expenses, and other liabilities (including without limitation reasonable attorney fees and costs of litigation) of every nature arising out of or in connection with actual acts, errors, omissions or negligence of Consultant or its subcontractors, employees, volunteers or agents relating to the performance of Services described herein.

19. Assignment. Neither this Agreement nor any duties or obligations hereunder shall be assignable by Consultant without the prior written consent of City. In the event of an assignment to

which City has consented, the assignee shall agree in writing to personally assume and perform the covenants, obligations, and agreements herein contained. In addition, Consultant shall not assign the payment of any monies due Consultant from City under the terms of this Agreement to any other individual, corporation or entity. City retains the right to pay any and all monies due Consultant directly to Consultant.

20. Form and Service of Notices. Any and all notices or other communications required or permitted by this Agreement or by law to be delivered to, served upon, or given to either party to this Agreement by the other party shall be in writing and shall be deemed properly delivered, served or given by one of the following methods:

a. Personally delivered to the party to whom it is directed. Service shall be deemed the date of delivery.

b. Delivered by e-mail to a known address of the party to whom it is directed, provided the e-mail is accompanied by a written acknowledgment of receipt by the other party. Service shall be deemed the date of written acknowledgement.

c. Delivery by a reliable overnight delivery service, ex., Federal Express, receipted, addressed to the addressees set forth below the signatories to this Agreement. Service shall be deemed the date of delivery.

d. Delivery by deposit in the United States mail, first class postage prepaid. Service shall be deemed delivered seventy-two (72) hours after deposit.

21. Entire Agreement. This Agreement, including the attachments, represents the entire Agreement between City and Consultant and supersedes all prior negotiations, representations or agreements, either written or oral, with respect to the subject matter herein. This Agreement may be amended only by written instrument signed by both City and Consultant.

22. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

23. Authority. The signatories to this Agreement warrant and represent that they have the legal right, power, and authority to execute this Agreement and bind their respective entities.

24. Severability. In the event any term or provision of this Agreement is declared to be invalid or illegal for any reason, this Agreement will remain in full force and effect and will be interpreted as though such invalid or illegal provision were not a part of this Agreement. The remaining provisions will be construed to preserve the intent and purpose of this Agreement and the parties will negotiate in good faith to modify any invalidated provisions to preserve each party's anticipated benefits.

25. Applicable Law and Interpretation and Venue. This Agreement shall be interpreted in accordance with the laws of the State of California. The language of all parts of this Agreement shall, in all cases, be construed as a whole, according to its fair meaning, and not strictly for or against either party. This Agreement is entered into by City and Consultant in the County of Kings, California.



Thus, in the event of litigation, the Parties agree venue shall only lie with the appropriate state or federal court in Kings County.

26. Amendments and Waiver. This Agreement shall not be modified or amended in any way, and no provision shall be waived, except in writing signed by the parties hereto. No waiver of any provision of this Agreement shall be deemed, or shall constitute, a waiver of any other provision, whether or not similar, nor shall any such waiver constitute a continuing or subsequent waiver of the same provision. Failure of either party to enforce any provision of this Agreement shall not constitute a waiver of the right to compel enforcement of the remaining provisions of this Agreement.

27. Third Party Beneficiaries. Nothing in this Agreement shall be construed to confer any rights upon any party not a signatory to this Agreement.

28. Execution in Counterparts. This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy or an original, with all signatures appended together, shall be deemed a fully executed Agreement.

29. Alternative Dispute Resolution. If a dispute arises out of or relating to this Agreement, or the alleged breach thereof, and if said dispute cannot be settled through negotiation, the parties agree first to try in good faith to settle the dispute by non-binding mediation before resorting to litigation or some other dispute resolution procedure, unless the parties mutually agree otherwise. The mediator shall be mutually selected by the parties, but in case of disagreement, the mediator shall be selected by lot from among two nominations provided by each party. All costs and fees required by the mediator shall be split equally by the parties; otherwise, each party shall bear its own costs of mediation. If mediation fails to resolve the dispute within thirty (30) days, either party may pursue litigation to resolve the dispute.

Demand for mediation shall be in writing and delivered to the other party to this Agreement. A demand for mediation shall be made within reasonable time after the claim, dispute or other matter in question has arisen. In no event shall the demand for mediation be made after the date when institution of legal or equitable proceedings based on such a claim, dispute or other matter in question would be barred by California statutes of limitations.

30. Non-Discrimination. Consultant shall not discriminate on the basis of any protected class under federal or State law in the provision of the Services or with respect to any Consultant employees or applicants for employment. Consultant shall ensure that any subcontractors are bound to this provision. A protected class includes, but is not necessarily limited to, race, color, national origin, ancestry, religion, age, sex, sexual orientation, marital status, and disability.

NOW, THEREFORE, the City and Consultant have executed this Agreement on the date(s) set forth below.

*Signatures on Next Page*

CONSULTANT

CITY OF LEMOORE

By: \_\_\_\_\_  
Dan Bergmann

By: \_\_\_\_\_  
Nathan Olson, City Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Party Identification and Contact Information:

IGService  
Attn: Dan Bergmann  
15 Shasta Lane  
Walnut Creek, CA 94597  
dan@igservice.com  
(925) 899-2578

City of Lemoore  
Attn: Nathan Olson, City Manager  
711 W Cinnamon Drive  
Lemoore, CA 93245  
nolson@lemoore.com  
(559) 924-6700

# **EXHIBIT A**

## **CONSULTANT PROPOSAL**

*See attached.*

# **EXHIBIT B**

# INSURANCE REQUIREMENTS

Prior to commencement of the Services, Consultant shall take out and maintain, at its own expense, and shall cause any subcontractor with whom Consultant contracts for the performance of Services pursuant to this Agreement to take out and maintain, the following insurance until completion of the Services or termination of this Agreement, whichever is earlier, except as otherwise required by subsection (d) below. All insurance shall be placed with insurance companies that are licensed and admitted to conduct business in the State of California and are rated at a minimum with an "A" by A.M. Best Company.

a. Minimum Limits of Insurance. Consultant shall maintain limits no less than:

(i) Professional Liability Insurance in an amount not less than \$1,000,000.00 per occurrence. Said insurance shall be maintained at all times during Consultant's performance of Services under this Agreement, and for a period of five years following completion of Consultant's Services under this Agreement or termination of this Agreement.

(ii) General Liability Insurance (including operations, products and completed operations coverages) in an amount not less than \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

(iii) Worker's Compensation Insurance as required by the State of California.

(iv) Business Automobile Liability Insurance in an amount not less than \$1,000,000 per accident for bodily injury and property damage.

If Consultant maintains higher limits than the minimums shown above, the City shall be entitled to coverage at the higher limits maintained.

b. Other Insurance Provisions. The general liability policy is to contain, or be endorsed to contain, the following provisions:

(i) The City, City Council members, employees, volunteers, agents and city officials are to be covered as insureds with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Consultant; and with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided with two endorsement forms: 1) in the form of an additional insured endorsement to the Consultant's insurance, or as a separate owner's policy (CG 20 10 11 85 or its equivalent language) and 2) a CG 20 37 10 01 endorsement form or its equivalent language. A later edition of the CG 20 10 form along with the CG 20 37 coverage form will give some protection to the entity for specific locations.

(ii) For any claims related to the Services performed pursuant to this Agreement, the Consultant's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, agents or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

(iii) Each insurance policy required by this section shall be endorsed to state that the City shall receive written notice at least thirty (30) days prior to the cancellation, non-renewal, or material modification of the coverages required herein.

(iv) Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of the Civil Code.

c. Evidence of Coverage. Consultant shall deliver to City written evidence of the above insurance coverages, including the required endorsements prior to commencing Services under this Agreement; and the production of such written evidence shall be an express condition precedent, notwithstanding anything to the contrary in this Agreement, to Consultant's right to be paid any compensation under this Agreement. City's failure, at any time, to object to Consultant's failure to provide the specified insurance or written evidence thereof (either as to the type or amount of such insurance), shall not be deemed a waiver of City's right to insist upon such insurance later.

d. Maintenance of Insurance. If Consultant fails to furnish and maintain the insurance required by this section, City may (but is not required to) purchase such insurance on behalf of Consultant, and the Consultant shall pay the cost thereof to City upon demand, and City shall furnish Consultant with any information needed to obtain such insurance. Moreover, at its discretion, City may pay for such insurance with funds otherwise due Consultant under this Agreement.

Consultant shall maintain all of the foregoing insurance coverages during the term of this Agreement, except as to (a) the products and completed operations coverage under the General Liability Insurance which shall also be maintained for a period of ten (10) years following completion of the Services by Consultant or termination of this Agreement, whichever is earlier; and (b) Professional Liability Insurance, which shall be maintained for a period of five (5) years following completion of the Services by Consultant or termination of this Agreement, whichever is earlier.

e. Indemnity and Defense. Except as otherwise expressly provided, the insurance requirements in this section shall not in any way limit, in either scope or amount, the indemnity and defense obligations separately owed by Consultant to City under this Agreement.

## LETTER AGREEMENT FOR CONSULTATIVE SERVICES

This Letter Agreement sets forth the agreement and understanding between the City of Lemoore and Interstate Gas Services, Inc. (DBA IGService and IGS), for IGS to provide analysis and recommendations for Lemoore's refuse services and rate structure.

### SCOPE AND SCHEDULE:

The detailed scope and budget are shown in Exhibit A. Overall, the purpose of the rate study is to first evaluate existing services, revenue, expenses, and rate structure. Next is to determine future needs for expanded services and anticipated expenses, then set rates for services such that fees collected are consistent with the costs of each service (land fill, recycle, green waste, organics).

The study will also focus on costs associated with operation of city-owned equipment providing services to provide detail of operating costs to provide services, including life-cycle costs of existing and future anticipated equipment needed. IGS will work collaboratively with city staff to enable staff to have input and fully understand cost assignment and the rate-setting process.

Work will commence within four weeks of approval by Lemoore, and be completed with four months.

### FEES AND BILLING:

As principal consultant, Dan Bergmann of IGS shall perform this work. Billing statements shall show detail of work, including hours and tasks by specific day.

Hourly Billing Rate: \$195 per hour

#### Expenses:

Mileage:	\$0.545 per mile (2018) or current IRS maximum
Travel:	\$75 per hour
Lodging:	Not to exceed \$150 per night
Meals:	Not applicable

### TERM:

This Agreement commences as of full execution and shall terminate six months following full execution.

**INDEPENDENT CONTRACTOR:**

In performing under this Agreement, IGS shall act at all times as an independent contractor. IGS shall not make any commitment or incur any charge or expense in the name of Lemoore, unless explicitly authorized to do so by the Lemoore city manager or city council as appropriate.

IGS expressly agrees, acknowledges, and stipulates that neither this Agreement nor the performance of its obligations or duties thereunder shall ever result in IGS, or anyone employed by IGS, being:

- A. An employee, agent, servant or representative of Lemoore; or
- B. Entitled to any benefits from Lemoore, including, without limitation, pension, profit sharing, accident insurance, or health, medical, life, or disability insurance benefits or coverage, to which employees of Lemoore are entitled.

The sole and only compensation and/or benefit of any nature to which IGS shall be entitled are the payments provided for herein. Lemoore shall have no direction or control of IGS or its employees and agents except in the results to be obtained subject to Lemoore's right to review/inspect the services. The actual performance and supervision of all services shall be by IGS, but the services shall meet the approval of Lemoore.

**SOCIAL SECURITY AND WAGE TAX LIABILITY/WORKER'S COMPENSATION INSURANCE:**

IGS agrees to pay timely and to accept exclusive liability for the payroll taxes, contributions for unemployment compensation insurance, old age benefits, social security, and any other payments now or hereafter imposed by the Government of the United States or by any state or political subdivision thereof, which are measured by the wages, salaries or other remuneration paid to IGS employees. IGS agrees to indemnify Lemoore and save it free and harmless from and against any and all taxes, contributions, and/or payments imposed by law upon IGS. IGS will at all times carry and provide worker's compensation insurance coverage for its employees.

**ASSIGNMENTS AND SUBCONTRACTS:**

This Agreement and all duties and obligations described hereunder are personal in nature. Accordingly, IGS shall not assign this Agreement or any portion thereof or subcontract to another party, unless explicitly authorized to do so by the Lemoore city manager.

**PAYMENT:**

IGS shall bill Lemoore on a monthly basis for work completed. Lemoore shall pay bills from IGS within 30 days after receipt.

**CONTACT INFORMATION:**

Communication between IGS and Lemoore shall be directed to the address and contact information shown below. Formal communication and notices shall be in written form. The parties accept email as a communication tool.

City of Lemoore

City of Lemoore  
119 Fox Street  
Lemoore, CA 93245  
Attn: Nathan Olson  
City Manager  
Phone: (559) 924-6700  
Email: [nolson@lemoore.com](mailto:nolson@lemoore.com)

IGService

IGService  
15 Shasta Lane  
Walnut Creek, CA 94597  
Attn: Dan Bergmann  
Cell: 925-899-2578  
Email: [dan@igservice.com](mailto:dan@igservice.com)

**ATTORNEYS FEES:**

In the event either party commences legal action in the courts or in arbitration to enforce or interpret any of the terms of this Agreement, the prevailing party in such action shall be entitled to an award of its reasonable attorney's fees and costs.

**INDEMNITY:**

City shall defend, indemnify and hold harmless IGS, its employees and agents from all claims, liabilities and actions filed against the City in the courts or in arbitration or otherwise, which result from the City's actions hereunder. Specifically, City shall pay any legal costs incurred by IGS resultant of legal action taken against IGS by any entity associated with IGS' financial analysis and rate- and/or fee-setting work for City.



If the above conditions and terms meet with your approval, please sign below.

**CITY OF LEMOORE**

By: \_\_\_\_\_

Date \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**INTERSTATE GAS SERVICES, INC. (DBA IGService)**

By: \_\_\_\_\_

Date \_\_\_\_\_

Dan Bergmann  
Principal

## EXHIBIT A

### IGS Scope and Budget for Refuse Rate Study

		Hrs	Rate	Total	Subtotals
<b>Areas of Focus</b>					
	<b>Existing status:</b> Review of existing rates and services. Meeting time with staff to determine services needed and method of approach. Tour of hauling equipment. Initial discussion on capital needs for new equipment and compliance with AB1826 (organics).	8	\$195	\$1,560	
	<b>Historical revenue and operating costs:</b> Develop comparison table showing last three years actual costs to operate enterprise (FY16/17/18). Reconcile to audited statements. Meeting time with Finance Director.	6	\$195	\$1,170	
	<b>Cost of Service Detail:</b> Determine costs for each service: Land fill, recycle, green waste, and organics. Distinguish truck hauling costs from disposal fees at KWRA. Include life cycle costs of trucks, department and general overhead components. Determine increased cost in the event recycle and green waste move to every week pickup (as opposed to present every other week schedule). Work with staff to develop revenue requirements next 5 years as basis for rate setting.	32	\$195	\$6,240	
	<b>New Rates:</b> Expand existing rate schedule to include detail for recycle, green waste, and organics. Provide modeling spreadsheet linking rates to overall projected revenue.	16	\$195	\$3,120	
	<b>Rate Comparison.</b> Comparison present and proposed rates to nearby communities for typical residential and also industrial users.	4	\$195	\$780	
	<b>Council Meeting #1. Prepare slides and presentation.</b>	6	\$195	\$1,170	
	<b>Written Report.</b> For city council and public distribution	8	\$195	\$1,560	
	<b>Council Meeting #2. Prepare slides and presentation.</b>	6	\$195	\$1,170	
	<b>Total Hours and Labor Cost</b>	86			\$16,770
<b>Expenses</b>					
	1 Driving Time	6	\$75	\$450	
	1 Mileage	402	\$0.545	\$219	
	1 Lodging per night, if two consecutive days work			\$125	
	2 Combined driving, mileage, lodging			\$794	
	3 Combined driving, mileage, lodging			\$794	
	4 Combined driving, mileage, lodging (City Council #1)			\$794	
	5 Combined driving, mileage, lodging (City Council #2)			\$794	
	<b>Total Expenses</b>				\$3,970
<b>Total Budgeted Cost for Study</b>					<b>\$20,740</b>



# CITY OF LEMOORE

## BUDGET AMENDMENT FORM

Date:	11/6/2018	Request By:	Frank Rivera
Requesting Department: Refuse			

**TYPE OF BUDGET AMENDMENT REQUEST:**

- ☐ Appropriation Transfer within Budget Unit  
☒ All other appropriations (Attach Council approved Staff Report)

**FROM:**

Fund	Budget Unit	Account	Current Budget	Proposed Increase/Decrease:	Proposed New Budget
056		1010	Refuse Reserves	\$ (20,740.00)	

**TO:**

Fund	Budget Unit	Account	Current Budget	Proposed Increase/Decrease:	Proposed New Budget
056	4256	4310	\$ 1,093,500.00	\$ 20,740.00	\$ 1,114,240.00

**JUSTIFICATION FOR CHANGE/FUNDING SOURCE:**

For Refuse Rate Study that was not budgeted.

**APPROVALS:**

Department Head:	Date:
City Manager:	Date:
Completed By:	Date:



711 West Cinnamon Drive • Lemoore, California 93245 • (559) 924-6700 • Fax (559) 924-6708

## Staff Report

**To:** Lemoore City Council  
**From:** Janie Venegas, City Clerk / Human Resources Manager  
**Date:** November 2, 2018 **Meeting Date:** November 6, 2018  
**Subject:** Activity Update

<b>Strategic Initiative:</b>	<input type="checkbox"/> Safe & Vibrant Community	<input type="checkbox"/> Growing & Dynamic Economy
	<input type="checkbox"/> Fiscally Sound Government	<input type="checkbox"/> Operational Excellence
	<input type="checkbox"/> Community & Neighborhood Livability	<input checked="" type="checkbox"/> Not Applicable

### Attendance Roster for Boards and Commissions

➤ January to October 2018

### Reports

➤ Warrant Register – FY 18/19	October 18, 2018
➤ Warrant Register – FY 18/19	October 26, 2018
➤ Warrant Register – FY 18/19	October 31, 2018

# RAY MADRIGAL - Mayor

YELLOW = ABSENT

Cross Valley Rail Corridor Joint Powers Authority	Kings County Association of Governments (KCAG)		Lemoore Finance Committee	Oversight Board for the Successor Agency to the Redevelopment Agency	San Joaquin Valley Air Quality Control Board Special Seclection Committee
No Information Received	Transportation Policy Committee (TPC)	Kings County Vehicle Abatement Committee (AVA)	January to October 2018 No Meetings	January 25, 2018 - No Meeting	January 2018 - No Meeting
<i>Assumed Primary September 2018</i>	January 24, 2018 - ABSENT	January 24, 2018 - ABSENT		January 31, 2018 - Special - ABSENT	February 2018 - No Meeting
	February 28, 2018	March 28, 2018 - ABSENT		February 22, 2018 - No Meeting	March 2018 - No Meeting
	March 28, 2018 - ABSENT	July 25, 2018 - ABSENT		March 22, 2018 - No Meeting	April 2018 - No Meetings
	April 25, 2018	September 26, 018 - ABSENT		April 26, 2018 - No Meeting	May 2, 2018 - Special
	May 23, 2018	<i>D. BROWN attended all of above as Alternate</i>		May 16, 2018 - Special - ABSENT	June to October 2018 No Meetings
	June 25, 2018 - ABSENT			May 24, 2018 - No Meeting	
	July 27, 2018 - ABSENT			June 28, 2018 - ABSENT	
	August 22, 2018			<i>DISBANDED JULY 2018</i>	
	Septebmer 26, 2018 - ABSENT				
	October 24, 2018				

**EDDIE NEAL - Mayor Pro Tem**
**YELLOW = ABSENT**

Kings County Community Action Organization (KCAO)			Kings County Gang Awareness Advisory Committee	Kings Waste & Recycling JPA Board	League of California Cities * General Membership + Executive Board
Board of Directors Meetings	Executive Committee Meetings	Strategic Committee Meetings	January to October 2018 No Meetings	January 31, 2018 - No Meeting	January 11, 2018 - ABSENT +
January 17, 2018	January 2018 - No Meeting	January 2018 - No Meeting		February 28, 2018	February 8, 2018 *
February 21, 2018	February 2018 - No Meeting	February 21, 2018		March 21, 2018 - Special	March 8, 2018 +
March 21, 2018	March 8, 2018 - ABSENT	March 2018 - No Meeting		March 28, 2018 - No Meeting	April 5, 2018 *
April 18, 2018	April 10, 2018 - Special	April 18, 2018		April 25, 2018 - No Meeting	May 2018 - No Meeting
May 16, 2018 - ABSENT	May 7, 2018 - ABSENT	May 16, 2018 - ABSENT		May 30, 2018	June 14, 2018 *
June 20, 2018	June 11, 2018 - Special	June 20, 2018		June 27, 2018 - No Meeting	July 2018 - No Meeting
July 18, 2018	July 2018 - No Meeting	July 2018 - No Meeting		July 25, 2018	August 2018 - No Meeting
August 15, 2018	August 2018 - No Meeting	August 15, 2018		August 29, 2018	September 12, 2018 - ABSENT +
August 17, 2018 - Special - ABSENT	September 2018 - No Meeting	September 19, 2018 - ABSENT		September 26, 2018	October 4, 2018 - ABSENT *
September 19, 2018	October 2018 - No Meeting	October 17, 2018 - ABSENT		October 31, 2018 - No Meeting	
October 17, 2018 - ABSENT					

**DAVE BROWN - Council Member**
**YELLOW = ABSENT**

Kings County Area Public Transit Authority (KCAPTA)	Kings County Commission on Aging	Kings County Economic Development Committee	Kings County Emergency Shelter and Food Committee	Lemoore City Manager's Committee	LVFD Qualification Review Committee	South Fork Kings Sustainable Groundwater Management Act JPA Board
January 24, 2018	No information Received	January 29, 2018 - ABSENT	September to October 2018 No Meetings	September to October 2018 No Meetings	January to October 2018 No Meetings	January 2018 - No Meeting
February 28, 2018		February 26, 2018	<i>Assumed Primary September 2018</i>	<i>Assumed Primary September 2018</i>		February 1, 2018 - Special
March 28, 2018		March 26, 2018				March 15, 2018
April 25, 2018		April 30, 2018				April 19, 2018
May 23, 2018		May 2018 - No Meeting				May 2018 - No Meeting
June 27, 2018		June 25, 2018				June 21, 2018
July 25, 2018		July 30, 2018 - No Meeting				July 19, 2018
August 22, 2018		August 27, 2018				August 16, 2018
September 26, 2018		September 2018 - No Meeting				September 2018 - No Meeting
October 18, 2018		October 2018 - No Meeting				October 18, 2018

**JEFF CHEDESTER - Council Member****YELLOW = ABSENT**

Indian Gaming Local Benefit Committee	Kings Mosquito Abatement District
January to October 2018 No Meetings	January 2018 - No Meeting
	February 12, 2018 - Special
	March 13, 2018 - Special - ABSENT
	April 10, 2018 - Special
	May 16, 2018
	June 20, 2018 - Special
	July 17, 2018
	August 15, 2018
	September 19, 2018
	October 1, 2018 - Special
	October 17, 2018 - No Meeting



**HOLLY BLAIR - Council Member**

YELLOW = ABSENT

Cross Valley Rail Corridor Joint Powers Authority	Kings County Emergency Shelter and Food Committee	Lemoore City Manager's Committee
No Information Received	January to August 2018 No Meetings	January to August 2018 No Meetings

*Information through August 2018*

# FY 18/19 Warrant Register 10-18-18

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 1  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4211 - CITY COUNCIL

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		4.96	.00	CITY COUNCIL
TOTAL						.00	4.96	.00	
TOTAL						.00	4.96	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 2  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4212 - CITY ATTORNEY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		.98	.00	CITY ATTRNY
TOTAL						.00	.98	.00	
TOTAL						.00	.98	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 3  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4213 - CITY MANAGER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/18/18	21		59718	5143 CA ASSOCIATION F		570.00	.00	MEMBERSHIP RENEWAL
TOTAL						.00	570.00	.00	
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		1.47	.00	CITY MNGR
TOTAL						.00	1.47	.00	
TOTAL					CITY MANAGER	.00	571.47	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 4  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4214 - CITY CLERK'S OFFICE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4380									
	10/18/18								
4 /19	10/18/18	21		59751	6861 MAILFINANCE		.39	.00	CITY CLERK
TOTAL						.00	.39	.00	
TOTAL						.00	.39	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 5  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4215 - FINANCE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/18/18	21		59771	5352 SHRED-IT USA INC		137.84	.00	CUST#11572944
TOTAL						.00	137.84	.00	
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		196.85	.00	FINANCE
TOTAL						.00	196.85	.00	
4389									
4 /19	10/18/18	21		59780	6104 US BANK		22.00	.00	MONTHLY MAINT
TOTAL						.00	22.00	.00	
TOTAL						.00	356.69	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 6  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4216 - PLANNING

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		8.89	.00	PLANNING
TOTAL						.00	8.89	.00	
TOTAL						.00	8.89	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 7  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4220 - MAINTENANCE DIVISION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		9.66	.00	NUTS & BOLTS
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		14.99	.00	130Z WHT PRIMER SPRY
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		16.80	.00	TV SCHLAG LOCK
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		21.44	.00	24X25 GRN 1" POULTRY
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		23.88	.00	1-1/4" WHT SXS COUPLI
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		40.51	.00	MP BTR 5GAL PNT MIXER
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		38.05	.00	MP BASIC 6PK 3/8 CVR
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		48.41	.00	MP 5" FORCE CUP PLUNG
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		68.07	.00	4" BRS KICKDWN DR STO
4 /19	10/18/18	21		59730	1547 VERITIV OPERATIN		206.31	.00	461308 SOAP DISP
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		81.66	.00	GAL ALU ENAM COATING
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		84.66	.00	1.41"X60YD BLU TAPE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		3.96	.00	TV KWIKSETLOCK
TOTAL					OPERATING SUPPLIES	.00	658.40	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/18/18	21	8798 -01	59773	6309 SOCIAL VOCATIONA		565.00	-565.00	JANITORIAL BLANKET
4 /19	10/18/18	21	8798 -01	59773	6309 SOCIAL VOCATIONA		3,475.00	-3,475.00	JANITORIAL BLANKET
4 /19	10/18/18	21		59706	1259 ADVANCED PEST CO		170.00	.00	CUST#LEM11907
4 /19	10/18/18	21		59706	1259 ADVANCED PEST CO		215.00	.00	CUST#LEM721
4 /19	10/18/18	21		59769	5287 RES COM PEST CON		38.00	.00	CUST#HX-18074
4 /19	10/18/18	21		59706	1259 ADVANCED PEST CO		50.00	.00	CUST#LEM11901
4 /19	10/18/18	21		59706	1259 ADVANCED PEST CO		50.00	.00	CUST#LEM721
TOTAL					PROFESSIONAL CONTRACT SVC	.00	4,563.00	-4,040.00	
4340					UTILITIES				
4 /19	10/18/18	21		59760	0363 P G & E		18,115.36	.00	8/16/18-9/16/18
TOTAL					UTILITIES	.00	18,115.36	.00	
TOTAL					MAINTENANCE DIVISION	.00	23,336.76	-4,040.00	



PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 8  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4221 - POLICE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/18/18	21		59720	4056 COMCAST		562.64	.00	INTERNET
4 /19	10/18/18	21		59732	6825 HEALTHWISE SERVI		125.00	.00	38 GAL SHRPS CONTAIN
TOTAL					PROFESSIONAL CONTRACT SVC	.00	687.64	.00	
4320					MEETINGS & DUES				
4 /19	10/18/18	21		59736	6329 JENNIFER CHRISTE		215.00	.00	DJ-RIBBON CELEBRATION
TOTAL					MEETINGS & DUES	.00	215.00	.00	
4360					TRAINING				
4 /19	10/18/18	21		59757	6089 JONATHAN MORITZ		494.00	.00	ADVANCE-TRAVEL
TOTAL					TRAINING	.00	494.00	.00	
4380					RENTALS & LEASES				
4 /19	10/18/18	21		59751	6861 MAILFINANCE		204.24	.00	POLICE
4 /19	10/18/18	21		59717	1817 C.A. REDING COMP		199.33	.00	PD-COPIER
TOTAL					RENTALS & LEASES	.00	403.57	.00	
TOTAL					POLICE	.00	1,800.21	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 9  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4222 - FIRE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4230									
					REPAIR/MAINT SUPPLIES				
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		86.83	.00	43" LED LIGHT
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		102.47	.00	4' 2LGT T8 SHOP LGHT
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		45.45	.00	PRO MULTIMETER TEST
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		60.02	.00	GE 2PK 32W 48" FLUO L
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		41.34	.00	12PK 1/2 WHTY CLAMP
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		26.06	.00	8OZ SPR AIR SPRAY
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		17.41	.00	8KEY TAG RACK
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		14.99	.00	12OZ ORG SPR ENAMEL
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		12.18	.00	32OZ HANDI SPRAYER
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		6.98	.00	REPLACEMENT SWITCH
TOTAL					REPAIR/MAINT SUPPLIES	.00	413.73	.00	
4310									
					PROFESSIONAL CONTRACT SVC				
4	/19	10/18/18	21	8789 -01 59725	6987 EMERGENCY REPORT		374.25	-499.00	WEB SERVICE DIRECT CAD LI
TOTAL					PROFESSIONAL CONTRACT SVC	.00	374.25	-499.00	
4380									
					RENTALS & LEASES				
4	/19	10/18/18	21	59751	6861 MAILFINANCE		2.31	.00	FIRE
TOTAL					RENTALS & LEASES	.00	2.31	.00	
TOTAL					FIRE	.00	790.29	-499.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 10  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4224 - BUILDING INSPECTION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		.79	.00	BLDG INSPEC
TOTAL						.00	.79	.00	
TOTAL						.00	.79	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 11  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4230 - PUBLIC WORKS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		2.80	.00	PUB WRKS
TOTAL						.00	2.80	.00	
TOTAL						.00	2.80	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 12  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4231 - STREETS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		-58.97	.00	16" LOW PROFILE CHAIN
4	/19	10/18/18	21	59744	0286 LAWRENCE TRACTOR		75.06	.00	14" BARST 3/8-050LIGH
TOTAL						.00	16.09	.00	
4230									
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		45.55	.00	MIRACLE-GRO TROWEL
TOTAL						.00	45.55	.00	
4310									
4	/19	10/18/18	20 8718	-01 59728	5758 MARK FERNANDES		-312.74	312.74	MAINTENANCE OF LANDSCAPE
4	/19	10/18/18	21 8718	-01 59728	5758 MARK FERNANDES		312.74	-312.74	MAINTENANCE OF LANDSCAPE
TOTAL						.00	.00	.00	
4380									
4	/19	10/18/18	21	59751	6861 MAILFINANCE		2.31	.00	STREETS
TOTAL						.00	2.31	.00	
TOTAL						.00	63.95	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 13  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4241 - PARKS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		93.22	.00	TG 18X525 YEL NYL TWI
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		192.99	.00	WHT ELONGPLAS TOIL SE
4 /19	10/18/18	21		59707	6081 ALL AMERICAN POO		60.01	.00	BROMINE TABS
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		48.25	.00	GT5/8X50 NEVERINK HOS
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		55.69	.00	MM 12"14T DEMO BLADE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		11.79	.00	FULL SZ ZINC NOZZLE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		15.00	.00	64OZ PRO DRAIN OPENER
4 /19	10/18/18	21		59707	6081 ALL AMERICAN POO		34.32	.00	MURATIC ACID 4 GAL
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		37.98	.00	3/4 PVC CMP COUPLING
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		23.57	.00	9" 4-5TPI UGLY SAW BL
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		26.90	.00	520 TEFLON SEAL
TOTAL					OPERATING SUPPLIES	.00	599.72	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/18/18	21		59761	6506 GOPHER GRABBERS		225.00	.00	RMVL SVC 19TH AVE
4 /19	10/18/18	21		59761	6506 GOPHER GRABBERS		225.00	.00	RMVL SVC CITY PARK
4 /19	10/18/18	21		59761	6506 GOPHER GRABBERS		325.00	.00	RMVL SVC HERITAGE
4 /19	10/18/18	21		59705	2914 AAA QUALITY SERV		105.12	.00	POTTY RENTAL
4 /19	10/18/18	21		59761	6506 GOPHER GRABBERS		150.00	.00	RMVL SVC LIONS PARK
TOTAL					PROFESSIONAL CONTRACT SVC	.00	1,030.12	.00	
4340					UTILITIES				
4 /19	10/18/18	21		59760	0363 P G & E		2,133.52	.00	8/29/18-9/27/18
TOTAL					UTILITIES	.00	2,133.52	.00	
TOTAL					PARKS	.00	3,763.36	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 14  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4242 - RECREATION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
	4 /19	10/18/18	21	59758	5396 OFFICE DEPOT		69.78	.00	PAPER, HAMM, GRT
TOTAL						.00	69.78	.00	
4310									
	4 /19	10/18/18	21	59777	6885 TRENTON WILLIAMS		104.00	.00	REFEREE
	4 /19	10/18/18	21	59752	7000 MARIA LOZA		115.50	.00	SCOREKEEPING
	4 /19	10/18/18	21	59716	6763 BRYCE HERNANDEZ		84.00	.00	REFEREE
	4 /19	10/18/18	21	59711	6884 ANTHONY HERNANDE		160.00	.00	REFEREE
	4 /19	10/18/18	21	59762	5587 BRENT RUSSELL PA		171.50	.00	JUNE, OCT PHOTOGRAPHY
	4 /19	10/18/18	21	59712	0040 LARRY AVILA		180.00	.00	REFEREE
	4 /19	10/18/18	21	59709	6893 ANGELA MENDOZA		181.50	.00	REC LEADER
	4 /19	10/18/18	21	59739	T2043 JULIO GONZALEZ		120.00	.00	REFEREE
	4 /19	10/18/18	21	59722	T2587 DANTE TOLLESON		124.00	.00	REFEREE
	4 /19	10/18/18	21	59778	6994 TY HODGE		148.00	.00	REFEREE
	4 /19	10/18/18	21	59715	T1316 FORD, BRIANNE		148.50	.00	SCOREKEEPING
	4 /19	10/18/18	21	59753	T2603 MARTIN PRADO		150.00	.00	UMPIRE
	4 /19	10/18/18	21	59776	6889 TOMI FORD		137.50	.00	REC LEADER
	4 /19	10/18/18	21	59729	T2220 FERNANDO VALLADA		188.00	.00	REFEREE
	4 /19	10/18/18	21	59735	6661 ISRAEL VALLADARE		188.00	.00	REFEREE
	4 /19	10/18/18	21	59734	7004 ISAIAH JOHNSTON		33.00	.00	SCOREKEEPING/PREP
TOTAL						.00	2,233.50	.00	
4380									
	4 /19	10/18/18	21	59751	6861 MAILFINANCE		18.11	.00	PARK & REC
TOTAL						.00	18.11	.00	
TOTAL						.00	2,321.39	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 15  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4296 - INFORMATION TECHNOLOGY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
	10/18/18	21		59737	5183 BRYCE JENSEN		2,343.75	.00	MONITORING
4 /19	10/18/18	21		59720	4056 COMCAST		1,687.92	.00	RRECURRING CHARGES
TOTAL						.00	4,031.67	.00	
4380									
	10/18/18	21		59751	6861 MAILFINANCE		.10	.00	IT
4 /19	10/18/18	21					.10	.00	
TOTAL						.00			
TOTAL						.00	4,031.77	.00	



PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 16  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4297 - HUMAN RESOURCES

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
	10/18/18	21		59743	T2176 LABORATORY CORPO		125.00	.00	B FERREIRA 620808287
4 /19	10/18/18	21		59724	2399 DEPARTMENT OF JU		32.00	.00	FINGERPRINTS
TOTAL						.00	157.00	.00	
4380									
	10/18/18	21		59751	6861 MAILFINANCE		2.55	.00	HR
4 /19	10/18/18	21					2.55	.00	
TOTAL						.00			
TOTAL						.00	159.55	.00	
TOTAL						.00	37,214.25	-4,539.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 17  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 040 - FLEET MAINTENANCE  
BUDGET UNIT - 4265 - FLEET MAINTENANCE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4230					REPAIR/MAINT SUPPLIES				
4 /19	10/18/18	21		59741	0252 KINGS AUTO SUPPL		3.21	.00	WHEEL NUT
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		4.83	.00	NUTS & BOLTS
4 /19	10/18/18	21		59782	0458 KELLER FORD LINC		-145.39	.00	BELT AND BUCK
4 /19	10/18/18	21	8787	-01 59723	6411 BRIDGEPORT MANUF		1,207.73	-1,207.73	BLANKET PO FOR PARTS
4 /19	10/18/18	21		59741	0252 KINGS AUTO SUPPL		160.05	.00	AIR FILT
4 /19	10/18/18	21		59756	0345 MORGAN & SLATES		108.54	.00	42867 HR FLAT 1/4
4 /19	10/18/18	21		59756	0345 MORGAN & SLATES		190.49	.00	24886 GATES 20G2 1 1/
4 /19	10/18/18	21		59782	0458 KELLER FORD LINC		233.93	.00	BOLT-WHEEL
4 /19	10/18/18	21		59741	0252 KINGS AUTO SUPPL		26.36	.00	SWITCH
4 /19	10/18/18	21		59741	0252 KINGS AUTO SUPPL		28.94	.00	GEAR OIL
TOTAL					REPAIR/MAINT SUPPLIES	.00	1,818.69	-1,207.73	
4350					REPAIR/MAINT SERVICES				
4 /19	10/18/18	21		59714	0056 BILLINGSLEY TIRE		368.26	.00	GOOD LT245/75R17
4 /19	10/18/18	21		59714	0056 BILLINGSLEY TIRE		185.63	.00	GOOD LT245/75R17 E WR
4 /19	10/18/18	21	8622	-01 59714	0056 BILLINGSLEY TIRE		654.32	-654.32	BLANKET PO FOR 18-19 FY P
4 /19	10/18/18	21	8797	-01 59738	2956 JONES COLLISION		2,073.79	-2,073.79	REPAIR TO UNIT 60
TOTAL					REPAIR/MAINT SERVICES	.00	3,282.00	-2,728.11	
TOTAL					FLEET MAINTENANCE	.00	5,100.69	-3,935.84	
TOTAL					FLEET MAINTENANCE	.00	5,100.69	-3,935.84	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 18  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 045 - GOLF COURSE - CITY  
BUDGET UNIT - 4245 - GOLF COURSE-CITY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4000K	COST OF REVENUE-KITCHEN								
4 /19	10/18/18	21		59763	T1885 THOMAS RINGER		2,024.15	.00	BUENO BEVERAGE
4 /19	10/18/18	21		59766	7003 RAVEN'S BRAND PR		32.88	.00	JERKY
4 /19	10/18/18	21		59766	7003 RAVEN'S BRAND PR		49.32	.00	JERKY
TOTAL	COST OF REVENUE-KITCHEN					.00	2,106.35	.00	
4000P	COST OF REVENUE-PRO SHOP								
4 /19	10/18/18	21		59783	6595 VERN WASKOM COMP		54.20	.00	CP2 WRAP
4 /19	10/18/18	21	8801	-01 59783	6595 VERN WASKOM COMP		675.95	-675.95	GOLF GRIPS, TEES, AND ACC
4 /19	10/18/18	21	8802	-01 59755	6588 MIZUNO		2,611.60	-2,611.60	BLANKET - GOLF GRIPS, CLU
4 /19	10/18/18	21		59783	6595 VERN WASKOM COMP		-275.50	.00	PULSAR PINS
4 /19	10/18/18	21		59783	6595 VERN WASKOM COMP		115.32	.00	MCC PLUS 4 BLUE
4 /19	10/18/18	21		59774	6443 TAYLORMADE GOLF		335.91	.00	TENSEI BLUE
4 /19	10/18/18	21		59774	6443 TAYLORMADE GOLF		300.00	.00	ND18 LONG & SOFT
4 /19	10/18/18	21		59783	6595 VERN WASKOM COMP		315.51	.00	SUPERSTROKE
TOTAL	COST OF REVENUE-PRO SHOP					.00	4,132.99	-3,287.55	
4220M	OPERATING SUPPLIES MAINT.								
4 /19	10/18/18	21		59744	0286 LAWRENCE TRACTOR		319.03	.00	FS94R
4 /19	10/18/18	21		59785	6523 WEST VALLEY SUPP		369.47	.00	11/2" GATE VALVE
4 /19	10/18/18	21		59713	6744 BELKORP AG, LLC		196.82	.00	BLL BEARING
4 /19	10/18/18	21		59744	0286 LAWRENCE TRACTOR		97.00	.00	BUSHING,V-BELT
4 /19	10/18/18	21		59727	5866 FASTENAL COMPANY		4.89	.00	CUP 5OZ PLAST TRAN
TOTAL	OPERATING SUPPLIES MAINT.					.00	987.21	.00	
4291	MISCELLANEOUS EXPENSES								
4 /19	10/18/18	21		59763	T1885 THOMAS RINGER		1,000.00	.00	C. PUCCI
4 /19	10/18/18	21		59742	6844 KNIGHT GUARD ALA		55.00	.00	ALARM MONITORING
4 /19	10/18/18	21		59742	6844 KNIGHT GUARD ALA		55.00	.00	ALARM MONITORING
4 /19	10/18/18	21		59742	6844 KNIGHT GUARD ALA		55.00	.00	ALARM MONITORING
TOTAL	MISCELLANEOUS EXPENSES					.00	1,165.00	.00	
4309	STAFFING/TOM RINGER								
4 /19	10/18/18	21		59763	T1885 THOMAS RINGER		1,305.74	.00	PAYROLL TAXES
4 /19	10/18/18	21		59763	T1885 THOMAS RINGER		14,394.86	.00	PAYROLL
TOTAL	STAFFING/TOM RINGER					.00	15,700.60	.00	
4310	PROFESSIONAL CONTRACT SVC								
4 /19	10/18/18	21		59733	6573 JAMES HUDGEON		514.70	.00	GOLF LESSONS
4 /19	10/18/18	21		59770	6548 RINGER, TOM		738.00	.00	GOLF LESSONS
4 /19	10/18/18	21		59710	6574 TONY ALANIZ JR.		260.10	.00	LESSONS
TOTAL	PROFESSIONAL CONTRACT SVC					.00	1,512.80	.00	
4340	UTILITIES								
4 /19	10/18/18	21		59760	0363 P G & E		807.25	.00	8/28/18-9/26/18
4 /19	10/18/18	21		59760	0363 P G & E		9.85	.00	8/28/18-9/26/18
TOTAL	UTILITIES					.00	817.10	.00	

RUN DATE 10/23/2018 TIME 16:48:28

PEI - FUND ACCOUNTING

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 19  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 045 - GOLF COURSE - CITY  
BUDGET UNIT - 4245 - GOLF COURSE-CITY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4340		UTILITIES		(cont'd)					
TOTAL		GOLF COURSE-CITY				.00	26,422.05	-3,287.55	
TOTAL		GOLF COURSE - CITY				.00	26,422.05	-3,287.55	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 20  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4250 - WATER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		6.42	.00	WD40
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		11.79	.00	SUMMER HAT
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		7.28	.00	GT 3/4" MALE MENDER
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		7.50	.00	MP GD 1"FLT BRUSH
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		7.57	.00	1" WHT SXT FEM ADAPTE
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		5.35	.00	TV GAL PLAS PAIL
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		5.67	.00	PT2X 12OZ GLS
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		18.19	.00	REGAL TOOL BIN
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		19.29	.00	9 CAN COOLER
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		21.44	.00	GT FLORAL SHOVEL
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		15.00	.00	12PK TERRY TOWEL
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		14.56	.00	17OZ MARKING PAINT
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		14.82	.00	8" RND BAST FILE
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		32.67	.00	TV 5GAL PAIL
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		36.44	.00	GT 5/8X50 NYL GDN
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		42.88	.00	MM 14" STL PIPE
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		42.88	.00	4-8 EVER REACH POLE
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		24.84	.00	1/4FIPX1/4FPT ELBOW
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		23.57	.00	MISC MDSE
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		23.57	.00	COBBERT COBWEB DUSTER
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		63.78	.00	TV 18CT 33GAL BAG
4	/19	10/18/18	21	8597 -01 59779	6058 UNIVAR		655.03	-655.03	ACCOUNT # 4250-4220CH 18-
4	/19	10/18/18	21	8597 -01 59779	6058 UNIVAR		788.64	-788.64	ACCOUNT # 4250-4220CH 18-
4	/19	10/18/18	21	8597 -01 59779	6058 UNIVAR		788.64	-788.64	ACCOUNT # 4250-4220CH 18-
4	/19	10/18/18	21	8597 -01 59779	6058 UNIVAR		943.16	-943.16	ACCOUNT # 4250-4220CH 18-
4	/19	10/18/18	21	8597 -01 59779	6058 UNIVAR		1,344.88	-1,344.88	ACCOUNT # 4250-4220CH 18-
4	/19	10/18/18	21	8597 -01 59779	6058 UNIVAR		1,453.05	-1,453.05	ACCOUNT # 4250-4220CH 18-
4	/19	10/18/18	21	8597 -01 59779	6058 UNIVAR		2,101.99	-2,101.99	ACCOUNT # 4250-4220CH 18-
4	/19	10/18/18	21	8597 -01 59779	6058 UNIVAR		2,488.28	-2,488.28	ACCOUNT # 4250-4220CH 18-
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		115.81	.00	1' TREE POLE PRUNER
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		126.05	.00	3" WHT CHIP BRSH
TOTAL					OPERATING SUPPLIES	.00	11,251.04	-10,563.67	
4230					REPAIR/MAINT SUPPLIES				
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		115.82	.00	10' 12/3 YEL EXT CORD
4	/19	10/18/18	21	59784	0474 WEST VALLEY SUPP		81.08	.00	BALL VALVE
4	/19	10/18/18	21	59784	0474 WEST VALLEY SUPP		96.13	.00	1" SCHED 80 PVC
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		87.41	.00	NUTS & BOLTS
4	/19	10/18/18	21	59772	0428 STONEY'S SAND &		494.62	.00	3/4" CRUSHED
4	/19	10/18/18	21	59772	0428 STONEY'S SAND &		199.65	.00	RECYCLED BASE ROCK
4	/19	10/18/18	21	8598 -01 59731	0188 FERGUSON ENTERPR		49.47	-49.47	18-19 BLANKET PO, WATER D
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		5.14	.00	5GAL MESH STRAINER
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		5.14	.00	5GAL MESH STRAINER
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		5.18	.00	1/2 WHT MESH ADAPT
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		3.99	.00	MIDWEST FASTNER
4	/19	10/18/18	21	59749	0304 LEMOORE HARDWARE		1.99	.00	HARDWARE

RUN DATE 10/23/2018 TIME 16:48:28

PEI - FUND ACCOUNTING

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 21  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4250 - WATER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4230									
					(cont'd)				
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		56.87	.00	15A WHT SELF TEST
4 /19	10/18/18	21		59784	0474 WEST VALLEY SUPP		50.68	.00	PVC HAND PUMP
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		38.59	.00	3/4" FPT BRS VALVE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		22.20	.00	3/4" SCH40 90EDG ELBO
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		22.54	.00	3/4" CAB CONNECTOR
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		24.66	.00	GAL ACETONE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		25.68	.00	HARDWARE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		25.69	.00	XOP 12OZ ENAMEL
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		29.79	.00	3/4 BALL VALVE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		35.22	.00	1X3/4 GALV COUPLING
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		33.20	.00	3OZ BLU GSKT MAKER
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		26.89	.00	NUTS & BOLTS
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		13.49	.00	MP GD 9X3/4 KNIT COVE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		14.99	.00	MPGD 9X1-1/4 KNIT COV
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		5.98	.00	3" WHT BRSH
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		7.64	.00	ELEC DEPT
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		12.09	.00	1-1/4X20 PIPE
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		10.27	.00	5GALMESH STRAINER
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		10.27	.00	9" SHALL TRAY
4 /19	10/18/18	21		59749	0304 LEMOORE HARDWARE		11.79	.00	8OZ VOC CEMENT
TOTAL					REPAIR/MAINT SUPPLIES	.00	1,624.15	-49.47	
4320									
4 /19	10/18/18	21		59781	5659 VALLEY COUNTIES		240.00	.00	VCWA DINNER
TOTAL					MEETINGS & DUES	.00	240.00	.00	
4350									
4 /19	10/18/18	21		59768	0388 REED ELECTRIC, L		207.00	.00	WELL #6
TOTAL					REPAIR/MAINT SERVICES	.00	207.00	.00	
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		3.44	.00	WATER
TOTAL					RENTALS & LEASES	.00	3.44	.00	
4392									
4 /19	10/18/18	21		59765	6388 PINNACLE PUBLIC		32,788.17	.00	SOLAR PROJ INTRST
TOTAL					SOLAR LOAN INTEREST EXP	.00	32,788.17	.00	
4393									
4 /19	10/18/18	21		59765	6388 PINNACLE PUBLIC		110,618.99	.00	SOLAR PROJ PRNCPL
TOTAL					SOLAR PRINCIPAL	.00	110,618.99	.00	
4825									
4 /19	10/18/18	21	8678	-01 59767	6625 RDO EQUIPMENT C		42,926.47	-42,926.47	5HZBF162XJLBJ1133, 2017 V
4 /19	10/18/18	21	8678	-02 59767	6625 RDO EQUIPMENT C		2,200.00	-2,200.00	FREIGHT
4 /19	10/18/18	21	8678	-03 59767	6625 RDO EQUIPMENT C		425.00	-425.00	PREP/RECONDITIONING

RUN DATE 10/23/2018 TIME 16:48:28

PEI - FUND ACCOUNTING

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4250 - WATER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4825									
4 /19	10/18/18	21	8678	-04 59767	6625 RDO	EQUIPMENT C	3,302.48	-3,302.48	TAX
4 /19	10/18/18	21	8678	-05 59767	6625 RDO	EQUIPMENT C	15.00	-15.00	TAX LICENSE
4 /19	10/18/18	21	8678	-06 59767	6625 RDO	EQUIPMENT C	7.00	-7.00	CA TIRE FEE
TOTAL							.00	48,875.95	-48,875.95
TOTAL							.00	205,608.74	-59,489.09

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 23  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4251 - UTILITY OFFICE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		39.32	.00	UTILITIES
TOTAL						.00	39.32	.00	
TOTAL						.00	39.32	.00	
TOTAL						.00	205,648.06	-59,489.09	



PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 24  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 056 - REFUSE  
BUDGET UNIT - 4256 - REFUSE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/18/18	21	8703	-01 59726	6869 MILLENNIUM FUNDI		700.80	-700.80	BLANKET FOR TEMP LABOR 18
4 /19	10/18/18	21		59721	6217 COTTA FENCING		490.00	.00	MAGNOLIA GARDENS
TOTAL						.00	1,190.80	-700.80	
4380									
4 /19	10/18/18	21		59751	6861 MAILFINANCE		.69	.00	REFUSE
TOTAL						.00	.69	.00	
TOTAL						.00	1,191.49	-700.80	
TOTAL						.00	1,191.49	-700.80	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 25  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 060 - SEWER& STORM WTR DRAINAGE  
BUDGET UNIT - 4260 - SEWER

ACCOUNT DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220								OPERATING SUPPLIES
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		3.21	.00	1/2 GALV STREET
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		4.60	.00	9" SMOOTH ROD CAULK
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		13.93	.00	2+GAL RED PLAS CAN
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		32.11	.00	COLOROX
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		30.02	.00	20PK DUST RESPIRATOR
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		25.73	.00	PLAYMATE 16QT COOLER
TOTAL					.00	109.60	.00	
4230								REPAIR/MAINT SUPPLIES
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		25.21	.00	1/2X12 SCH 80 NIPPLE
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		31.36	.00	1/2X3/8 UNION
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		15.00	.00	3/8X3/8X48 CONNECTOR
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		18.22	.00	12" TONGUE&GRN PLIER
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		6.40	.00	HARDWARE
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		6.41	.00	100Z WHT PROJ LIQ NAI
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		5.89	.00	BRS BOLT/SCR SET
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		48.33	.00	1/2X7/8X20 CONNECTOR
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		-15.00	.00	3/8X3/8X48 CONNECTOR
4 /19 10/18/18 21			59772	0428 STONEY'S SAND &		199.66	.00	RECYCLED BASE ROCK
4 /19 10/18/18 21			59749	0304 LEMOORE HARDWARE		140.14	.00	NUTS & BOLTS
TOTAL					.00	481.62	.00	
4310								PROFESSIONAL CONTRACT SVC
4 /19 10/18/18 21 8690 -01 59750				6156 LEPRINO FOODS CO		59,884.00	-59,884.00	WATER DISPOSAL FEES BLANK
TOTAL					.00	59,884.00	-59,884.00	
4350								REPAIR/MAINT SERVICES
4 /19 10/18/18 21			59768	0388 REED ELECTRIC, L		310.50	.00	LIFT STATION CITY YAR
TOTAL					.00	310.50	.00	
4360								TRAINING
4 /19 10/18/18 21			59764	T1586 JOSE PEREZ		17.43	.00	REIMBURSE FOR SEMINAR
TOTAL					.00	17.43	.00	
4380								RENTALS & LEASES
4 /19 10/18/18 21			59751	6861 MAILFINANCE		.69	.00	SEWER
TOTAL					.00	.69	.00	
TOTAL					.00	60,803.84	-59,884.00	
TOTAL					.00	60,803.84	-59,884.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 26  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 068 - GENERAL FACILITIES CAP  
BUDGET UNIT - 5700 - ADMIN OFFICE RELOCATION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/18/18	21		59708	6718 ALLSTEEL INC.		453.46	.00	CABINET W/ STORAGE
TOTAL						.00	453.46	.00	
TOTAL						.00	453.46	.00	
TOTAL						.00	453.46	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 27  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 150 - RDA RETIREMENT OBLIG FUND  
BUDGET UNIT - 4951 - RDA RETIREMENT OBLIG FUND

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/18/18	21		2572	6716 RICHARDS, WATSON		150.00	.00	SPEC COUNSEL SVC
TOTAL						.00	150.00	.00	
TOTAL						.00	150.00	.00	
TOTAL						.00	150.00	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 28  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 201 - LLMD ZONE 1  
BUDGET UNIT - 4851 - LLMD ZONE 1 WESTFIELD

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/18/18	21		59784	0474 WEST VALLEY SUPP		4.35	.00	1/2" SLIP FIX
TOTAL						.00	4.35	.00	
TOTAL						.00	4.35	.00	
TOTAL						.00	4.35	.00	

PEI  
DATE: 10/23/2018  
TIME: 16:48:28

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 29  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.fund between '001' and '300' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 212 - LLMD ZONE 12 SUMMERWIND  
BUDGET UNIT - 4862 - LLMD ZONE 12 SUMMERWIND

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/18/18	21		59784	0474 WEST VALLEY SUPP		3.04	.00	FUNNY PIPE 1/2 ML ELB
TOTAL						.00	3.04	.00	
TOTAL						.00	3.04	.00	
TOTAL						.00	3.04	.00	
TOTAL						.00	336,991.23	-131,836.28	

PEI  
DATE: 10/23/2018  
TIME: 16:50:06

CITY OF LEMOORE  
GENERAL LEDGER TRANSACTION ANALYSIS

PAGE NUMBER: 1  
AUDIT311

SELECTION CRITERIA: account.acct between '2000' and '2999'AND transact.yr='19' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND

ACCOUNT	DATE	T/C	REFERENCE	VENDOR/PAYER	DEBIT	CREDIT	DESCRIPTION
2020			ACCOUNTS PAYABLE				
4 /19	10/18/18	21	59724	2399 DEPARTMENT OF JUSTIC		708.00	FINGERPRINTS
TOTAL			ACCOUNTS PAYABLE		.00	708.00	
2285			LIVE SCAN DEPOSITS--PD				
4 /19	10/18/18	21	59724	2399 DEPARTMENT OF JUSTIC	708.00		FINGERPRINTS
TOTAL			LIVE SCAN DEPOSITS--PD		708.00	.00	
TOTAL			GENERAL FUND		708.00	708.00	

PEI  
DATE: 10/23/2018  
TIME: 16:50:06

CITY OF LEMOORE  
GENERAL LEDGER TRANSACTION ANALYSIS

PAGE NUMBER: 2  
AUDIT311

SELECTION CRITERIA: account.acct between '2000' and '2999'AND transact.yr='19' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 090 - TRUST & AGENCY

ACCOUNT	DATE	T/C	REFERENCE	VENDOR/PAYER	DEBIT	CREDIT	DESCRIPTION
2020			ACCOUNTS PAYABLE				
4 /19	10/18/18	21	59759	T2604 OLGA COVARRUBIAS		250.00	REFUND-VET HALL
4 /19	10/18/18	21	59740	6788 KART		320.00	\$10./10TRIPS
4 /19	10/18/18	21	59740	6788 KART		370.00	BUS PASS, TRIPS
TOTAL			ACCOUNTS PAYABLE		.00	940.00	
2300			CUSTOMER DEPOSITS				
4 /19	10/18/18	21	59759	T2604 OLGA COVARRUBIAS	250.00		REFUND-VET HALL
TOTAL			CUSTOMER DEPOSITS		250.00	.00	
2313			KART				
4 /19	10/18/18	21	59740	6788 KART	320.00		\$10./10TRIPS
4 /19	10/18/18	21	59740	6788 KART	370.00		BUS PASS, TRIPS
TOTAL			KART		690.00	.00	
TOTAL			TRUST & AGENCY		940.00	940.00	
TOTAL REPORT					1,648.00	1,648.00	



PEI  
DATE: 10/23/2018  
TIME: 16:49:17

CITY OF LEMOORE  
REVENUE TRANSACTION ANALYSIS

PAGE NUMBER: 1  
AUDIT31

SELECTION CRITERIA: transact.yr='19' and transact.account between '3000' and '3999' and transact.batch='JL101918'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 001 - GENERAL FUND

ACCOUNT	DATE	T/C	RECEIVE	REFERENCE	PAYER/VENDOR	BUDGET	RECEIPTS	RECEIVABLES DESCRIPTION
3625								
	4 /19	10/18/18	210	59754	T2605 MELISSA SOLORIO		-250.00	REFUND -DEP AUDITORIUM
	4 /19	10/18/18	210	59775	T2601 TINA THREADGILL		-250.00	REFUND - CIVIC AUD
	4 /19	10/18/18	210	59719	T2600 CAROLYN HUDGINS		-250.00	REFUND-C AUDITORIUM
TOTAL					CIVIC AUDITORIUM RENTAL	.00	-750.00	.00
TOTAL					GENERAL FUND	.00	-750.00	.00
TOTAL					GENERAL FUND	.00	-750.00	.00
TOTAL					REPORT	.00	-750.00	.00

# FY 18/19 Warrant Register 10-26-18

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 1  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4211 - CITY COUNCIL

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4320									
4 /19	10/26/18	21		59844	0298 LEMOORE CHAMBER		75.00	.00	STA TICKET
TOTAL						.00	75.00	.00	
TOTAL					CITY COUNCIL	.00	75.00	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 2  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4213 - CITY MANAGER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220			OPERATING SUPPLIES						
4 /19	10/26/18	21		59857	5396 OFFICE DEPOT		40.41	.00	3 TIER MAGAZINE HLDR
4 /19	10/26/18	21		59857	5396 OFFICE DEPOT		4.10	.00	CARDHOLDER,
TOTAL			OPERATING SUPPLIES			.00	44.51	.00	
4320			MEETINGS & DUES						
4 /19	10/26/18	21		59855	T1356 NATHAN OLSON		241.87	.00	REIMBURSE- ICSC
TOTAL			MEETINGS & DUES			.00	241.87	.00	
4340			UTILITIES						
4 /19	10/26/18	21		59889	0116 VERIZON WIRELESS		93.32	.00	CITY MGR
TOTAL			UTILITIES			.00	93.32	.00	
TOTAL			CITY MANAGER			.00	379.70	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 3  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4215 - FINANCE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4340									
4 /19	10/26/18	21		59889	0116 VERIZON WIRELESS		27.48	.00	FINANCE
TOTAL		UTILITIES				.00	27.48	.00	
TOTAL		FINANCE				.00	27.48	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 4  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4220 - MAINTENANCE DIVISION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
									OPERATING SUPPLIES
4 /19	10/26/18	21		59846	0304 LEMOORE HARDWARE		23.02	.00	FLEX NECK LIGHTER
4 /19	10/26/18	21		59869	0388 REED ELECTRIC, L		310.23	.00	6"LED CAN TRIMS
4 /19	10/26/18	21	8794	-01 59869	0388 REED ELECTRIC, L		2,123.55	-2,123.55	BLANKET PO FOR ELECTRICAL
4 /19	10/26/18	21	8818	-01 59858	5941 OMEGA INDUSTRIAL		1,127.87	-1,127.87	SUPPLIES
TOTAL						.00	3,584.67	-3,251.42	
4310									PROFESSIONAL CONTRACT SVC
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		23.98	.00	MAT-PATTERN-CLEATED
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		23.98	.00	MAT-PATTERN
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		23.98	.00	MAT-PATTERN
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		23.98	.00	MAT-PATTERN-CLEATED
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		23.98	.00	MAT-PATTERN-CLEATED
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		54.30	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		54.30	.00	PANT-AUS-FLAT-FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		60.30	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		67.30	.00	COMPANY EMBLEMS
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		86.09	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59851	6970 MARICRUZ FERNAND		528.00	.00	JANITORIAL WRK
TOTAL						.00	970.19	.00	
4340									UTILITIES
4 /19	10/26/18	21		59889	0116 VERIZON WIRELESS		40.52	.00	MAINT
TOTAL						.00	40.52	.00	
TOTAL						.00	4,595.38	-3,251.42	MAINTENANCE DIVISION

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 5  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4222 - FIRE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/26/18	21		59847	0313 LEMOORE VOLUNTEE		14.69	.00	BOSTON PIZZA
4 /19	10/26/18	21		59847	0313 LEMOORE VOLUNTEE		78.00	.00	LAS ESPUELAS
4 /19	10/26/18	21		59847	0313 LEMOORE VOLUNTEE		528.29	.00	SAVE MART
4 /19	10/26/18	21		59847	0313 LEMOORE VOLUNTEE		643.68	.00	SMART & FINAL
4 /19	10/26/18	21	8806	-01 59818	0126 L.N. CURTIS & SO		205.00	-205.00	.025 LPM MODEL RP FIXED F
4 /19	10/26/18	21	8806	-02 59818	0126 L.N. CURTIS & SO		245.00	-245.00	34L 4-GAS CALIBRATION KIT
4 /19	10/26/18	21	8806	-03 59818	0126 L.N. CURTIS & SO		32.62	-32.62	SALES TAX
4 /19	10/26/18	21	8806	-04 59818	0126 L.N. CURTIS & SO		51.07	-51.07	TRANSPORTATION
TOTAL					OPERATING SUPPLIES	.00	1,798.35	-533.69	
4230					REPAIR/MAINT SUPPLIES				
4 /19	10/26/18	21		59846	0304 LEMOORE HARDWARE		10.17	.00	TOG SWITCH
4 /19	10/26/18	21		59846	0304 LEMOORE HARDWARE		11.79	.00	SAFE GLASSES
4 /19	10/26/18	21		59846	0304 LEMOORE HARDWARE		40.56	.00	ELEC TAPE
4 /19	10/26/18	21		59823	2806 FED EX/FREIGHT W		70.87	.00	ACCT#1529-3006-2
TOTAL					REPAIR/MAINT SUPPLIES	.00	133.39	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		39.16	.00	PANT-JEAN-AUS-RLX
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		39.16	.00	PANT-JEAN-AUS
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		39.16	.00	PANT-JEAN-AUS-RLX
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		101.53	.00	PANT-JEAN-AUS-RLX
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		101.53	.00	PANT-JEAN-AUS-RLX
TOTAL					PROFESSIONAL CONTRACT SVC	.00	320.54	.00	
4340					UTILITIES				
4 /19	10/26/18	21		59889	0116 VERIZON WIRELESS		51.49	.00	FIRE
TOTAL					UTILITIES	.00	51.49	.00	
TOTAL					FIRE	.00	2,303.77	-533.69	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 6  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4224 - BUILDING INSPECTION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4340									
4 /19	10/26/18	21		59889	0116 VERIZON WIRELESS		91.88	.00	BUILD
TOTAL						.00	91.88	.00	
TOTAL						.00	91.88	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 7  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4230 - PUBLIC WORKS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4340									
4 /19	10/26/18	21		59889	0116 VERIZON WIRELESS		23.49	.00	PUB WRKS
TOTAL						.00	23.49	.00	
TOTAL						.00	23.49	.00	



PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 8  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4231 - STREETS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		46.34	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		46.34	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		46.34	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		46.34	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		50.84	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21	8718	-01 59824	5758 MARK FERNANDES		215.00	-215.00	MAINTENANCE OF LANDSCAPE
4 /19	10/26/18	21	8718	-01 59824	5758 MARK FERNANDES		500.00	-500.00	MAINTENANCE OF LANDSCAPE
TOTAL					PROFESSIONAL CONTRACT SVC	.00	951.20	-715.00	
TOTAL					STREETS	.00	951.20	-715.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 9  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4241 - PARKS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		20.44	.00	PANT-AUS FLAT FRNT
4 /19	10/26/18	21		59864	0370 PHIL'S LOCKSMITH		21.45	.00	10 DEEP KEYS
TOTAL					OPERATING SUPPLIES	.00	41.89	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		20.44	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		20.44	.00	PANT-AUS FLAT- FRONT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		31.44	.00	COMPANY EMBLEMS
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		20.44	.00	PANT-AUS-FLAT FRONT
TOTAL					PROFESSIONAL CONTRACT SVC	.00	92.76	.00	
4340					UTILITIES				
4 /19	10/26/18	21		59861	0363 P G & E		471.21	.00	9/7/18-10/7/18
TOTAL					UTILITIES	.00	471.21	.00	
4350					REPAIR/MAINT SERVICES				
4 /19	10/26/18	21 8815 -01		59869	0388 REED ELECTRIC, L		1,641.72	-1,641.72	REPAIRS
TOTAL					REPAIR/MAINT SERVICES	.00	1,641.72	-1,641.72	
TOTAL					PARKS	.00	2,247.58	-1,641.72	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 10  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4242 - RECREATION

ACCOUNT DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220				OPERATING SUPPLIES				
4 /19 10/26/18 21			59846	0304 LEMOORE HARDWARE		36.84	.00	VELCRO TAPE
4 /19 10/26/18 21			59865	5829 JONES BOYS LLC		112.61	.00	ST690 POLOS
4 /19 10/26/18 21			59828	0521 GRAINGER		136.33	.00	INSTANT COLD PACK
4 /19 10/26/18 21 8813		-01	59837	7005 KAY PARK RECEREA		1,218.00	-1,218.00	DRINKING FOUNTAIN PARTS
4 /19 10/26/18 21 8813		-02	59837	7005 KAY PARK RECEREA		74.64	-74.64	SHIPPING
TOTAL				OPERATING SUPPLIES	.00	1,578.42	-1,292.64	
4310				PROFESSIONAL CONTRACT SVC				
4 /19 10/26/18 21			59850	T2091 MARIAH RAMIREZ		116.25	.00	SCOREKEEPER
4 /19 10/26/18 21			59871	6703 SALVADOR VARGAS		116.50	.00	UMPIRE
4 /19 10/26/18 21			59805	0040 LARRY AVILA		121.00	.00	REC LEADER
4 /19 10/26/18 21			59801	6848 ADRIAN CALDERA		148.50	.00	REC LEADER
4 /19 10/26/18 21			59835	6888 JESSE CHAVARRIA		208.00	.00	UMPIRE
4 /19 10/26/18 21			59808	6099 BOCKYN,LLC		250.00	.00	NOV 2018 MAINT & HOST
4 /19 10/26/18 21			59820	6283 ERIK SURWILL		665.50	.00	CMC ATTENDANT
TOTAL				PROFESSIONAL CONTRACT SVC	.00	1,625.75	.00	
4340				UTILITIES				
4 /19 10/26/18 21			59889	0116 VERIZON WIRELESS		52.74	.00	PARKS
4 /19 10/26/18 21			59889	0116 VERIZON WIRELESS		163.99	.00	REC
TOTAL				UTILITIES	.00	216.73	.00	
TOTAL				RECREATION	.00	3,420.90	-1,292.64	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 11  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4297 - HUMAN RESOURCES

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/26/18	21		59885	T2185 UNITED HEALTH CE		215.00	.00	B FERREIRA 620808287
TOTAL						.00	215.00	.00	
4360									
4 /19	10/26/18	21		59832	2473 JUDY HOLWELL		284.02	.00	ADVANCE-TRAVEL
TOTAL						.00	284.02	.00	
TOTAL						.00	499.02	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 12  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 5712 - REGIONAL DISPATCH CENTER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/26/18	21		59881	6933 TETER, LLP		5,332.25	.00	PD DISPATCH BUILDING
TOTAL						.00	5,332.25	.00	
TOTAL						.00	5,332.25	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 13  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 5800 - TRUCK REPLACEMENT

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4825									
4 /19	10/26/18	21	8371	-01 59825	0934 FERRARA FIRE APP		260,000.00	-260,000.00	FIRE APPARATUS 2018 LIGHT
TOTAL						.00	260,000.00	-260,000.00	
TOTAL						.00	260,000.00	-260,000.00	
TOTAL						.00	279,947.65	-267,434.47	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 14  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 040 - FLEET MAINTENANCE  
BUDGET UNIT - 4265 - FLEET MAINTENANCE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
	4 /19	10/26/18	21	59839	0252 KINGS AUTO SUPPL		42.86	.00	AAA BAT
TOTAL						.00	42.86	.00	
4220F									
	4 /19	10/26/18	21	8623 -01 59826	6445 GARY V. BURROWS,		9,660.26	-9,660.26	BLANKET PO FOR FUEL 18-19
TOTAL						.00	9,660.26	-9,660.26	
4230									
	4 /19	10/26/18	21	59859	6120 O'REILLY AUTO PA		32.21	.00	WATER PUMP
	4 /19	10/26/18	21	59843	0314 LEMOORE AUTO SUP		34.30	.00	HYDRAULIC FITTING
	4 /19	10/26/18	21	59822	5866 FASTENAL COMPANY		17.99	.00	7/16" FHN YZ 8
	4 /19	10/26/18	21	59888	0458 KELLER FORD LINC		63.25	.00	8A8Z 7G004 A COVER
	4 /19	10/26/18	21	59816	6374 COOK'S COMMUNICA		117.38	.00	WALL CHARGER R ALLEN
	4 /19	10/26/18	21	59827	0799 GOLDEN STATE PET		118.46	.00	HORN ASY-24.5"X6 CHRO
	4 /19	10/26/18	21	59806	1908 BATTERY SYSTEMS		129.54	.00	49,840CCA,155RC
	4 /19	10/26/18	21	59831	5181 HAAKER EQUIPMENT		160.24	.00	TENSIONER, BELT
	4 /19	10/26/18	21	59806	1908 BATTERY SYSTEMS		237.49	.00	31,950CCA,175RC
	4 /19	10/26/18	21	8786 -01 59829	6998 GREAT WEST EQUIP		3,126.12	-3,126.12	CRACKFILL MACHINE PARTS
	4 /19	10/26/18	21	8786 -02 59829	6998 GREAT WEST EQUIP		226.64	-226.64	TAX
TOTAL						.00	4,263.62	-3,352.76	
4310									
	4 /19	10/26/18	21	59804	2653 AMERIPRIDE		53.70	.00	PANT-AUS-CTTN
	4 /19	10/26/18	21	59804	2653 AMERIPRIDE		53.70	.00	PANT-CTTN-EASY FIT
	4 /19	10/26/18	21	59804	2653 AMERIPRIDE		53.70	.00	PANT-CTTN-EASY FIT
	4 /19	10/26/18	21	59804	2653 AMERIPRIDE		55.20	.00	PANT- AUS-CTTN FLAT F
	4 /19	10/26/18	21	59804	2653 AMERIPRIDE		100.33	.00	PANT-CTTN-EASY FIT FL
TOTAL						.00	316.63	.00	
4340									
	4 /19	10/26/18	21	59889	0116 VERIZON WIRELESS		60.69	.00	FLEET
TOTAL						.00	60.69	.00	
4350									
	4 /19	10/26/18	21	8782 -01 59838	2671 KELLER MOTORS		1,046.15	-1,046.15	BLANKET PO FOR REPAIRS
TOTAL						.00	1,046.15	-1,046.15	
TOTAL						.00	15,390.21	-14,059.17	
TOTAL						.00	15,390.21	-14,059.17	

RUN DATE 10/26/2018 TIME 11:30:15

PEI - FUND ACCOUNTING

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 15  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 045 - GOLF COURSE - CITY  
BUDGET UNIT - 4245 - GOLF COURSE-CITY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4000K									
	4 /19	10/26/18	21	59868	7003 RAVEN'S BRAND PR		49.32	.00	PKGS OF JERKY
	4 /19	10/26/18	21	59878	6440 SYSCO		610.61	-610.61	BLANKET PO 18-19.
	4 /19	10/26/18	21	59878	6440 SYSCO		656.05	-656.05	BLANKET PO 18-19.
TOTAL						.00	1,315.98	-1,266.66	
4000P									
	4 /19	10/26/18	21	59892	6472 WEST COAST TREND		40.23	.00	1X DRIVER WOOD COVER
	4 /19	10/26/18	21	59890	6595 VERN WASKOM COMP		113.66	.00	CP2 PRO STANDARD
	4 /19	10/26/18	21	59853	6588 MIZUNO		128.59	.00	MEN'S GLOVE
	4 /19	10/26/18	21	59879	6443 TAYLORMADE GOLF		204.07	.00	WHITE TIE 55 MFS5
	4 /19	10/26/18	21	59853	6588 MIZUNO		291.58	.00	TOUR DELTA
TOTAL						.00	778.13	.00	
4220									
	4 /19	10/26/18	21	59843	0314 LEMOORE AUTO SUP		16.93	.00	5PC SET SF SCREW
TOTAL						.00	16.93	.00	
4220K									
	4 /19	10/26/18	21	59815	6624 CINTAS		48.56	.00	TERRY TOWEL
	4 /19	10/26/18	21	59880	6812 TERMINIX COMMERC		50.00	.00	CUST#11122650
	4 /19	10/26/18	21	59815	6624 CINTAS		55.10	.00	TERRY TOWEL
TOTAL						.00	153.66	.00	
4220M									
	4 /19	10/26/18	21	59842	0286 LAWRENCE TRACTOR		21.24	.00	AIR FILTER
	4 /19	10/26/18	21	59843	0314 LEMOORE AUTO SUP		28.91	.00	BEARING
	4 /19	10/26/18	21	59854	0345 MORGAN & SLATES		40.22	.00	49182 PROCESSING LABO
	4 /19	10/26/18	21	59807	0056 BILLINGSLEY TIRE		10.00	.00	DISMOUNT & MOUNT
	4 /19	10/26/18	21	59843	0314 LEMOORE AUTO SUP		14.46	.00	BEARING
	4 /19	10/26/18	21	59822	5866 FASTENAL COMPANY		18.77	.00	1000' 2PLY TISSUE
	4 /19	10/26/18	21	59867	6474 R & R PRODUCTS,		64.24	.00	PUTTING CUP
	4 /19	10/26/18	21	59860	0361 ORTON'S EQUIPMEN		67.07	.00	IGN SWITCH
	4 /19	10/26/18	21	59822	5866 FASTENAL COMPANY		74.29	.00	PRO LYSOL
	4 /19	10/26/18	21	59854	0345 MORGAN & SLATES		102.40	.00	18642 DRIVES 60-1R
	4 /19	10/26/18	21	59822	5866 FASTENAL COMPANY		164.91	.00	CUP 4.5OZ
	4 /19	10/26/18	21	59854	0345 MORGAN & SLATES		165.75	.00	48792 HR PLATE
	4 /19	10/26/18	21	59867	6474 R & R PRODUCTS,		188.03	.00	LEVER ACTION CUTTER
	4 /19	10/26/18	21	59854	0345 MORGAN & SLATES		197.77	.00	113931 WALTERSCHEID
	4 /19	10/26/18	21	59841	0234 KINGS WASTE AND		348.00	.00	TKT#521204 ACT#LGC
	4 /19	10/26/18	21	59884	5379 TURF STAR		386.62	.00	SOLENOID
	4 /19	10/26/18	21	59817	5663 CROP PRODUCTION		2,594.92	-2,594.92	GOLF COURSE FERTILIZER/CH
TOTAL						.00	4,487.60	-2,594.92	
4220P									
	4 /19	10/26/18	21	59800	6911 ADIDAS AMERICA I		81.34	.00	ADIULT REGFTPNT BLK
	4 /19	10/26/18	21	59890	6595 VERN WASKOM COMP		85.40	.00	HF-100

RUN DATE 10/26/2018 TIME 11:30:15

PEI - FUND ACCOUNTING



PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 16  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 045 - GOLF COURSE - CITY  
BUDGET UNIT - 4245 - GOLF COURSE-CITY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220P									
					OPERATING SUPPLIES-PRO SH (cont'd)				
TOTAL					OPERATING SUPPLIES-PRO SH	.00	166.74	.00	
4291					MISCELLANEOUS EXPENSES				
4 /19	10/26/18	21		59821	6876 EZLINKS GOLF LLC		295.00	.00	OCT EZENGAGE SVCS
4 /19	10/26/18	21		59876	6890 STOTT		495.00	.00	HWY 41 SIGN
4 /19	10/26/18	21	8821	-01 59814	6770 CART ADDICTIONS		920.13	-920.13	CART RENTALS-ADDITIONAL C
TOTAL					MISCELLANEOUS EXPENSES	.00	1,710.13	-920.13	
4309					STAFFING/TOM RINGER				
4 /19	10/26/18	21		59862	T1885 THOMAS RINGER		1,199.87	.00	PAYROLL TAXES
4 /19	10/26/18	21		59862	T1885 THOMAS RINGER		2,286.83	.00	WORKMANS COMP
4 /19	10/26/18	21		59862	T1885 THOMAS RINGER		13,878.64	.00	PAYROLL
TOTAL					STAFFING/TOM RINGER	.00	17,365.34	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/26/18	21	8591	-01 59870	6548 RINGER, TOM		6,500.00	-6,500.00	TOTAL YEARLY ANNUAL MANAG
TOTAL					PROFESSIONAL CONTRACT SVC	.00	6,500.00	-6,500.00	
4340					UTILITIES				
4 /19	10/26/18	21		59861	0363 P G & E		10,309.36	.00	9/5/18-10/3/18
TOTAL					UTILITIES	.00	10,309.36	.00	
4350					REPAIR/MAINT SERVICES				
4 /19	10/26/18	21		59873	5891 SHAW'S AIR CONDI		62.00	.00	DIAGNOSTIC
4 /19	10/26/18	21		59873	5891 SHAW'S AIR CONDI		303.00	.00	DIAGNOSTIC
4 /19	10/26/18	21		59873	5891 SHAW'S AIR CONDI		356.00	.00	ICE MACHINE FILTER
TOTAL					REPAIR/MAINT SERVICES	.00	721.00	.00	
4382					LEASE PURCHASE				
4 /19	10/26/18	21	8615	-01 59866	6447 PNC EQUIPMENT FI		4,491.03	-4,491.03	ANNUAL GOLF CART LEASE
TOTAL					LEASE PURCHASE	.00	4,491.03	-4,491.03	
TOTAL					GOLF COURSE-CITY	.00	48,015.90	-15,772.74	
TOTAL					GOLF COURSE - CITY	.00	48,015.90	-15,772.74	

RUN DATE 10/26/2018 TIME 11:30:15

PEI - FUND ACCOUNTING

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220	OPERATING SUPPLIES								
4 /19	10/26/18	21		59822	5866 FASTENAL COMPANY		271.26	.00	12V M12 HACKZALL KIT
4 /19	10/26/18	21	8597 -01	59886	6058 UNIVAR		943.16	-943.16	ACCOUNT # 4250-4220CH 18-
4 /19	10/26/18	21	8597 -01	59886	6058 UNIVAR		1,514.86	-1,514.86	ACCOUNT # 4250-4220CH 18-
4 /19	10/26/18	21	8597 -01	59886	6058 UNIVAR		1,947.48	-1,947.48	ACCOUNT # 4250-4220CH 18-
4 /19	10/26/18	21	8597 -01	59886	6058 UNIVAR		2,063.37	-2,063.37	ACCOUNT # 4250-4220CH 18-
4 /19	10/26/18	21	8597 -01	59886	6058 UNIVAR		2,284.43	-2,284.43	ACCOUNT # 4250-4220CH 18-
TOTAL	OPERATING SUPPLIES					.00	9,024.56	-8,753.30	
4230	REPAIR/MAINT SUPPLIES								
4 /19	10/26/18	21		59875	0428 STONEY'S SAND &		123.88	.00	FILL SAND
4 /19	10/26/18	21		59875	0428 STONEY'S SAND &		470.37	.00	CRUSHED ROCK
4 /19	10/26/18	21		59812	1323 CALIFORNIA IND.		482.63	.00	69881 1/2" BLK
4 /19	10/26/18	21	8598 -01	59830	0188 FERGUSON ENTERPR		65.56	-65.56	18-19 BLANKET PO, WATER D
TOTAL	REPAIR/MAINT SUPPLIES					.00	1,142.44	-65.56	
4310	PROFESSIONAL CONTRACT SVC								
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		73.36	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		73.36	.00	PANT-AUS-FLAT-FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		79.86	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		81.36	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		84.36	.00	PANT-AUS-FLAT FRNT
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		28.00	-28.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		28.00	-28.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		28.00	-28.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		28.00	-28.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		28.00	-28.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		76.50	-76.50	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		105.00	-105.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		112.00	-112.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		112.00	-112.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		112.00	-112.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		112.00	-112.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		112.00	-112.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		120.00	-120.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		120.00	-120.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		120.00	-120.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		170.00	-170.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		252.00	-252.00	ACCOUNT CIP #450-4310BSK
4 /19	10/26/18	21	8601 -01	59809	1397 BSK ANALYTICAL L		580.00	-580.00	ACCOUNT CIP #450-4310BSK
TOTAL	PROFESSIONAL CONTRACT SVC					.00	2,635.80	-2,243.50	
4320	MEETINGS & DUES								
4 /19	10/26/								

PEI - FUND ACCOUNTING

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 18  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4250 - WATER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4340									
									UTILITIES
4 /19	10/26/18	21		59863	6627 PG&E NON ENERGY		481.72	.00	ELEC DISTRIBUTION
4 /19	10/26/18	21		59889	0116 VERIZON WIRELESS		934.76	.00	WATER
TOTAL						.00	1,416.48	.00	
4350									
									REPAIR/MAINT SERVICES
4 /19	10/26/18	21	8698	-01 59833	6858 INDUSTRIAL AUTOM		4,043.00	-4,043.00	REQUEST FOR AUTOMATION GR
4 /19	10/26/18	21	8698	-02 59833	6858 INDUSTRIAL AUTOM		1,598.00	-1,598.00	HARDWARE
4 /19	10/26/18	21	8698	-03 59833	6858 INDUSTRIAL AUTOM		115.86	-116.00	TAX
4 /19	10/26/18	21	8698	-04 59833	6858 INDUSTRIAL AUTOM		200.00	-200.00	FREIGHT
TOTAL						.00	5,956.86	-5,957.00	
4360									
									TRAINING
4 /19	10/26/18	21		59813	1999 CALIFORNIA RURAL		500.00	.00	DISTR CERT REVIEW
TOTAL						.00	500.00	.00	
TOTAL						.00	21,028.14	-17,019.36	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 19  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4251 - UTILITY OFFICE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/26/18	21		59834	5546 INFOSEND		1,400.22	.00	POSTAGE
TOTAL						.00	1,400.22	.00	
4335									
4 /19	10/26/18	21		59834	5546 INFOSEND		2,566.29	.00	POSTAGE
TOTAL						.00	2,566.29	.00	
TOTAL					UTILITY OFFICE	.00	3,966.51	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 20  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 5211 - REPAINT WATER TANKS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									OPERATING SUPPLIES
4 /19	10/26/18	21	8650	-01 59874	6613 SHERWIN WILLIAMS		190.62	-190.62	PRO INDUSTRIAL DTM ACRYLI
4 /19	10/26/18	21	8650	-01 59874	6613 SHERWIN WILLIAMS		605.69	-605.69	PRO INDUSTRIAL DTM ACRYLI
4 /19	10/26/18	21	8650	-01 59874	6613 SHERWIN WILLIAMS		895.75	-895.75	PRO INDUSTRIAL DTM ACRYLI
4 /19	10/26/18	21	8650	-01 59874	6613 SHERWIN WILLIAMS		1,076.25	-1,076.25	PRO INDUSTRIAL DTM ACRYLI
4 /19	10/26/18	21	8650	-01 59874	6613 SHERWIN WILLIAMS		1,662.38	-1,662.38	PRO INDUSTRIAL DTM ACRYLI
4 /19	10/26/18	21	8650	-01 59874	6613 SHERWIN WILLIAMS		2,543.49	-2,543.49	PRO INDUSTRIAL DTM ACRYLI
4 /19	10/26/18	21	8650	-01 59874	6613 SHERWIN WILLIAMS		2,845.07	-2,845.07	PRO INDUSTRIAL DTM ACRYLI
TOTAL						.00	9,819.25	-9,819.25	
4230									REPAIR/MAINT SUPPLIES
4 /19	10/26/18	21	8809	-01 59799	2914 AAA QUALITY SERV		112.97	-112.97	BLANKET PURCHASE ORDER
4 /19	10/26/18	21	8809	-01 59799	2914 AAA QUALITY SERV		112.97	-112.97	BLANKET PURCHASE ORDER
4 /19	10/26/18	21	8811	-01 59843	0314 LEMOORE AUTO SUP		54.67	-54.67	BLANKET PURCHASE ORDER
TOTAL						.00	280.61	-280.61	
TOTAL						.00	10,099.86	-10,099.86	REPAINT WATER TANKS
TOTAL						.00	35,094.51	-27,119.22	WATER

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 21  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 056 - REFUSE  
BUDGET UNIT - 4256 - REFUSE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4	/19	10/26/18	21	59804	2653 AMERIPRIDE		63.49	.00	PANT-AUS-CTTN-FLAT FR
4	/19	10/26/18	21	59804	2653 AMERIPRIDE		78.49	.00	PANT-AUS-FLAT
4	/19	10/26/18	21	59804	2653 AMERIPRIDE		86.69	.00	PANT-AUS-STTN
4	/19	10/26/18	21	59804	2653 AMERIPRIDE		98.19	.00	COMPANY EMBLEMS
TOTAL						.00	326.86	.00	
4340									
4	/19	10/26/18	21	59889	0116 VERIZON WIRELESS		367.75	.00	REFUSE
TOTAL						.00	367.75	.00	
TOTAL						.00	694.61	.00	
TOTAL						.00	694.61	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 22  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 060 - SEWER& STORM WTR DRAINAGE  
BUDGET UNIT - 4260 - SEWER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/26/18	21		59822	5866 FASTENAL COMPANY		62.67	.00	XL FASTFIT HI-VIZ
4 /19	10/26/18	21		59865	5829 JONES BOYS LLC		96.53	.00	3X2 ALUMINUM SIGN
4 /19	10/26/18	21		59887	6049 UNISAFE INC.		489.25	.00	RUBBERCARE GLOVES
4 /19	10/26/18	21		59856	1889 NORTHERN SAFETY		489.60	.00	NS HIVIS LIME GN
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		-3,000.00	3,000.00	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		-3,000.00	3,000.00	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		-3,000.00	3,000.00	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		-2,000.00	2,000.00	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		3,381.40	-3,381.40	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		3,821.80	-3,821.80	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		3,952.07	-3,952.07	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		5,720.20	-5,720.20	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		5,915.60	-5,915.60	ACCOUNT # 4260-4220CH
4 /19	10/26/18	21	8599	-01 59882	2072 THATCHER COMPANY		5,915.60	-5,915.60	ACCOUNT # 4260-4220CH
TOTAL					OPERATING SUPPLIES	.00	18,844.72	-17,706.67	
4230					REPAIR/MAINT SUPPLIES				
4 /19	10/26/18	21		59854	0345 MORGAN & SLATES		72.83	.00	42447 HR ANGLE 2X2X3/
4 /19	10/26/18	21		59875	0428 STONEY'S SAND &		123.87	.00	FILL SAND
TOTAL					REPAIR/MAINT SUPPLIES	.00	196.70	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		60.26	.00	PANT-JEAN-AUS-RLX FIT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		60.26	.00	PANT-JEAN-AUS
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		61.76	.00	PANT-JEAN-AUS-RLX FIT
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		64.91	.00	PANT-JEAN-AUS RLX
4 /19	10/26/18	21		59804	2653 AMERIPRIDE		64.91	.00	PANT-0JEAN-RLX FIT
TOTAL					PROFESSIONAL CONTRACT SVC	.00	312.10	.00	
4340					UTILITIES				
4 /19	10/26/18	21		59889	0116 VERIZON WIRELESS		648.31	.00	SEWER
TOTAL					UTILITIES	.00	648.31	.00	
4350					REPAIR/MAINT SERVICES				
4 /19	10/26/18	21		59836	0242 JORGENSEN COMPAN		213.70	.00	INSTR CALIBRATION
TOTAL					REPAIR/MAINT SERVICES	.00	213.70	.00	
4360					TRAINING				
4 /19	10/26/18	21		59883	T2407 THOMAS NULL		19.13	.00	FINAL-REIMBURSE-TRVL
TOTAL					TRAINING	.00	19.13	.00	
TOTAL					SEWER	.00	20,234.66	-17,706.67	
TOTAL					SEWER& STORM WTR DRAINAGE	.00	20,234.66	-17,706.67	

RUN DATE 10/26/2018 TIME 11:30:15

PEI - FUND ACCOUNTING

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 23  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 090 - TRUST & AGENCY  
BUDGET UNIT - 4295 - TRUST & AGENCY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4430									
4430									
4 /19	10/26/18	21		59848	0306 LEMOORE HIGH SCH		28,622.93	.00	IMPACT FEES SEP 18
4 /19	10/26/18	21		59845	0301 LEMOORE UNION SC		40,695.18	.00	IMPACT FEE/ APPORTION
TOTAL						.00	69,318.11	.00	
4432									
4 /19	10/26/18	21		59840	5561 KINGS COUNTY TRE		13,976.73	.00	IMPACT FEES SEPT 18
TOTAL						.00	13,976.73	.00	
TOTAL					TRUST & AGENCY	.00	83,294.84	.00	
TOTAL					TRUST & AGENCY	.00	83,294.84	.00	



PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 24  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 201 - LLMD ZONE 1  
BUDGET UNIT - 4851 - LLMD ZONE 1 WESTFIELD

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220			OPERATING SUPPLIES						
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		30.34	.00	EDGER BLADE
TOTAL			OPERATING SUPPLIES			.00	30.34	.00	
TOTAL			LLMD ZONE 1 WESTFIELD			.00	30.34	.00	
TOTAL			LLMD ZONE 1			.00	30.34	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 25  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 203 - LLMD ZONE 3 SILVA ESTATES  
BUDGET UNIT - 4853 - LLMD ZONE 3 SILVA ESTATES

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		4.24	.00	EDGER BLADE
TOTAL						.00	4.24	.00	
TOTAL						.00	4.24	.00	
TOTAL						.00	4.24	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 26  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 205 - LLMD ZONE 5 WILDFLOWER  
BUDGET UNIT - 4855 - LLMD ZONE 5 WILDFLOWER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		.69	.00	EDGER BLADE
TOTAL						.00	.69	.00	
TOTAL						.00	.69	.00	
TOTAL						.00	.69	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 27  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 206 - LLMD ZONE 6 CAPISTRANO  
BUDGET UNIT - 4856 - LLMD ZONE 6 CAPISTRANO

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		.41	.00	EDGER BLADE
TOTAL						.00	.41	.00	
TOTAL					LLMD ZONE 6 CAPISTRANO	.00	.41	.00	
TOTAL					LLMD ZONE 6 CAPISTRANO	.00	.41	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 28  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 207 - LLMD ZONE 7 SILVERADO  
BUDGET UNIT - 4857 - LLMD ZONE 7 SILVERADO

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		1.78	.00	EDGER BLADE
TOTAL						.00	1.78	.00	
TOTAL						.00	1.78	.00	
TOTAL						.00	1.78	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 29  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 208 - LLMD ZONE 8 COUNTY CLUB  
BUDGET UNIT - 4858 - LLMD ZONE 8 COUNTY CLUB

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		1.16	.00	EDGER BLADE
TOTAL						.00	1.16	.00	
TOTAL						.00	1.16	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 30  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 208 - LLMD ZONE 8 COUNTY CLUB  
BUDGET UNIT - 4858B - LLMD ZONE 8 B PARK

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		1.94	.00	EDGER BLADE
TOTAL						.00	1.94	.00	
TOTAL						.00	1.94	.00	
TOTAL						.00	3.10	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 31  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 209 - LLMD ZONE 9 LA DANTE ROSE  
BUDGET UNIT - 4859 - LLMD ZONE 9 LA DANTE ROSE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		1.68	.00	EDGER BLADE
TOTAL						.00	1.68	.00	
TOTAL					LLMD ZONE 9 LA DANTE ROSE	.00	1.68	.00	
TOTAL					LLMD ZONE 9 LA DANTE ROSE	.00	1.68	.00	



PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 32  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 210 - LLMD ZONE 10 AVALON  
BUDGET UNIT - 4860 - LLMD ZONE 10 AVALON

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		5.85	.00	EDGER BLADE
TOTAL						.00	5.85	.00	
TOTAL						.00	5.85	.00	
TOTAL						.00	5.85	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 33  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 211 - LLMD ZONE 11 SELF HELP EN  
BUDGET UNIT - 4861 - LLMD ZONE 11 SELF HELP EN

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		.85	.00	EDGER BLADE
TOTAL						.00	.85	.00	
TOTAL					LLMD ZONE 11 SELF HELP EN	.00	.85	.00	
TOTAL					LLMD ZONE 11 SELF HELP EN	.00	.85	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 34  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 212 - LLMD ZONE 12 SUMMERWIND  
BUDGET UNIT - 4862 - LLMD ZONE 12 SUMMERWIND

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/26/18	21		59842	0286 LAWRENCE TRACTOR		7.97	.00	EDGER BLADE
TOTAL						.00	7.97	.00	
TOTAL						.00	7.97	.00	
TOTAL						.00	7.97	.00	

PEI  
DATE: 10/26/2018  
TIME: 11:30:15

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 35  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.fund between '001' and '300' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 213 - LLMD ZONE 13 CORNERSTONE  
BUDGET UNIT - 4863 - LLMD ZONE 13 CORNERSTONE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
	10/26/18	21		59842	0286 LAWRENCE TRACTOR		1.01	.00	EDGER BLADE
TOTAL						.00	1.01	.00	
TOTAL						.00	1.01	.00	
TOTAL						.00	1.01	.00	
TOTAL						.00	482,730.30	-342,092.27	

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JL102618'  
ACCOUNTING PERIOD: 4/19

FUND - 155 - HOUSING AUTHORITY FUND  
BUDGET UNIT - 4953 - HOUSING AUTHORITY FUNDS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/26/18	21	8748	-01 2573	4054 SELF-HELP ENTERP		825.00	-825.00	LOAN PORTFOLIO MANAGEMENT
TOTAL						.00	825.00	-825.00	
TOTAL						.00	825.00	-825.00	
TOTAL						.00	825.00	-825.00	
TOTAL REPORT						.00	825.00	-825.00	

PEI  
DATE: 10/26/2018  
TIME: 11:34:17

CITY OF LEMOORE  
GENERAL LEDGER TRANSACTION ANALYSIS

PAGE NUMBER: 1  
AUDIT311

SELECTION CRITERIA: account.acct between '2000' and '2999' AND transact.yr='19' and transact.period='4' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND

ACCOUNT	DATE	T/C	REFERENCE	VENDOR/PAYER	DEBIT	CREDIT	DESCRIPTION
2020			ACCOUNTS PAYABLE				
4 /19	10/26/18	21	59811	6254 DIVISION OF THE STAT		28.00	1ST QTR FEES
4 /19	10/26/18	21	59810	5685 CALIFORNIA BUILDING		345.00	REVLNG FUND JUL-SEPT
4 /19	10/26/18	21	59891	T1544 VOLUNTEERS IN POLICI		430.00	SWAP MEET APR-OCT
TOTAL			ACCOUNTS PAYABLE		.00	803.00	
2242			ADA&EDUCATION [SB1186]				
4 /19	10/26/18	21	59811	6254 DIVISION OF THE STAT	28.00		1ST QTR FEES
TOTAL			ADA&EDUCATION [SB1186]		28.00	.00	
2243			CALIF.BSASF. SB1473				
4 /19	10/26/18	21	59810	5685 CALIFORNIA BUILDING	345.00		REVLNG FUND JUL-SEPT
TOTAL			CALIF.BSASF. SB1473		345.00	.00	
2283			VOLUNTEERS IN POLICING				
4 /19	10/26/18	21	59891	T1544 VOLUNTEERS IN POLICI	430.00		SWAP MEET APR-OCT
TOTAL			VOLUNTEERS IN POLICING		430.00	.00	
TOTAL			GENERAL FUND		803.00	803.00	

PEI  
DATE: 10/26/2018  
TIME: 11:34:17

CITY OF LEMOORE  
GENERAL LEDGER TRANSACTION ANALYSIS

PAGE NUMBER: 2  
AUDIT311

SELECTION CRITERIA: account.acct between '2000' and '2999'AND transact.yr='19' and transact.period='4' and transact.batch='JL102518'  
ACCOUNTING PERIOD: 4/19

FUND - 090 - TRUST & AGENCY

ACCOUNT	DATE	T/C	REFERENCE	VENDOR/PAYER	DEBIT	CREDIT	DESCRIPTION
2020			ACCOUNTS PAYABLE				
4 /19	10/26/18	21	59819	0819 DEPT OF CONSERVATION		985.59	MAPPING FEE JUL-SEP
4 /19	10/26/18	21	59849	T2606 MARIAH AUSTIN		250.00	REFUND CIVIC AUD
TOTAL			ACCOUNTS PAYABLE		.00	1,235.59	
2256			STRONG MOTION				
4 /19	10/26/18	21	59819	0819 DEPT OF CONSERVATION	985.59		MAPPING FEE JUL-SEP
TOTAL			STRONG MOTION		985.59	.00	
2300			CUSTOMER DEPOSITS				
4 /19	10/26/18	21	59849	T2606 MARIAH AUSTIN	250.00		REFUND CIVIC AUD
TOTAL			CUSTOMER DEPOSITS		250.00	.00	
TOTAL			TRUST & AGENCY		1,235.59	1,235.59	
TOTAL REPORT					2,038.59	2,038.59	





# FY 18/19 Warrant Register 10-31-18

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 1  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4211 - CITY COUNCIL

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		2.35	.00	EMAIL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		23.97	.00	OFFICE 365
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		8,854.92	.00	PROF SVC SEPT 18
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		51.92	.00	COPIER/PRINTER
TOTAL					PROFESSIONAL CONTRACT SVC	.00	8,933.16	.00	
TOTAL					CITY COUNCIL	.00	8,933.16	.00	

RUN DATE 10/31/2018 TIME 14:29:54

PEI - FUND ACCOUNTING

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 2  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4213 - CITY MANAGER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		39.43	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		70.76	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		84.62	.00	LVFD PLANT
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		186.42	.00	ECON DEV MARKETING SU
TOTAL					OPERATING SUPPLIES	.00	381.23	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		1.88	.00	EMAIL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		19.18	.00	OFFICE 365
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		3,466.86	.00	PROF SVC SEPT 18
4 /19	10/31/18	21	8573	-01 59943	2849 KINGS COUNTY ECO		1,666.67	-1,666.67	MONTHLY CONTRIB. OCTO
4 /19	10/31/18	21	8840	-01 59948	0298 LEMOORE CHAMBER		8,492.50	-8,492.50	CONTRACT SERVICES -\$40000
TOTAL					PROFESSIONAL CONTRACT SVC	.00	13,647.09	-10,159.17	
4320					MEETINGS & DUES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		35.53	.00	ECON DEV MEETING
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		125.00	.00	ICSC CONFERENCE- OLSO
TOTAL					MEETINGS & DUES	.00	160.53	.00	
4330					PRINTING & PUBLICATIONS				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		150.95	.00	ECON DEV MARKETING SU
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		479.84	.00	ECON DEV MARKETING SU
TOTAL					PRINTING & PUBLICATIONS	.00	630.79	.00	
4340					UTILITIES				
4 /19	10/31/18	21		59899	5516 AT&T		36.88	.00	C.M. 9391034005
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		41.52	.00	WATER SERVICES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		71.50	.00	CMC CABLE SERVICE
TOTAL					UTILITIES	.00	149.90	.00	
4360					TRAINING				
4 /19	10/31/18	21		59907	0879 COLLEGE OF THE S		50.00	.00	SV INDUSTRIAL SUMMIT
TOTAL					TRAINING	.00	50.00	.00	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		1,990.19	.00	COPIER/PRINTER
TOTAL					RENTALS & LEASES	.00	1,990.19	.00	
TOTAL					CITY MANAGER	.00	17,009.73	-10,159.17	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 3  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4214 - CITY CLERK'S OFFICE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
	10/31/18	21		59924	3022 FIRST BANKCARD		35.26	.00	COUNCIL SNACK/WATER
4 /19								.00	
TOTAL						.00	35.26	.00	
4310									
	10/31/18	21		59924	3022 FIRST BANKCARD		.94	.00	EMAIL
4 /19							9.59	.00	OFFICE 365
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD			.00	
TOTAL						.00	10.53	.00	
4320									
	10/31/18	21		59937	T2394 JANIE VENEGAS		30.85	.00	MILEAGE REIMB.
4 /19								.00	
TOTAL						.00	30.85	.00	
TOTAL						.00	76.64	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 4  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4215 - FINANCE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		31.17	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		51.44	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		84.07	.00	TONER
4 /19	10/31/18	21		59932	6787 I DESIGN		349.93	.00	5000 WINDOW ENVELOPES
TOTAL					OPERATING SUPPLIES	.00	516.61	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		2.35	.00	EMAIL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		23.97	.00	OFFICE 365
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		3,096.00	.00	PROF SVC SEPT 18
TOTAL					PROFESSIONAL CONTRACT SVC	.00	3,122.32	.00	
4340					UTILITIES				
4 /19	10/31/18	21		59899	5516 AT&T		23.05	.00	ADMIN 9391034005
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		58.59	.00	WATER SERVICES
TOTAL					UTILITIES	.00	81.64	.00	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		77.14	.00	COPIER/PRINTER
TOTAL					RENTALS & LEASES	.00	77.14	.00	
TOTAL					FINANCE	.00	3,797.71	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 5  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4216 - PLANNING

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
	10/31/18	21		59924	3022 FIRST BANKCARD		56.37	.00	OFFICE SUPPLIES
4 /19						.00	56.37	.00	
TOTAL									
4310									
	10/31/18	21		59924	3022 FIRST BANKCARD		1.41	.00	EMAIL
4 /19							14.38	.00	OFFICE 365
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		918.00	.00	PROF SVC SEPT 18
TOTAL						.00	933.79	.00	
4380									
	10/31/18	21		59929	5977 GREATAMERICA FIN		351.87	.00	COPIER/PRINTER
4 /19						.00	351.87	.00	
TOTAL									
TOTAL						.00	1,342.03	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 6  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4220 - MAINTENANCE DIVISION

ACCOUNT DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220								
								OPERATING SUPPLIES
4 /19 10/31/18 21			59926	1547 VERITIV OPERATIN		45.52	.00	4 URINAL GUARDS
4 /19 10/31/18 21	C549	-01	59924	3022 FIRST BANKCARD		499.50	-499.50	USA FLAGS
4 /19 10/31/18 21	C549	-02	59924	3022 FIRST BANKCARD		39.22	-39.22	TAX
4 /19 10/31/18 21	C556	-01	59924	3022 FIRST BANKCARD		1,536.52	-1,536.52	JSP EVOLUTION DLX 6161V F
4 /19 10/31/18 21			59926	1547 VERITIV OPERATIN		77.01	.00	2 MOPS
4 /19 10/31/18 21			59926	1547 VERITIV OPERATIN		174.71	.00	6 LARGE MOPS
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		260.20	.00	LUMBER AND DOOR KNOBS
4 /19 10/31/18 21			59926	1547 VERITIV OPERATIN		349.42	.00	12 LARGE MOPS CIVIC
TOTAL					.00	2,982.10	-2,075.24	
4310								
								PROFESSIONAL CONTRACT SVC
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		1.88	.00	EMAIL
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		19.18	.00	OFFICE 365
TOTAL					.00	21.06	.00	
4340								
								UTILITIES
4 /19 10/31/18 21			59970	0423 SOCALGAS		.93	.00	09/14/18-10/17/18
4 /19 10/31/18 21			59970	0423 SOCALGAS		26.38	.00	09/14/18-10/17/18
4 /19 10/31/18 21			59970	0423 SOCALGAS		34.91	.00	09/14/18-10/17/18
4 /19 10/31/18 21			59970	0423 SOCALGAS		55.02	.00	09/14/18-10/17/18
4 /19 10/31/18 21			59970	0423 SOCALGAS		66.62	.00	09/14/18-10/17/18
4 /19 10/31/18 21			59970	0423 SOCALGAS		71.29	.00	09/14/18-10/17/18
4 /19 10/31/18 21			59970	0423 SOCALGAS		121.64	.00	09/14/18-10/17/18
TOTAL					.00	376.79	.00	
TOTAL					.00	3,379.95	-2,075.24	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 7  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4221 - POLICE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220	OPERATING SUPPLIES								
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		43.71	.00	OTTERBOXES - ROCHA/SO
4 /19	10/31/18	21	8707	-01 59911	2454 DELL COMPUTER CO		1,973.66	-1,973.66	DELL OPTIPLEX 7060 SFF
4 /19	10/31/18	21	8707	-01 59911	2454 DELL COMPUTER CO		7,624.42	-7,624.42	DELL OPTIPLEX 7060 SFF
4 /19	10/31/18	21	8707	-02 59911	2454 DELL COMPUTER CO		493.52	-493.52	DELL 22 MONITOR
4 /19	10/31/18	21	8707	-02 59911	2454 DELL COMPUTER CO		1,906.49	-1,906.48	DELL 22 MONITOR
4 /19	10/31/18	21	8707	-03 59911	2454 DELL COMPUTER CO		32.64	-32.64	APC 7-OUTLET SURGEARREST
4 /19	10/31/18	21	8707	-03 59911	2454 DELL COMPUTER CO		126.08	-126.08	APC 7-OUTLET SURGEARREST
4 /19	10/31/18	21	8707	-04 59911	2454 DELL COMPUTER CO		19.74	-19.74	ENVIRO FEE
4 /19	10/31/18	21	8707	-04 59911	2454 DELL COMPUTER CO		76.26	-76.26	ENVIRO FEE
4 /19	10/31/18	21	8707	-05 59911	2454 DELL COMPUTER CO		146.81	-146.81	TAX
4 /19	10/31/18	21	8707	-05 59911	2454 DELL COMPUTER CO		567.12	-567.12	TAX
4 /19	10/31/18	21	C550	-01 59924	3022 FIRST BANKCARD		1,379.99	-1,379.99	DJI INSPIRE 1 V2.0 DRONE
4 /19	10/31/18	21	C550	-02 59924	3022 FIRST BANKCARD		100.05	-100.05	TAX
4 /19	10/31/18	21	C550	-03 59924	3022 FIRST BANKCARD		7.95	-7.95	SHIPPING
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		88.23	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		104.09	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		133.37	.00	MEASURING WHEEL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		241.59	.00	RIFLE PARTS
4 /19	10/31/18	21		59927	2960 GALLS		318.28	.00	DEMO GUN GLOCK 17/22
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		322.00	.00	20 HOBBLES
TOTAL	OPERATING SUPPLIES					.00	15,706.00	-14,454.72	
4220U	OPERAT SUPPLIES- UNIFORMS								
4 /19	10/31/18	21	8842	-01 59894	6699 5.11 TACTICAL		617.30	-617.30	UNIFORM, SHIRTS, PANTS, J
4 /19	10/31/18	21		59951	0650 LORD'S UNIFORMS		89.88	.00	JOHN PLOURDE VOL
4 /19	10/31/18	21		59951	0650 LORD'S UNIFORMS		218.41	.00	JESSICA PADILLA UNIFO
4 /19	10/31/18	21		59951	0650 LORD'S UNIFORMS		324.75	.00	BRIAN FERREIRA UNIFOR
4 /19	10/31/18	21		59894	6699 5.11 TACTICAL		332.49	.00	ROSSI UNIFORMS
TOTAL	OPERAT SUPPLIES- UNIFORMS					.00	1,582.83	-617.30	
4310	PROFESSIONAL CONTRACT SVC								
4 /19	10/31/18	21		59941	6990 K & K VETERINARY		6.28	.00	FINANCE CHRG STRAY CA
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		25.00	.00	DETECTIVES
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		5,578.48	.00	PROF SVC SEPT 18
4 /19	10/31/18	21		59919	5814 CITY OF HANFORD		14,665.14	.00	DISPATCH NOV 18
4 /19	10/31/18	21	C559	-01 59924	3022 FIRST BANKCARD		569.24	-569.24	VETERINARY PET INSURANCE
TOTAL	PROFESSIONAL CONTRACT SVC					.00	20,844.14	-569.24	
4320	MEETINGS & DUES								
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		14.56	.00	COOKIE PLATTER FOR MI
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		30.00	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		37.62	.00	K-9 INSURANCE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		65.25	.00	K-9 INSURANCE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		75.00	.00	GANG TRAINING. J.DIA
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		92.76	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		127.50	.00	EXPLORERS COMPETITION

RUN DATE 10/31/2018 TIME 14:29:54

PEI - FUND ACCOUNTING

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 8  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4221 - POLICE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4320					(cont'd)				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		133.53	.00	PESCATORE-LODGING TAS
4 /19	10/31/18	21		59965	T853 DEBBIE SANTOS		163.00	.00	CLEARs TNG & TECH SEM
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		320.58	.00	K-9 INSURANCE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		326.85	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITIO
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		427.14	.00	EXPLORERS COMPETITION
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		499.99	.00	COFFEE WITH A COP
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		536.94	.00	LODGING-ROCHA-RIMCON
TOTAL						.00	6,694.98	.00	
4340					UTILITIES				
4 /19	10/31/18	21		59899	5516 AT&T		22.71	.00	PD 9391034003
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		35.44	.00	PD WATER SERVICE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		35.44	.00	PD WATER SERVICE
4 /19	10/31/18	21		59975	0116 VERIZON WIRELESS		856.53	.00	SEPT 2-OCT 01
4 /19	10/31/18	21		59975	0116 VERIZON WIRELESS		1,600.94	.00	SEP 17 - OCT 16
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		85.50	.00	PD CABLE SERVICE
4 /19	10/31/18	21		59899	5516 AT&T		172.36	.00	9391033999
TOTAL						.00	2,808.92	.00	
4360					TRAINING				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		704.35	.00	LODGING-POST RECORDS
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		750.00	.00	ADVANCED TA INVESTIG
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		988.90	.00	LODGING WK 1 MORITZ
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		988.90	.00	LODGING WK 2 MORITZ
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		2,124.07	.00	LODGING-COSPER ADVANC
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		76.00	.00	FIELD TRNG PROG-TUITI
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		140.87	.00	LODGING-CANCELLATION
4 /19	10/31/18	21		59901	T946 YOLANDA BREWER		157.00	.00	CRIME SCENE TNG 11/18
TOTAL						.00	5,930.09	.00	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		.20	.00	COPIER/PRINTER
4 /19	10/31/18	21		59904	1817 C.A. REDING COMP		404.87	.00	PD COPIER 9246714
TOTAL						.00	405.07	.00	
TOTAL					POLICE	.00	53,972.03	-15,641.26	

RUN DATE 10/31/2018 TIME 14:29:54

PEI - FUND ACCOUNTING



PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 9  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4222 - FIRE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									OPERATING SUPPLIES

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 10  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4222 - FIRE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		42.08	.00	SHIPPING
4 /19	10/31/18	21		59949	0313 LEMOORE VOLUNTEE		78.74	.00	REYNA'S RESTAURANT
4 /19	10/31/18	21		59916	2806 FED EX/FREIGHT W		84.88	.00	COMPLETE WIRELESS TEC
TOTAL					OPERATING SUPPLIES	.00	205.70	.00	
4230					REPAIR/MAINT SUPPLIES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		59.57	.00	FLUORECENT TUBE-HIGH
TOTAL					REPAIR/MAINT SUPPLIES	.00	59.57	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		.94	.00	EMAIL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		14.38	.00	OFFICE 365
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		36.00	.00	PROF SVC SEPT 18
4 /19	10/31/18	21		59919	5814 CITY OF HANFORD		10,998.86	.00	DISPATCH NOV 18
TOTAL					PROFESSIONAL CONTRACT SVC	.00	11,050.18	.00	
4340					UTILITIES				
4 /19	10/31/18	21		59899	5516 AT&T		96.00	.00	9391034001
TOTAL					UTILITIES	.00	96.00	.00	
4360					TRAINING				
4 /19	10/31/18	21		59903	T2610 BRUCE GERMAN		180.00	.00	FERRARA FIRE
4 /19	10/31/18	21		59944	T2581 KYLE REED		180.00	.00	FERRARA FIRE
TOTAL					TRAINING	.00	360.00	.00	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		256.13	.00	COPIER/PRINTER
TOTAL					RENTALS & LEASES	.00	256.13	.00	
TOTAL					FIRE	.00	12,027.58	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 11  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4224 - BUILDING INSPECTION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		56.37	.00	OFFICE SUPPLIES
TOTAL						.00	56.37	.00	
4310									
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		2.12	.00	EMAIL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		16.78	.00	OFFICE 365
TOTAL						.00	18.90	.00	
4380									
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		27.38	.00	COPIER/PRINTER
TOTAL						.00	27.38	.00	
TOTAL						.00	102.65	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 12  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4230 - PUBLIC WORKS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
	4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		76.53	.00	OFFICE SUPPLIES
TOTAL						.00	76.53	.00	
4310									
	4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		2.26	.00	EMAIL
	4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		22.98	.00	OFFICE 365
	4 /19	10/31/18	21	59952	5609 LOZANO SMITH, LL		1,332.00	.00	PROF SVC SEPT 18
TOTAL						.00	1,357.24	.00	
4340									
	4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		42.51	.00	WATER SERVICES
TOTAL						.00	42.51	.00	
4380									
	4 /19	10/31/18	21	59929	5977 GREATAMERICA FIN		167.08	.00	COPIER/PRINTER
TOTAL						.00	167.08	.00	
TOTAL						.00	1,643.36	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 13  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4231 - STREETS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		.57	.00	THRUST PAD
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		1.45	.00	COVER
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		7.25	.00	TENSIONER SLIDE
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		22.30	.00	INNER SIDE PLATE
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		33.24	.00	14" BAR
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		99.12	.00	SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		119.96	.00	SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		342.99	.00	WEED SPRAY
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		454.18	.00	LED LIGHTS
TOTAL					OPERATING SUPPLIES	.00	1,081.06	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		2.68	.00	EMAIL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		27.29	.00	OFFICE 365
TOTAL					PROFESSIONAL CONTRACT SVC	.00	29.97	.00	
4340					UTILITIES				
4 /19	10/31/18	21		59961	6627 PG&E NON ENERGY		27.36	.00	UTILITIES 09/18
TOTAL					UTILITIES	.00	27.36	.00	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		.09	.00	COPIER/PRINTER
TOTAL					RENTALS & LEASES	.00	.09	.00	
TOTAL					STREETS	.00	1,138.48	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 14  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4241 - PARKS

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		2.18	.00	EMAIL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		22.17	.00	OFFICE 365
TOTAL						.00	24.35	.00	
TOTAL						.00	24.35	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 15  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4242 - RECREATION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		7.50	.00	YOUTH DANCE
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		9.96	.00	SOUN SYSTEM
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		10.70	.00	KFUN EVENT
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		11.99	.00	VENDING MACHINE
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		16.76	.00	FLAG FOOTBALL
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		16.76	.00	YOUTH DANCE
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		21.44	.00	SENIOR CITIZEN PROM
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		21.45	.00	OPERA ON THE GREEN
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		21.95	.00	LIL KICKERS
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		25.14	.00	FLAG FOOTBALL
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		28.97	.00	FLAG FOOTBALL
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		35.00	.00	FACEBOOK ADS
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		36.84	.00	SENIOR CITIZEN PROM D
4	/19	10/31/18	21	C562 -01 59924	3022 FIRST BANKCARD		640.25	-640.25	WHITE SUNRAY MEDALS - FLA
4	/19	10/31/18	21	C562 -02 NOV184804079	3022 FIRST BANKCARD		.00	-75.00	SHIPPING
4	/19	10/31/18	21	C563 -01 59924	3022 FIRST BANKCARD		1,646.07	-1,646.07	DANCE RECITAL OUTFITS
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		52.50	.00	OPERA ON THE GREEN
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		64.82	.00	VENDING MACHINE
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		65.37	.00	FLAG FOOTBALL
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		71.40	.00	YOUTH DANCE
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		79.31	.00	VENDING MACHINE
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		108.75	.00	SENIOR CITIZEN PROM
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		127.25	.00	DRAMA CLUB SCRIPTS
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		152.25	.00	DRAMA CLUB SCRIPTS
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		184.76	.00	FLAG FOOTBALL
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		233.38	.00	YOUTH DANCE
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		315.48	.00	VENDING MACHINE
TOTAL					OPERATING SUPPLIES	.00	4,006.05	-2,361.32	
4310					PROFESSIONAL CONTRACT SVC				
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		2.71	.00	EMAIL
4	/19	10/31/18	21	59942	7011 KERRI MICHELLE H		17.50	.00	PEEWEE FITNESS
4	/19	10/31/18	21	59958	6973 MELODY MAR		21.00	.00	BATON TWIRLING 10/18
4	/19	10/31/18	21	59924	3022 FIRST BANKCARD		27.62	.00	OFFICE 365
4	/19	10/31/18	21	59942	7011 KERRI MICHELLE H		42.00	.00	PEEWEE MUSIC
4	/19	10/31/18	21	59967	T2217 SHANEE RANESSES		1,561.00	.00	DANCE 10/18
4	/19	10/31/18	21	59934	7004 ISALIAH JOHNSTON		77.00	.00	FIELD PREP/SCORE KEEP
4	/19	10/31/18	21	59936	7009 JANENE SHERRY		84.00	.00	PEEWEE FITNESS 10/18
4	/19	10/31/18	21	59968	5235 STATE DISBURSEME		86.00	.00	SEPT CHLD SUPPORT
4	/19	10/31/18	21	59897	6884 ANTHONY HERNANDE		100.00	.00	REFEREE 10/18
4	/19	10/31/18	21	59953	T2545 MAKENZIE TAYLOR		101.75	.00	SCOREKEEPER 10/18
4	/19	10/31/18	21	59972	6994 TY HODGE		102.00	.00	REFEREE 10/18
4	/19	10/31/18	21	59912	6856 DIZTINCT GRAFFIX		111.54	.00	SOFTBALL SHIRTS
4	/19	10/31/18	21	59896	6893 ANGELA MENDOZA		121.00	.00	SCORE KEEPER 10-18
4	/19	10/31/18	21	59956	T2603 MARTIN PRADO		125.00	.00	UMPIRE 10/18
4	/19	10/31/18	21	59902	T1316 FORD, BRIANNE		126.50	.00	SCOREKEEPING 10/18

RUN DATE 10/31/2018 TIME 14:29:54

PEI - FUND ACCOUNTING

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 16  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4242 - RECREATION

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310					PROFESSIONAL CONTRACT SVC (cont'd)				
4 /19	10/31/18	21		59940	T2043 JULIO GONZALEZ		130.00	.00	REFEREE 10/18
4 /19	10/31/18	21		59955	7000 MARIA LOZA		132.00	.00	SCOREKEEPING 10/18
4 /19	10/31/18	21		59971	6885 TRENTON WILLIAMS		136.00	.00	REFEREE 10/18
4 /19	10/31/18	21		59910	T2587 DANTE TOLLESON		148.00	.00	REFEREE 10/18
4 /19	10/31/18	21		59935	6661 ISRAEL VALLADARE		182.00	.00	REFEREE 10/18
4 /19	10/31/18	21		59918	T2220 FERNANDO VALLADA		182.00	.00	REFEREE 10/18
4 /19	10/31/18	21		59900	0040 LARRY AVILA		211.00	.00	REFEREE 10/18
4 /19	10/31/18	21		59939	5929 JOSEPH MESTRES		225.00	.00	UMPIRE 10/18
4 /19	10/31/18	21		59940	T2043 JULIO GONZALEZ		245.00	.00	DRAMA 10/18
4 /19	10/31/18	21		59954	6371 MANUEL VELARDE		297.50	.00	KARATE 10/18
4 /19	10/31/18	21		59917	T2225 FELLIPE OLIVEIRA		400.00	.00	REFEREE 10/18
4 /19	10/31/18	21		59928	5962 JASON GLASPIE		505.50	.00	BOXING 10/18
4 /19	10/31/18	21		59909	T1444 JOE CORREIA		532.00	.00	SOCCER ATTENDANT 10/1
4 /19	10/31/18	21		59925	6731 FLORENCE COLBY		596.40	.00	ZUMBA 10/18
TOTAL					PROFESSIONAL CONTRACT SVC	.00	6,629.02	.00	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		601.05	.00	COPIER/PRINTER
TOTAL					RENTALS & LEASES	.00	601.05	.00	
TOTAL					RECREATION	.00	11,236.12	-2,361.32	



PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 17  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4296 - INFORMATION TECHNOLOGY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
									OPERATING SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		56.17	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		255.26	.00	KEYBOARD & TRAY J.HOW
TOTAL						.00	311.43	.00	
									OPERATING SUPPLIES
TOTAL						.00	311.43	.00	INFORMATION TECHNOLOGY

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 18  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 4297 - HUMAN RESOURCES

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		36.67	.00	EMPLOYEE BREAKFAST
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		45.75	.00	EMPLOYEE BREAKFAST
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		46.82	.00	EMPLOYEE BREAKFAST
TOTAL					OPERATING SUPPLIES	.00	129.24	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		2,635.47	.00	PROF SVC SEPT 18
TOTAL					PROFESSIONAL CONTRACT SVC	.00	2,635.47	.00	
4360					TRAINING				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		16.95	.00	SUPERVISOR TNG COFFEE
4 /19	10/31/18	21	C557 -01	59924	3022 FIRST BANKCARD		607.50	-607.50	REGISTRATION - UC DAVIS U
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		324.00	.00	J.HOLWELL UC DAVIS
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		324.00	.00	J.HOLWELL UC DAVIS
TOTAL					TRAINING	.00	1,272.45	-607.50	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		11.56	.00	COPIER/PRINTER
TOTAL					RENTALS & LEASES	.00	11.56	.00	
4534					EE HOME BUYERS ASSIST.PRG				
4 /19	10/31/18	21		59920	2483 FIRST AMERICAN T		10,000.00	.00	A.CHAMPION 1ST HOME B
TOTAL					EE HOME BUYERS ASSIST.PRG	.00	10,000.00	.00	
TOTAL					HUMAN RESOURCES	.00	14,048.72	-607.50	
TOTAL					GENERAL FUND	.00	129,043.94	-30,844.49	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 19  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 040 - FLEET MAINTENANCE  
BUDGET UNIT - 4265 - FLEET MAINTENANCE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		-70.04	.00	COPIER/PRINTER
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		13.72	.00	1/2 EXT TRX SCKT
4 /19	10/31/18	21		59959	6120 O'REILLY AUTO PA		23.57	.00	CAR WASH CHAMOIS
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		33.56	.00	FLEET SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		56.37	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		128.64	.00	AUTOCUT25-2 BULK
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		299.52	.00	FLEET SUPPLIES
TOTAL					OPERATING SUPPLIES	.00	485.34	.00	
4220F					OPERATING SUPPLIES FUEL				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		20.00	.00	UNIT 91 FUEL FOR RECO
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		22.13	.00	UNIT 91 FUEL FOR RECO
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		30.19	.00	UNIT 57 FUEL FOR EXPL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		46.01	.00	UNIT 91 FUEL FOR RECO
TOTAL					OPERATING SUPPLIES FUEL	.00	118.33	.00	
4230					REPAIR/MAINT SUPPLIES				
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		6.75	.00	HYDRAULIC HOSE-BULK
4 /19	10/31/18	21		59978	T2609 MATTHEW WILDES		10.00	.00	UNIT 25 CERTIFICATE
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		17.52	.00	4G-4FJX
4 /19	10/31/18	21		59931	6146 HANFORD CHRYSLER		34.39	.00	AG BOTTLE CO
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		42.85	.00	SWIVEL JACK
4 /19	10/31/18	21		59930	5181 HAAKER EQUIPMENT		50.09	.00	BULB SEAL
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		72.76	.00	6G-6FJX
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		84.00	.00	HYDRAULIC HOSE BULK
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		167.14	.00	16G-16FJX
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		254.08	.00	16M3KXREEL
TOTAL					REPAIR/MAINT SUPPLIES	.00	739.58	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		.83	.00	EMAIL
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		8.50	.00	OFFICE 365
TOTAL					PROFESSIONAL CONTRACT SVC	.00	9.33	.00	
4350					REPAIR/MAINT SERVICES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		2,717.65	.00	C560 UNIT 41 REPAIR
4 /19	10/31/18	21	8825 -01	59966	5615 SAUNDERS AUTOMAT		1,172.65	-1,172.65	TRANSMISSION REPAIR ON SE
4 /19	10/31/18	21		59957	6012 MCCANN & SON'S H		175.00	.00	DIAGNOSTIC TEST 2007
TOTAL					REPAIR/MAINT SERVICES	.00	4,065.30	-1,172.65	
TOTAL					FLEET MAINTENANCE	.00	5,417.88	-1,172.65	
TOTAL					FLEET MAINTENANCE	.00	5,417.88	-1,172.65	

RUN DATE 10/31/2018 TIME 14:29:54

PEI - FUND ACCOUNTING

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 20  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 045 - GOLF COURSE - CITY  
BUDGET UNIT - 4245 - GOLF COURSE-CITY

ACCOUNT DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4000K								
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		10.77	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		13.40	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		669.68	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59960	T1885 THOMAS RINGER		1,373.30	.00	VALLEYWIDE BEVERAGES
4 /19 10/31/18 21 8614	-01		59969	6440 SYSCO		570.98	-570.98	BLANKET PO 18-19.
4 /19 10/31/18 21 8614	-01		59895	6450 TITLEIST		810.00	-810.00	BLANKET PO 18-19.
4 /19 10/31/18 21			59963	7003 RAVEN'S BRAND PR		49.32	.00	JERKEY
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		54.95	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		59.22	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		83.75	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		190.61	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		356.45	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59960	T1885 THOMAS RINGER		391.95	.00	DONAGHY SALES
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		400.91	.00	FOOD PRODUCTS FOR RES
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		467.22	.00	FOOD PRODUCTS FOR RES
TOTAL					.00	5,502.51	-1,380.98	
4000P								
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		77.40	-77.40	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		106.47	-106.47	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		106.54	-106.54	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		138.33	-138.33	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		187.62	-187.62	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		187.75	-187.75	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		196.54	-196.54	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		302.43	-302.43	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		382.02	-382.02	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		1,565.18	-1,565.18	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21 8646	-01		59905	6476 CALLAWAY		2,317.00	-2,317.00	GOLF BALLS, EQUIPMENT, RA
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		69.99	.00	PURCHASE OF GOLF SHAF
4 /19 10/31/18 21			59976	6595 VERN WASKOM COMP		141.36	.00	CP2 PRO STANDARD
TOTAL					.00	5,778.63	-5,567.28	
4220K								
4 /19 10/31/18 21			59906	6624 CINTAS		55.10	.00	TOWEL,MOP,BAGS, APRON
TOTAL					.00	55.10	.00	
4220M								
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		-78.61	.00	COURSE MAINTENACE SUP
4 /19 10/31/18 21			7459-194469	6526 LEMOORE AUTO SUP		.00	.00	BATTERY-FARM TRUCK
4 /19 10/31/18 21			59950	6526 LEMOORE AUTO SUP		10.70	.00	ENGINE DEGREASER
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		16.59	.00	COURSE MAINTENANCE SU
4 /19 10/31/18 21			59950	6526 LEMOORE AUTO SUP		25.01	.00	HYDRAULIC HOSE-BULK
4 /19 10/31/18 21			59924	3022 FIRST BANKCARD		26.78	.00	COURSE MAINTENANCE SU
4 /19 10/31/18 21			59950	6526 LEMOORE AUTO SUP		32.15	.00	TUBE SEALANT
4 /19 10/31/18 21 8834	-01		59977	6206 WILBUR-ELLIS COM		547.96	-547.96	GOLF COURSE MAINTENANCE C

RUN DATE 10/31/2018 TIME 14:29:54

PEI - FUND ACCOUNTING

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 21  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 045 - GOLF COURSE - CITY  
BUDGET UNIT - 4245 - GOLF COURSE-CITY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220M	OPERATING SUPPLIES MAINT. (cont'd)								
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		54.69	.00	COURSE MAINTENANCE
4 /19	10/31/18	21		59950	6526 LEMOORE AUTO SUP		58.56	.00	COUPLING W/O -RING
4 /19	10/31/18	21		59950	6526 LEMOORE AUTO SUP		64.00	.00	BEARING,COUPLER, AIR
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		83.64	.00	GOLF COURSE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		104.80	.00	COURSE MAINTENANCE SU
4 /19	10/31/18	21		59950	6526 LEMOORE AUTO SUP		107.23	.00	HYD FLD TRACTOR UNIV
4 /19	10/31/18	21		59950	6526 LEMOORE AUTO SUP		132.80	.00	BATTERY-FARM TRUCK
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		144.69	.00	GOLF COURSE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		184.55	.00	GOLF COURSE SUPPLIES
TOTAL	OPERATING SUPPLIES MAINT.					.00	1,515.54	-547.96	
4220P	OPERATING SUPPLIES-PRO SH								
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		-75.06	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		10.12	.00	POSTAGE/GOLF SHOP RET
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		10.13	.00	POSTAGE/GOLF SHOP RET
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		20.37	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		26.98	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		45.33	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		58.44	.00	PRINTING/BROCHURES-GO
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		121.51	.00	ADVERTISING POSTERS
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		165.75	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		176.95	.00	PRINTING/BROCHURES-GO
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		197.32	.00	OFFICE SUPPLIES
TOTAL	OPERATING SUPPLIES-PRO SH					.00	757.84	.00	
4291	MISCELLANEOUS EXPENSES								
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		-59.99	.00	RETURN
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		13.93	.00	PRIME
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		59.99	.00	BOUGHT BY MISTAKE
4 /19	10/31/18	21		59908	7013 COMCAST SPOTLIGH		417.50	.00	CABLE 09/18
TOTAL	MISCELLANEOUS EXPENSES					.00	431.43	.00	
4309	STAFFING/TOM RINGER								
4 /19	10/31/18	21		59960	T1885 THOMAS RINGER		180.36	.00	AFLAC
4 /19	10/31/18	21		59960	T1885 THOMAS RINGER		250.00	.00	MARK FRANTZ
TOTAL	STAFFING/TOM RINGER					.00	430.36	.00	
4340	UTILITIES								
4 /19	10/31/18	21		59970	0423 SOCALGAS		14.79	.00	09/11/18-10/11/18
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		40.00	.00	PHONE/FAX SERVICE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		40.00	.00	PHONE/FAX SERVICE
4 /19	10/31/18	21		59970	0423 SOCALGAS		82.85	.00	09/11/18-10/11/18
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		90.43	.00	PHONE SERVICE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		128.20	.00	CABLE SERVICE - CLUBH
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		130.08	.00	PHONE/FAX SERVICE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		162.02	.00	PHONE/FAX SERVICE

RUN DATE 10/31/2018 TIME 14:29:54

PEI - FUND ACCOUNTING

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 22  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 045 - GOLF COURSE - CITY  
BUDGET UNIT - 4245 - GOLF COURSE-CITY

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4340									
					(cont'd)				
TOTAL						.00	688.37	.00	
4350									
4 /19	10/31/18	21	8833	-01	59979		3,875.12	-3,875.12	SERVICE, REPAIR AND PREVE
TOTAL						.00	3,875.12	-3,875.12	
TOTAL						.00	19,034.90	-11,371.34	
TOTAL						.00	19,034.90	-11,371.34	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 23  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4250 - WATER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		3.50	.00	APP
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		5.00	.00	SCADA APP
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		5.35	.00	ORANGE WIPES 25 CT
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		5.35	.00	ENGINE DEGREASER
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		5.35	.00	GLASS CLEANER
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		5.36	.00	HOT SHINE TIRE COAT
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		8.03	.00	HOT SHINE TIRE COAT
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		8.46	.00	CAR WASH/WAX
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		13.93	.00	CONSPICUITY TAPE
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		13.93	.00	CONSPICUITY TAPE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		14.99	.00	SUPPLIES
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		16.08	.00	SHOP TOWEL BOX
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		16.09	.00	HOT RIM ALL WHL CLNR
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		21.97	.00	LD RAVEN PWDR FREE
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		25.71	.00	WASP HORNET KILLER
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		30.02	.00	HD RBR MAT 4 PC
4 /19	10/31/18	21		59938	6860 JOHN SOUZA		33.90	.00	COFFEE/WATER CERT REV
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		42.89	.00	CLTH ROL 1 1/2 IN X 2
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		43.73	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		45.03	.00	TUBING CUTTER
4 /19	10/31/18	21	8597 -01	59973	6058 UNIVAR		975.60	-975.60	ACCOUNT # 4250-4220CH 18-
4 /19	10/31/18	21	8597 -01	59973	6058 UNIVAR		1,086.85	-1,086.85	ACCOUNT # 4250-4220CH 18-
4 /19	10/31/18	21	8597 -01	59973	6058 UNIVAR		1,151.75	-1,151.75	ACCOUNT # 4250-4220CH 18-
4 /19	10/31/18	21	8597 -01	59973	6058 UNIVAR		2,199.33	-2,199.33	ACCOUNT # 4250-4220CH 18-
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		56.37	.00	OFFICE SUPPLIES
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		62.93	.00	12 OZ. SMART STRAW
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		85.79	.00	BIT SET
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		199.49	.00	WATER SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		237.25	.00	SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		244.11	.00	WATER SUPPLIES
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		300.24	.00	VALVE,GATED "Y" 2 1/2
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		300.24	.00	VALVE,GATED "Y" 2 1/2
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		300.24	.00	VALVE, GATED "Y" 2 1/
TOTAL					OPERATING SUPPLIES	.00	7,564.86	-5,413.53	
4230					REPAIR/MAINT SUPPLIES				
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		.57	.00	HEX NUT
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		2.71	.00	7/16 14 CAPSCREW
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		9.00	.00	GASKET MAKER-GRY
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		9.43	.00	ADHESIVE SELANT CLR
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		120.70	.00	RUST-SUNBST YLW
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		199.51	.00	SUPPLIES
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		499.03	.00	RUST-SUNBST YLW
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		499.03	.00	RUST-SUNBST YLW
TOTAL					REPAIR/MAINT SUPPLIES	.00	1,339.98	.00	

RUN DATE 10/31/2018 TIME 14:29:54

PEI - FUND ACCOUNTING

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 24  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4250 - WATER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4300					RENTAL/CITY OWNED VEHICLE				
4300					RENTAL/CITY OWNED VEHICLE				
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		19.29	.00	TOWING ADAPTER
TOTAL					RENTAL/CITY OWNED VEHICLE	.00	19.29	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		5.22	.00	EMAIL
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		882.00	.00	PROF SVC SEPT 18
4 /19	10/31/18	21		59919	5814 CITY OF HANFORD		3,666.29	.00	DISPATCH NOV 18
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		53.21	.00	OFFICE 365
TOTAL					PROFESSIONAL CONTRACT SVC	.00	4,606.72	.00	
4340					UTILITIES				
4 /19	10/31/18	21		59970	0423 SOCALGAS		50.00	.00	09/14/18-10/17/18
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		55.35	.00	WATER SERVICES
4 /19	10/31/18	21		59899	5516 AT&T		100.41	.00	9391034000
4 /19	10/31/18	21		59898	6639 AT&T		155.08	.00	INTERNET CHRGS
TOTAL					UTILITIES	.00	360.84	.00	
4350					REPAIR/MAINT SERVICES				
4 /19	10/31/18	21	8491	-01 59933	6858 INDUSTRIAL AUTOM		1,300.00	-1,300.00	QUOTE ID: TCL0010, CONTRO
4 /19	10/31/18	21	8491	-02 59933	6858 INDUSTRIAL AUTOM		5,527.60	-5,527.60	HARDWARE
4 /19	10/31/18	21	8491	-03 59933	6858 INDUSTRIAL AUTOM		2,204.80	-2,204.80	ELECTRICAL INSTALLATION
4 /19	10/31/18	21	8491	-04 59933	6858 INDUSTRIAL AUTOM		416.00	-416.00	ELECTRICAL MATERIAL
4 /19	10/31/18	21	8491	-05 59933	6858 INDUSTRIAL AUTOM		445.41	-445.41	SALES TAX
4 /19	10/31/18	21	8491	-06 59933	6858 INDUSTRIAL AUTOM		200.00	-200.00	FREIGHT
TOTAL					REPAIR/MAINT SERVICES	.00	10,093.81	-10,093.81	
4360					TRAINING				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		440.00	.00	TRAINING
TOTAL					TRAINING	.00	440.00	.00	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		4.78	.00	COPIER/PRINTER
TOTAL					RENTALS & LEASES	.00	4.78	.00	
TOTAL					WATER	.00	24,430.28	-15,507.34	



PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 25  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 050 - WATER  
BUDGET UNIT - 4251 - UTILITY OFFICE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
	10/31/18	21		59974	6405 I DESIGN & PRINT		388.71	.00	3000 DOORHANGERS
4 /19							388.71	.00	
TOTAL						.00			
4310									
	10/31/18	21		59924	3022 FIRST BANKCARD		.84	.00	EMAIL
4 /19					3022 FIRST BANKCARD		8.51	.00	OFFICE 365
4 /19	10/31/18	21		59924				.00	
TOTAL						.00	9.35	.00	
4340									
	10/31/18	21		59899	5516 AT&T		16.90	.00	UB 9391034005
4 /19							16.90	.00	
TOTAL						.00			
4380									
	10/31/18	21		59929	5977 GREATAMERICA FIN		91.46	.00	COPIER/PRINTER
4 /19							91.46	.00	
TOTAL						.00			
TOTAL						.00	506.42	.00	
TOTAL						.00	24,936.70	-15,507.34	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 26  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 056 - REFUSE  
BUDGET UNIT - 4256 - REFUSE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220									
	4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		56.37	.00	OFFICE SUPPLIES
TOTAL						.00	56.37	.00	
4310									
	4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		4.60	.00	EMAIL
	4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		46.82	.00	OFFICE 365
	4 /19	10/31/18	21	59919	5814 CITY OF HANFORD		3,666.28	.00	DISPATCH NOV 18
	4 /19	10/31/18	21	8703 -01 59913	6869 MILLENNIUM FUNDI		700.80	-700.80	BLANKET FOR TEMP LABOR 18
	4 /19	10/31/18	21	8703 -01 59913	6869 MILLENNIUM FUNDI		700.80	-700.80	BLANKET FOR TEMP LABOR 18
	4 /19	10/31/18	21	8823 -01 59980	6826 ASBURY ENVIROMEN		3,404.00	-3,404.00	ATTEMPTED CLEAN UP OF WAS
TOTAL						.00	8,523.30	-4,805.60	
4380									
	4 /19	10/31/18	21	59929	5977 GREATAMERICA FIN		.31	.00	COPIER/PRINTER
TOTAL						.00	.31	.00	
TOTAL						.00	8,579.98	-4,805.60	
TOTAL						.00	8,579.98	-4,805.60	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 27  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 060 - SEWER& STORM WTR DRAINAGE  
BUDGET UNIT - 4260 - SEWER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4220					OPERATING SUPPLIES				
4 /19	10/31/18	21		59915	5866 FASTENAL COMPANY		1.16	.00	7/16' MEDSPLIT
4 /19	10/31/18	21		59915	5866 FASTENAL COMPANY		3.28	.00	HCS 7/16-14X2
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		3.49	.00	APP
4 /19	10/31/18	21		59915	5866 FASTENAL COMPANY		4.29	.00	NYLOCK NE 7/16-14Z
4 /19	10/31/18	21		59915	5866 FASTENAL COMPANY		4.29	.00	SAW F/W 7/16Z
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		53.60	.00	22 LATITUDE
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		61.59	.00	OFFICE SUPPLIES
TOTAL					OPERATING SUPPLIES	.00	131.70	.00	
4230					REPAIR/MAINT SUPPLIES				
4 /19	10/31/18	21		59947	0314 LEMOORE AUTO SUP		30.01	.00	15 BLK CBL TIE HD120
TOTAL					REPAIR/MAINT SUPPLIES	.00	30.01	.00	
4310					PROFESSIONAL CONTRACT SVC				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		4.81	.00	EMAIL
4 /19	10/31/18	21		59952	5609 LOZANO SMITH, LL		2,575.25	.00	PROF SVC SEPT 18
4 /19	10/31/18	21		59919	5814 CITY OF HANFORD		3,666.28	.00	DISPATCH NOV 18
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		48.95	.00	OFFICE 365
TOTAL					PROFESSIONAL CONTRACT SVC	.00	6,295.29	.00	
4340					UTILITIES				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		27.59	.00	WATER SERVICES
4 /19	10/31/18	21		59899	5516 AT&T		32.89	.00	SEWER 9391052729
TOTAL					UTILITIES	.00	60.48	.00	
4360					TRAINING				
4 /19	10/31/18	21		59924	3022 FIRST BANKCARD		275.50	.00	TRAINING
TOTAL					TRAINING	.00	275.50	.00	
4380					RENTALS & LEASES				
4 /19	10/31/18	21		59929	5977 GREATAMERICA FIN		9.76	.00	COPIER/PRINTER
TOTAL					RENTALS & LEASES	.00	9.76	.00	
TOTAL					SEWER	.00	6,802.74	.00	
TOTAL					SEWER& STORM WTR DRAINAGE	.00	6,802.74	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 28  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 201 - LLMD ZONE 1  
BUDGET UNIT - 4851 - LLMD ZONE 1 WESTFIELD

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		91.62	.00	MOWER
TOTAL						.00	91.62	.00	
TOTAL						.00	91.62	.00	
TOTAL						.00	91.62	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 29  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 203 - LLMD ZONE 3 SILVA ESTATES  
BUDGET UNIT - 4853 - LLMD ZONE 3 SILVA ESTATES

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		12.80	.00	MOWER
TOTAL						.00	12.80	.00	
TOTAL						.00	12.80	.00	
TOTAL						.00	12.80	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 30  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 205 - LLMD ZONE 5 WILDFLOWER  
BUDGET UNIT - 4855 - LLMD ZONE 5 WILDFLOWER

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		2.09	.00	MOWER
TOTAL						.00	2.09	.00	
TOTAL						.00	2.09	.00	
TOTAL						.00	2.09	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 31  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 206 - LLMD ZONE 6 CAPISTRANO  
BUDGET UNIT - 4856 - LLMD ZONE 6 CAPISTRANO

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
	10/31/18			59945	0286 LAWRENCE TRACTOR		1.23	.00	MOWER
TOTAL						.00	1.23	.00	
TOTAL						.00	1.23	.00	
TOTAL						.00	1.23	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 32  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 207 - LLMD ZONE 7 SILVERADO  
BUDGET UNIT - 4857 - LLMD ZONE 7 SILVERADO

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
	10/31/18	21		59945	0286 LAWRENCE TRACTOR		5.36	.00	MOWER
TOTAL						.00	5.36	.00	
TOTAL						.00	5.36	.00	
TOTAL						.00	5.36	.00	



PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 33  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 208 - LLMD ZONE 8 COUNTY CLUB  
BUDGET UNIT - 4858 - LLMD ZONE 8 COUNTY CLUB

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		3.52	.00	MOWER
TOTAL						.00	3.52	.00	
TOTAL						.00	3.52	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 34  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 208 - LLMD ZONE 8 COUNTY CLUB  
BUDGET UNIT - 4858B - LLMD ZONE 8 B PARK

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		5.87	.00	MOWER
TOTAL						.00	5.87	.00	
TOTAL						.00	5.87	.00	
TOTAL						.00	9.39	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 35  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 209 - LLMD ZONE 9 LA DANTE ROSE  
BUDGET UNIT - 4859 - LLMD ZONE 9 LA DANTE ROSE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		5.09	.00	MOWER
TOTAL						.00	5.09	.00	
TOTAL						.00	5.09	.00	
TOTAL						.00	5.09	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 36  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 210 - LLMD ZONE 10 AVALON  
BUDGET UNIT - 4860 - LLMD ZONE 10 AVALON

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		17.65	.00	MOWER
TOTAL						.00	17.65	.00	
TOTAL						.00	17.65	.00	
TOTAL						.00	17.65	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 37  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 211 - LLMD ZONE 11 SELF HELP EN  
BUDGET UNIT - 4861 - LLMD ZONE 11 SELF HELP EN

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		2.57	.00	MOWER
TOTAL						.00	2.57	.00	
TOTAL					LLMD ZONE 11 SELF HELP EN	.00	2.57	.00	
TOTAL					LLMD ZONE 11 SELF HELP EN	.00	2.57	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 38  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 212 - LLMD ZONE 12 SUMMERWIND  
BUDGET UNIT - 4862 - LLMD ZONE 12 SUMMERWIND

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		24.07	.00	MOWER
TOTAL						.00	24.07	.00	
TOTAL						.00	24.07	.00	
TOTAL						.00	24.07	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 39  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 213 - LLMD ZONE 13 CORNERSTONE  
BUDGET UNIT - 4863 - LLMD ZONE 13 CORNERSTONE

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4350									
4 /19	10/31/18	21		59945	0286 LAWRENCE TRACTOR		3.04	.00	MOWER
TOTAL						.00	3.04	.00	
TOTAL						.00	3.04	.00	
TOTAL						.00	3.04	.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 40  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 252 - PFMD ZONE 2  
BUDGET UNIT - 4872 - PFMD ZONE 2

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
	10/31/18	21	8830	-02 11684	5637 ELITE MAINTENANC		.00	.00	BID PACK ONE
4 /19	10/31/18	21	8830	-02 59914	5637 ELITE MAINTENANC		1,785.00	-1,785.00	BID PACK ONE
TOTAL						.00	1,785.00	-1,785.00	
4350									
	10/31/18	21		59914	5637 ELITE MAINTENANC		420.00	.00	MAINLINE REPAIR - DEV
4 /19	10/31/18	21					420.00	.00	
TOTAL						.00	420.00	.00	
TOTAL						.00	2,205.00	-1,785.00	
TOTAL						.00	2,205.00	-1,785.00	



PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 41  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 253 - PFMD ZONE 3  
BUDGET UNIT - 4873 - PFMD ZONE 3

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/31/18	21	8830	-03 59914	5637 ELITE MAINTENANC		952.00	-952.00	ZONE 3 SILVA ESTATES
TOTAL						.00	952.00	-952.00	
TOTAL						.00	952.00	-952.00	
TOTAL						.00	952.00	-952.00	

PEI  
DATE: 10/31/2018  
TIME: 14:29:54

CITY OF LEMOORE  
EXPENDITURE TRANSACTION ANALYSIS

PAGE NUMBER: 42  
AUDIT11

SELECTION CRITERIA: transact.yr='19' and transact.period='4' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 256 - PFMD ZONE 6  
BUDGET UNIT - 4876 - PFMD ZONE 6

ACCOUNT	DATE	T/C	ENCUMBRANC	REFERENCE	VENDOR	BUDGET	EXPENDITURES	ENCUMBRANCES	DESCRIPTION
4310									
4 /19	10/31/18	21	8830	-01 11684	5637 ELITE MAINTENANC		.00	.00	SAGE CREST
4 /19	10/31/18	21	8830	-01 59914	5637 ELITE MAINTENANC		650.00	-650.00	SAGE CREST
TOTAL					PROFESSIONAL CONTRACT SVC	.00	650.00	-650.00	
TOTAL					PFMD ZONE 6	.00	650.00	-650.00	
TOTAL					PFMD ZONE 6	.00	650.00	-650.00	
TOTAL					REPORT	.00	197,798.05	-67,088.42	

PEI  
DATE: 10/31/2018  
TIME: 14:33:41

CITY OF LEMOORE  
GENERAL LEDGER TRANSACTION ANALYSIS

PAGE NUMBER: 1  
AUDIT311

SELECTION CRITERIA: account.acct between '2000' and '2999'AND transact.yr='19' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND

ACCOUNT	DATE	T/C	REFERENCE	VENDOR/PAYER	DEBIT	CREDIT	DESCRIPTION
2020			ACCOUNTS PAYABLE				
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		5.98	VENDING MACHINES
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		47.18	VENDING MACHINES
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		63.80	PHOTO FRAMES GOLF TOU
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		78.82	VENDING MACHINES
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		154.30	VENDING MACHINES
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD		155.83	GOLF TOURNAMENT
TOTAL			ACCOUNTS PAYABLE		.00	505.91	
2296			YOUTH RECREATION FUND				
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD	63.80		PHOTO FRAMES GOLF TOU
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD	155.83		GOLF TOURNAMENT
TOTAL			YOUTH RECREATION FUND		219.63	.00	
2308			EMPLOYEE APPRECIATION				
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD	5.98		VENDING MACHINES
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD	47.18		VENDING MACHINES
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD	78.82		VENDING MACHINES
4 /19	10/31/18	21	59924	3022 FIRST BANKCARD	154.30		VENDING MACHINES
TOTAL			EMPLOYEE APPRECIATION		286.28	.00	
TOTAL			GENERAL FUND		505.91	505.91	

PEI  
DATE: 10/31/2018  
TIME: 14:33:41

CITY OF LEMOORE  
GENERAL LEDGER TRANSACTION ANALYSIS

PAGE NUMBER: 2  
AUDIT311

SELECTION CRITERIA: account.acct between '2000' and '2999'AND transact.yr='19' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 090 - TRUST & AGENCY

ACCOUNT	DATE	T/C	REFERENCE	VENDOR/PAYER	DEBIT	CREDIT	DESCRIPTION
2020							
4 /19	10/31/18	21	59962	T2608 PHILIP RIOS		250.00	VET HALL REFUND 10/20
TOTAL					.00	250.00	
2300							
4 /19	10/31/18	21	59962	T2608 PHILIP RIOS	250.00		VET HALL REFUND 10/20
TOTAL					250.00	.00	
TOTAL				TRUST & AGENCY	250.00	250.00	
TOTAL REPORT					755.91	755.91	

PEI  
DATE: 10/31/2018  
TIME: 14:31:18

CITY OF LEMOORE  
REVENUE TRANSACTION ANALYSIS

PAGE NUMBER: 1  
AUDIT31

SELECTION CRITERIA: transact.yr='19' and transact.account between '3000' and '3999' and transact.batch='JV110218'  
ACCOUNTING PERIOD: 4/19

FUND - 001 - GENERAL FUND  
BUDGET UNIT - 001 - GENERAL FUND

ACCOUNT	DATE	T/C	RECEIVE REFERENCE	PAYER/VENDOR	BUDGET	RECEIPTS	RECEIVABLES DESCRIPTION
3681	RECREATION FEES						
4 /19	10/31/18	210	59964	T2595 RICHIE REA		-30.00	SENIOR CIT PROM REFUN
TOTAL	RECREATION FEES				.00	-30.00	.00
TOTAL	GENERAL FUND				.00	-30.00	.00
TOTAL	GENERAL FUND				.00	-30.00	.00
TOTAL	REPORT				.00	-30.00	.00