# Planning Commission Meeting Agenda

June 9, 2026
5:30 PM – Regular Meeting
Council Chambers
400 N. Douty St.

Planning Commissioners will meet in-person in the Council Chambers. The meeting will also be live streamed on the City's website: http://livestream.hanford.city/

**ROLL CALL:**

**INVOCATION:**

**FLAG SALUTE:**

**PUBLIC COMMENT:**

*This is the time for citizens to comment on subject matters not on the agenda and that are within the jurisdiction of the Commission. This is also the public's opportunity to request an item from the Consent Calendar be pulled for discussion purposes or to comment on any item on the agenda. Comments related to Public Hearing items will be heard at the time the item is discussed. A maximum of three minutes is allowed for each speaker. Please begin your comments by stating your name and providing your city of residence.*

**CONSENT CALENDAR:**

*Consent Calendar items are considered routine and will be enacted in one motion. There will be no separate discussion of these matters unless a request is made and then the item will be removed from the Consent Calendar to be discussed and voted upon by a separate motion.*

A. Community Development: Approval of the March 24, 2026 Minutes

**PUBLIC HEARING:**

A. Community Development: Conditional Use Permit No. 0069-26: a request to allow an owner-operated pet grooming business to operate at 610 N. Irwin St. in the MX-D Downtown Mixed Use zone district (APN 010-232-007).

B. Community Development: Tentative Parcel Map No. 0015-25: a request to divide two parcels, 55.54 acres and 19.48 acres in size, into three parcels (Parcel 1: 32.00 acres; Parcel 2: 25.24 acres; Parcel 3: 17.79 acres) in the R-L-5 Low Density Residential zone district. The project is located south of Hanford Armona Road, between 12th and 13th Avenues (APN 011-040-040, and -027).

C. Community Development: Modifications to Vesting Tentative Tract 881: A request, by SJVH, to amend previously approved Tentative Tract Map 881 to reflect changes

between the approved tentative map and the submitted final map, including the addition of Acorn Lane off Hume Avenue, reconfiguration of end lots to front Amber Harvest Drive, and a reconfiguration to accommodate a cul-de-sac on Sparrow Drive. The project pertains to Unit III of Tract 881, Live Oak East, which is generally located east of 12th Avenue, south of Hume Avenue (APN 011-110-051-000)

**DIRECTOR'S COMMENTS:**

**COMMISSIONERS' ITEMS OF INTEREST:**

*At this time, any Commissioner may ask a question for clarification of matters within the Planning Commission's jurisdiction, make an announcement, or report briefly on activities in their role as a Planning Commissioner. In addition, subject to the Planning Commissioner's Handbook, Commissioners may request staff to report back to the Planning Commission at a subsequent meeting concerning any matter within the Commissioner's jurisdiction (GC 54954.2).*

**ADJOURNMENT:**

*Materials related to an item on this Agenda submitted to the Planning Commission after distribution of the agenda packet are available to public inspection in the Planning Division Office located at 317 N. Douty Street, Hanford, California 93230, during normal business hours. Such documents are also available at the city's website, www.cityofhanfordca.com subject to staff's ability to post documents before the meeting. If you need a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, please contact the Planning Division's office, 559-585-2580, 317 N. Douty Street, Hanford, California 93230, at least 2 days prior to the meeting {28 CFR 35.102.35.104 ADA Title II} APPEALS: Any action of the Planning Commission, which is a final project decision, may be appealed to the City Council by the applicant or any adversely affected person. To file an appeal, an appeal application and filing fee of $1,100.00 must be submitted to the Community Development Department, 317 N. Douty Street, Hanford, California, within ten (10) days following the date of the final decision of the Planning Commission.*

**Planning Commission Regular Meeting**
**Minutes**
**March 24, 2026 5:30 PM**
**Council Chambers**
**400 N. Douty St.**

## ROLL CALL:

| Present: | Absent: |
|---|---|
| ESPARZA | |
| GILL | |
| NELSON (arrived at 5:38 p.m.) | |
| NORRIS | |
| HAM | |
| McILWAINE | |

## INVOCATION:

There was no invocation.

## FLAG SALUTE:

Commissioner NELSON led the flag salute.

## PUBLIC COMMENT:

*This is the time for citizens to comment on subject matters not on the agenda and that are within the jurisdiction of the Commission. This is also the public's opportunity to request an item from the Consent Calendar be pulled for discussion purposes or to comment on any item on the agenda. Comments related to Public Hearing items will be heard at the time the item is discussed. A maximum of three minutes is allowed for each speaker. Please begin your comments by stating your name and providing your city of residence.*

None.

## CONSENT CALENDAR:

*Consent Calendar items are considered routine and will be enacted in one motion. There will be no separate discussion of these matters unless a request is made and then the item will be removed from the Consent Calendar to be discussed and voted upon by a separate motion.*

No items.

## ELECTION OF THE 2026 PLANNING COMMISSSION CHAIR AND VICE-CHAIR:

Chair HAM opened the nominations and deferred to City Attorney Ty Mizote. Attorney Mizote explained the nominating procedure and called for nominations for the Planning Commission Chair position.

Motion to elect Commissioner HAM.

| | |
|---|---|
| **RESULT:** | **(UNANIMOUS)** |
| **MOVER:** | NORRIS |
| **AYES:** | NORRIS, NELSON, ESPARZA, GILL, HAM |

Attorney Mizote called for nominations for the Vice-Chair position.

Motion to elect Commissioner NELSON.

| | |
|---|---|
| **RESULT:** | **(UNANIMOUS)** |
| **MOVER:** | NORRIS |
| **AYES:** | NORRIS, ESPARZA, GILL, NORRIS, HAM |

## GENERAL BUSINESS:

A. Community Development: Finding of General Plan Consistency for the acquisition of real properties located on the north side of E Sixth Street, west of Brown Street, comprised of approximately 12,000 square feet, located in the City of Hanford, County of Kings, State of California, consisting of Kings County Assessor's Parcel Numbers APNs 012-045-006 and 012-045-007, in accordance with Government Code Section 65402.

Attorney Mizote recused himself from this item, as he owns property within 500 feet of the project, and he left the chambers. Director Jason Waters presented the staff report and invited questions. There being no questions, Chair HAM called for a motion.

Motion to find the acquisition of the property is consistent with the General Plan, adopted April 24, 2017, in accordance with Government Code Section 65402.

| | |
|---|---|
| **RESULT:** | **(UNANIMOUS)** |
| **MOVER:** | NORRIS |
| **SECONDER:** | NELSON |
| **AYES:** | NELSON, NORRIS, ESPARZA, GILL, HAM |

Following the vote, City Attorney Mizote returned to the chambers and resumed his place at the dais.

## PUBLIC HEARING:

A. Community Development: Conditional Use Permit No. 0058-26: a request to locate a massage therapy business in the O-R Office Residential zone district. The project is located at 804 N. Irwin St. Unit C (APN 010-185-014).

Chair HAM opened the public hearing and called for the staff report. Associate Planner Manha presented the staff report, recommended approval, and invited questions of staff. There being no questions, Chair HAM opened Public Comment:

FAVOR
Applicant Johnathan Quair introduced himself and provided information about his business.

OPPOSED
None

Chair HAM called for a motion.

Motion to adopt Resolution No. 2026-04, approving Conditional Use Permit No. 0058-26.

| | |
|---|---|
| **RESULT:** | **(UNANIMOUS)** |
| **MOVER:** | NELSON |
| **SECONDER:** | NORRIS |
| **AYES:** | NELSON, NORRIS, ESPARZA, GILL, HAM |

B. Community Development: **Continuation Request: Staff requests that the Planning Commission continue the public hearing to Tuesday, April 14, 2026, in order to allow for the 30-day State review period to end.**

**Tentative Tract 949:** A request by N & M Capital, LLC, to subdivide a 30.9-acre site into a 211 unit single-family subdivision with a 0.66-acre open space site with a planned unit development overlay in the R-L-5 Low-Density Residential zone district. **Planned Unit Development No. 47-25:** A request to deviate from the standards of the R-L-5 Low-Density Residential zone district, in order to allow reduced lot sizes, width, depth, setbacks, and a deviation to the standard open-space dimension for the proposed subdivision. **Mitigated Negative Declaration No. 2026-12 (SCH #2026030252):** a request to certify that the project will have a less-than-significant impact on the environment with the incorporation of mitigation measures. **Location:** The project is located south of Lacey Boulevard, west of 12 ½ Avenue (Aquifer Drive) APN 011-010-010.

Principal Planner Gabrielle Myers explained that, although the proper noticing was completed on time, technical issues in uploading the environmental documents to CEQAnet (California Environmental Quality Act) caused a change to the required noticing dates. Staff requested that the public hearing be continued to Tuesday, April 14, 2026, in order to allow for the 30-day State review period to end.

Motion to continue the public hearing to April 14, 2026, to allow for the 30-day State review period to end.

| | |
|---|---|
| **RESULT:** | **(UNANIMOUS)** |
| **MOVER:** | NORRIS |
| **SECONDER:** | NELSON |
| **AYES:** | NORRIS, NELSON, ESPARZA, GILL, HAM |

## DIRECTOR'S COMMENTS:

Director Waters thanked the Commissioners for agreeing to the special meeting with City Council on May 12. He stated that the time of the meeting may have to be adjusted, to accommodate schedules. Mr. Waters will notify them of the time shortly. The purpose of the meeting is to go over the work that Mintier-Harnish have been working on regarding Environmental Justice and Objective Design Standards.

## COMMISSIONERS' ITEMS OF INTEREST:

*At this time, any Commissioner may ask a question for clarification of matters within the Planning Commission's jurisdiction, make an announcement, or report briefly on activities in their role as a Planning Commissioner. In addition, subject to the Planning Commissioner's Handbook, Commissioners may request staff to report back to the Planning Commission at a subsequent meeting concerning any matter within the Commissioner's jurisdiction (GC 54954.2).*

Director Waters welcomed the new Alternate Planning Commissioner Lisa McIlwaine.

There were no Commissioners' items of interest.

## ADJOURNMENT:

*Materials related to an item on this Agenda submitted to the Planning Commission after distribution of the agenda packet are available to public inspection in the Planning Division Office located at 317 N. Douty Street, Hanford, California 93230, during normal business hours. Such documents are also available at the city's website, www.cityofhanfordca.com subject to staff's ability to post documents before the meeting. If you need a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, please contact the Planning Division's office, 559-585-2580, 317 N. Douty Street, Hanford, California 93230, at least 2 days prior to the meeting {28 CFR 35.102.35.104 ADA Title II} APPEALS: Any action of the Planning Commission, which is a final project decision, may be appealed to the City Council by the applicant or any adversely affected person. To file an appeal, an appeal application and filing fee of $1,100.00 must be submitted to the Community Development Department, 317 N. Douty Street, Hanford, California, within ten (10) days following the date of the final decision of the Planning Commission.*

Chair HAM adjourned the meeting at 5:25 p.m.

# AGENDA
# STAFF REPORT

| **MEETING DATE:** 6/9/2026 | **AGENDA SECTION:** PUBLIC HEARING |
|---|---|

**SUBJECT:**
Conditional Use Permit No. 0069-26: a request to allow an owner-operated pet grooming business to operate at 610 N. Irwin St. in the MX-D Downtown Mixed Use zone district (APN 010-232-007).

## STAFF RECOMMENDATION

Staff recommends that the Planning Commission:

1. Adopt Resolution 2026-07, approving Conditional Use Permit 0069-26.

## RECOMMENDED MOTION

1. I move to adopt Resolution 2026-07, approving Conditional Use Permit 0069-26.

## PROJECT DESCRIPTION

The project is a request to allow an owner-operated pet grooming business to operate at 610 N. Irwin St. in the MX-D Downtown Mixed Use zone district. As stated in the operational statement provided (see Attachment 1), the applicant proposes to provide services for dogs, including bathing, clipping, and nail trimming. Hours of operation will be Monday – Friday, 9:00 a.m. – 5:00 p.m. There will be no boarding or overnight care provided. The applicant expects to provide services for 7-10 dogs daily, and scheduling by appointment no more than 3-4 dogs on the premises at a time in order to assist with limiting on-site activity, maintaining low noise levels, and reducing traffic congestion in the area. Dogs will be placed in individual kennels while on-site, which will be cleaned and sanitized after each use, in order to ensure the safety and comfort of each animal, and to maintain a clean and hygienic environment in accordance with standard health and safety practices.

As shown on the site plan (see Attachment 2), the business will provide a seating area for customers to wait for their pets as well as two grooming tables, a tub, and kennels for employee use when handling the animals. All business operations will occur within the existing building. There is no outdoor dog relief area or dog run proposed as a part of this project. The use of a pet grooming business requires a conditional use permit in the MX-D Downtown Mixed Use zone district. The last use of the space was a notary office.

### Project Location

The project is located at 610 N. Irwin Street (APN 010-232-007), as shown in Figure 1.

**Figure 1:**
Land Use (property shown in red)



**BACKGROUND INFORMATION**

**General Plan Designation**

The General Plan designates the property as Downtown Mixed Use (see Figure 2). According to General Plan Policy L69, the purpose of the Downtown Mixed Use Land Use Designation is to be a unique pedestrian-oriented, multi-story, concentrated area of shopping, entertainment, eating establishments, high-density housing, and offices primarily served by on-street or public parking concentrated in the historic center of Hanford to serve the entire community. In accordance with Policy L70, typical uses in the Downtown Mixed Use Land Use Designation include a wide range of retail, financial, governmental, professional, business, service, dining, and entertainment activities, along with high density residential dwellings. The proposed allowance of pet grooming is consistent with the General Plan, by allowing a compatible service use in the Downtown Mixed Use Land Use Designation.

**Figure 2: General Plan Designation**
Downtown Mixed Use (property outlined in bold)




## Zoning Designation

The property is zoned MX-D Downtown Mixed Use, which corresponds with the General Plan designation (See Figure 3). Pet grooming businesses are permitted in the MX-D Downtown Mixed Use zone district, subject to the approval of a conditional use permit.

**Figure 3: Zoning Designation**
MX-D Downtown Mixed Use (property outlined in bold)




**Figure 4: Land Use Table**

| Commercial, Office, and Industrial Use Table<br>P = Use is Permitted by Right C = Use Requires Conditional Use Permit<br>A = Use Requires Administrative Use Permit T = Use Requires Temporary Use Permit<br>Blank = Use is Not Allowed | | | |
|---|---|---|---|
| **Land Uses** | | **MX-D** | **Specific Land Use Standards (See identified Section)** |
| J24 | Pet grooming | C | |

In accordance with Section 17.96.020 Land Use Definitions "Pet grooming" means personal service establishment that, for a fee, trims, cleans or curries domestic pets such as dogs and cats and which may sell pet supplies. This use does not include kennel or animal boarding, which is not proposed as a part of this project.

**PROJECT EVALUATION**

Conformance with the standards of the MX-D Downtown Mixed Use zone district

**17.28.030 Site Area**

In the MX-D Downtown Mixed Use zone district, the minimum site area shall be 5,000 square feet, unless a smaller site is approved with a conditional use permit, in accordance with Chapter 17.80. The subject site is an existing building on an existing lot of 1,875 sq. ft., which does not meet the

requirement. However, the property is considered a legally existing, nonconforming site. According to Section 17.90.050(A) of the Hanford Municipal Code, “a lot shall be deemed nonconforming if it was legally created in accordance with the State Subdivision Map Act prior to the adoption or amendment of this title, but which, does not meet all of the provisions, standards, and requirements of this title applicable to lots.” The site was in the original township and has remained unchanged over the years. The applicant does not propose to bring the site into further non-conformance. As an existing site, it may remain, as is.

**17.28.040 Lot Dimensions**

The minimum lot frontage of the MX-D Downtown Mixed Use zone district shall be 40 feet, unless a reciprocal use agreement for shared common access and parking areas is recorded with the Kings County Recorder’s Office. The subject site has an existing 26 feet of street frontage along N. Irwin Street, which does not meet the requirement. However, the property is considered a legally existing, nonconforming site. According to Section 17.90.050(A) of the Hanford Municipal Code, “a lot shall be deemed nonconforming if it was legally created in accordance with the State Subdivision Map Act prior to the adoption or amendment of this title, but which, does not meet all of the provisions, standards, and requirements of this title applicable to lots.” The site was in the original township and has remained unchanged over the years. The applicant does not propose to bring the site into further non-conformance. As an existing site, it may remain, as is.

**17.28.050 Coverage**

The maximum coverage of the lot shall be determined by the combined building setback area requirements, open space requirements, and off-street parking and loading requirements. All required building setbacks, off-street parking and loading requirements were evaluated and mandated as part of the site plan review process.

**17.28.060 Building Setback Area**

No structure is permitted to be placed within a building setback area.

**Front Building Setback**

In the MX-D Downtown Mixed Use zone district there is no front building setback area. The existing building has no setback from the front property line.
Rear Building Setback

In the MX-D Downtown Mixed Use zone district, the rear building setback may be zero feet from the rear lot line, except where the rear lot line abuts a public street, or an R-L, R-M, R-H, OR, O, PF, AP, or CO zone district, then the rear building setback shall be 15 feet. The rear property line does not abut a public street or any of the stated zone districts; therefore, a zero-setback is permissible. The existing building has a 2’ setback from the rear property line.

**Side Building Setback**

In the MX-D Downtown Mixed Use zone district, the side building setback may be zero feet from side lot lines, except where the side lot line abuts an R-L, R-M, R-H, OR, O, PF, AP, or CO zone district, the setback shall be 15 feet. The subject site is abutted by a property in the MX-D Downtown Mixed Use zone district to the south and an alley to the north; therefore, a zero-setback is permitted from the side property lines. The existing building has 3’-3 1/2” setbacks from the side property lines.

All setback requirements for the MX-D Downtown Mixed Use zone district have been satisfied.

**17.28.070 Distances Between Structures**

In the MX-D Downtown Mixed Use zone district, all distances allowed by the building code area allowed. The project proposed to be developed within an existing structure has been evaluated by the Building Official and Fire Chief and conditioned according to the California Building and Fire Codes.

**17.28.080 Height of Structures**

The maximum structure height in the MX-D Downtown Mixed Use zone district shall be 100 feet. The existing building on site is a single-level building, well below the 100-foot maximum height limitation.

**17.28.090 Driveways**

Whenever possible, developments in the MX-D Downtown Mixed Use zone district shall share driveways to minimize the number of driveways on public streets. New driveways near street corners shall be located a minimum 100 feet from the radius curve of the curb, unless otherwise specifically approve by the City Engineer. Sites with alleys should utilize alley access to minimize driveways on streets to the greatest extent possible. The site has no existing driveways and is not proposing any new driveways. No new driveways are required.

**17.28.100 Off-Street Parking**

Since there is not an established parking requirement for pet grooming businesses, the staff shall determine the most similar specified use. It was determined that the parking requirement for offices would be the most similar use for this site. Chapter 17.54.040 of the Hanford Municipal Code requires 1 space per 250 square feet for all office and medical uses, except call center, hospital, and pharmacy. Based on the calculation for parking requirements for a change of use in the Central Parking and Business Improvement District stated below, no additional parking is required.

**Calculation:**

| Proposed Use | Pet Grooming |
|---|---|
| Total Square Feet | 1,830.4 sq. ft. |
| Parking Requirement Per Municipal Code | 1:250 sq. ft. |
| **Total Parking Required** | **(A) 7 stalls** |

| Previous Use | Notary Office |
|---|---|
| Total Square Feet of Previous Use | 1,830.4 sq. ft. |
| Parking Requirement of Previous Use | 1:250 sq. ft. |
| **Total Parking Credit** | **(B) 7 stalls** |

Parking Requirement:

Total Parking Required (A) Less Total Parking Credit (B) equals New Parking Demand (C)

(A) 7 - (B) 7 = (C) 0 Parking Spaces Required

The existing site has no off-street parking spaces. According to General Plan Policy L69, the purpose of the Downtown Mixed Use district is to provide a unique pedestrian-oriented, multi-story, concentrated area of shopping, entertainment, eating establishments, high-density housing, and offices primarily served by on-street or public parking concentrated in the historic center of Hanford to serve the entire community. There is one on-street parking available along Irwin directly in front of the site and additional on-street parking in the surrounding area Per Section 17.54.050, “no existing land use or structure shall be deemed to be a nonconforming use solely because of the lack of off-street parking or off-street loading facilities prescribed in this chapter.”

**17.28.110 Usable open space**

In the MX-D Downtown Mixed Use zone district, there is no standard requirement for minimum usable open space. However, conditional uses may be required to provide usable open space as a condition of approval. Usable open space is not a requirement of this application.

**17.28.120 Landscaping**

In the MX-D Downtown Mixed Use zone district, landscaping shall be provided and permanently maintained in a setback area not less than 15 feet from a lot line adjoining a street, except where the setback area is covered by structures, parking, or driveways. The existing site is fully developed. Landscaping is not provided within any building setback areas, since the building essentially covers the entire property. There are no landscaping changes proposed. The landscaping requirements are satisfied.

**17.28.130 Screening, Fences, and Walls**

A block wall with a minimum height of seven (7) feet shall be provided along any side or rear lot line that abuts an R-L, R-M, R-H, OR, PF, AP, or CO zone district. The subject site does not abut any of the specified zones; therefore, a block wall is not required. No fence or wall shall be placed in front of or within any landscaped area located next to a street. There is no existing or proposed fence or wall within any landscaped areas located next to the street. The open storage of materials and equipment attendant to a use shall be permitted only within an area surrounded or screened by a solid wall or fence seven feet minimum in height. Such storage shall not be visible above the fence or wall. Outdoor storage is not proposed for the subject site. All storage of materials and business operations will occur within the existing building.

**17.28.140 Signs**

Signs placed in the MX-D Downtown Mixed Use zone district shall be subject to the following requirements:

Table 17.56.090(A)

| Number and Size of Permanent Signs by Zone | | |
|---|---|---|
| **Zone District** | **Building Signs** | **Freestanding Signs** |
| MX-D zone | 2 sq. ft. per 1 lineal foot of building frontage up to 100 sq. ft. on primary frontage.<br><br>1 sq. ft. per 1 lineal foot up to 100 sq. ft. on secondary frontage.<br><br>External illumination or exposed neon illumination only. | None allowed. |

Signage requires a separate application and will be evaluated at the time of submittal.

**17.28.150 General Provisions and Standards**

In the MX-D Downtown Mixed Use zone district, all businesses, services, and processes shall be conducted entirely within a completely enclosed permanently fixed structure, except where specifically permitted by this title. All pet grooming operations are proposed to be located within the existing footprint of the building.

All requirements of the MX-D Downtown Mixed Use zone district have been satisfied, except for those items that are legally non-conforming.

**FINDINGS FOR APPROVAL: CONDITIONAL USE PERMIT**

**Conditional Use Permit No. 0069-26**

In taking action on a Conditional Use Permit, the Planning Commission must make the appropriate findings, in accordance with Section 17.80.030 of the Hanford Municipal Code:

1. The proposed use would not impair the integrity and character of the zoning district in which it is to be located;

ANALYSIS: The proposed use will not impair the integrity and character of the MX-D Downtown Mixed Use zone district. Pet grooming businesses contribute to the goal of the General Plan to establish the Downtown Mixed Use designation for compatible service uses. The proposed pet grooming business will comply with the standards set forth in the Hanford Municipal Code for the MX-D Downtown Mixed Use zone district, except for those items that are legally existing, non-conforming, but will not be brought into further non-conformance.

2. The proposed use would be compatible with existing land uses and future permitted land uses within the zoning district in which the proposed use is to be located;

ANALYSIS: The proposed pet grooming business is compatible with existing land uses and future permitted land uses within the MX-D Downtown Mixed Use zone district. Pet grooming businesses contribute to the goal of the General Plan to establish the Downtown Mixed Use designation for compatible service uses. The proposed pet grooming business will comply with the standards set forth in the Hanford Municipal Code for the MX-D Downtown Mixed Use zone district, except for

those items that are legally existing, non-conforming, but will not be brought into further non-conformance. Lori's Puppy Palace is an example of an existing pet grooming business within this zone district.

3. The proposed use is consistent with the General Plan.

ANALYSIS: According to General Plan Policy L69, the purpose of the Downtown Mixed Use Land Use Designation is to be a unique pedestrian-oriented, multi-story, concentrated area of shopping, entertainment, eating establishments, high-density housing, and offices primarily served by on-street or public parking concentrated in the historic center of Hanford to serve the entire community. In accordance with Policy L70, typical uses in the Downtown Mixed Use Land Use Designation include a wide range of retail, financial, governmental, professional, business, service, dining, and entertainment activities, along with high density residential dwellings. The proposed allowance of pet grooming business is consistent with the General Plan, by allowing a compatible service use in the Downtown Mixed Use Land Use Designation.

4. There will not be significant effects upon the quality of the environment and natural resources;

ANALYSIS: This project is categorically exempt from further environmental review, as per Section 15301 Existing Facilities of the California Environmental Quality Act (CEQA) Guidelines. A Notice of Exemption has been prepared and is attached as **Attachment 3**.

5. The proposed location, size, design, and operating characteristics of the proposed use would not be detrimental to the public interests, health, safety, convenience, or welfare of the city and that any incompatible impacts of the proposed use are mitigated by conditions of approval.

ANALYSIS: This application has been reviewed by the various City departments and evaluated for conformity with the requirements of Chapter 17.28 of the Hanford Municipal Code. The use of this site for a pet grooming business is compliant with the Hanford Municipal Code. Any improvements required for public health, safety, and welfare have been applied to the project as conditions of approval.

**CONDITIONS OF APPROVAL**

Conditions of Approval:

1. Comply with all regulations set forth in Chapter 17.28 Downtown Mixed Use of the Hanford Municipal Code.

2. An active business license shall be maintained for this location.

3. The business shall operate consistent with the operational statement provided.

4. Use of the site shall comply with the uses listed as permitted, permitted with an administrative approval, conditionally permitted, or temporarily permitted in the land use table presented in Chapter 17.08 of the Hanford Municipal Code. The proposed use shall operate in conformance with the "pet grooming" definition in Chapter 17.96 of the Hanford Zoning Ordinance.

5. No expansion of the use or structures which would tend to increase the projected scale of operations beyond the scope and nature described in this Conditional Use Permit shall be permitted except upon application for, and approval of, modification of this application according to all

procedures and requirements thereof.

6. Approval of this project does not exempt compliance with all applicable sections of the Zoning Ordinance, Public Works Improvement Standards, fees, or other City Ordinances.

Conditions of approval from the Hanford Engineering and Building Divisions appear in the resolution.

**ENVIRONMENTAL ASSESSMENT**

This project is categorically exempt from further environmental review, in accordance with the California Environmental Quality Act Guidelines Section 15301 Existing Facilities. There are no exceptions to this exemption, as per Section 15300.2 Exceptions of the California Environmental Quality Act (CEQA) Guidelines. A Notice of Exemption has been prepared for the project – **Attachment 3**.

**PUBLIC COMMENTS**

A Notice of Public Hearing for a Conditional Use Permit was noticed in the local newspaper on May 27, 2026 and mailed to property owners within 300 feet of the project site on May 27, 2026. No public comments have been received as of the date of preparation of this report.

**RECOMMENDATION**
Staff recommends that the Planning Commission:

1. Adopt Resolution 2026-07, approving Conditional Use Permit 0069-26.

**Applicant:**
Candace Berumen
901 W. Mulberry Dr.
Hanford, CA 93230

**Property Owner:**
David Lloyd
1388 W. Semillon St.
Hanford, CA 93230

**ATTACHMENTS:**
1. Resolution No. 2026-07
2. Attachment 1 CUP0069-26
3. Attachment 2 CUP0069-26
4. Attachment 3 CUP0069-26
5. APN Map CUP0069-26

**RESOLUTION NO. 2026-07**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD APPROVING CONDITIONAL USE PERMIT NO. 0069-26, A REQUEST TO OPERATE A PET GROOMING BUSINESS IN THE MX-D DOWNTOWN MIXED USE ZONE DISTRCIT. THE PROJECT IS LOCATED AT 610 N. IRWIN ST. (APN 010-232-007).**

At a regular meeting of the City of Hanford Planning Commission duly called and held on June 9, 2026 on motion of Commissioner _____, seconded by Commissioner ____, and duly carried, the following resolution was adopted:

**WHEREAS**, Conditional Use Permit No. 0069-26, a request to operate a pet grooming business in the MX-D Downtown Mixed Use zone district, as shown in **Exhibit A**, has been reviewed by the Planning Commission of the City of Hanford in accordance with Title 17.80 of the Hanford Municipal Code; and

**WHEREAS**, the project is located at 610 N. Irwin St. (APN 010-232-007); and

**WHEREAS**, staff, the various governmental departments, and the Planning Commission have given careful consideration to this Conditional Use Permit and have made recommendations thereon; and

**WHEREAS**, the project is exempt from environmental review, per Section 15301 existing facilities of the California Environmental Quality Act (CEQA) Guidelines and a Notice of Exemption has been prepared; and

**WHEREAS**, on the basis of the facts and evidence provided in the staff report and the written and oral evidence presented at the public hearing, the Planning Commission hereby makes the following findings pursuant to Section 17.80.030 of the Hanford Municipal Code:

1. The proposed use would not impair the integrity and character of the zoning district in which it is to be located;

ANALYSIS: The proposed use will not impair the integrity and character of the MX-D Downtown Mixed Use zone district. Pet grooming businesses contribute to the goal of the General Plan to establish the Downtown Mixed Use designation for compatible service uses. The proposed pet grooming business will comply with the standards set forth in the Hanford Municipal Code for the MX-D Downtown Mixed Use zone district, except for those items that are legally existing, non-conforming, but will not be brought into further non-conformance.

2. The proposed use would be compatible with existing land uses and future permitted land uses within the zoning district in which the proposed use is to be located;

ANALYSIS: The proposed pet grooming business is compatible with existing land uses and future permitted land uses within the MX-D Downtown Mixed Use zone district. Pet grooming businesses contribute to the goal of the General Plan to establish the Downtown Mixed Use designation for compatible service uses. The proposed pet grooming business will comply with the standards set forth in the Hanford Municipal Code for the MX-D Downtown Mixed Use zone district, except for those items that are legally existing, non-conforming, but will not be brought into further non-conformance. Lori's Puppy Palace is an example of an existing pet grooming business within this zone district.

3. The proposed use is consistent with the General Plan.

ANALYSIS: According to General Plan Policy L69, the purpose of the Downtown Mixed Use Land Use Designation is to be a unique pedestrian-oriented, multi-story, concentrated area of shopping, entertainment, eating establishments, high-density housing, and offices primarily served by on-street or public parking concentrated in the historic center of Hanford to serve the entire community. In accordance with Policy L70, typical uses in the Downtown Mixed Use Land Use Designation include a wide range of retail, financial, governmental, professional, business, service, dining, and entertainment activities, along with high density residential dwellings. The proposed allowance of pet grooming business is consistent with the General Plan, by allowing a compatible service use in the Downtown Mixed Use Land Use Designation.

4. There will not be significant effects upon the quality of the environment and natural resources;

ANALYSIS: This project is categorically exempt from further environmental review, as per Section 15301 Existing Facilities of the California Environmental Quality Act (CEQA) Guidelines. A Notice of Exemption has been prepared.

5. The proposed location, size, design, and operating characteristics of the proposed use would not be detrimental to the public interests, health, safety, convenience, or welfare of the city and that any incompatible impacts of the proposed use are mitigated by conditions of approval.

ANALYSIS: This application has been reviewed by the various City departments and evaluated for conformity with the requirements of Chapter 17.28 of the Hanford Municipal Code. The use of this site for a pet grooming business is compliant with the Hanford Municipal Code. Any improvements required for public health, safety, and welfare have been applied to the project as conditions of approval.

**THEREFORE, BE IT RESOLVED** that Conditional Use Permit No. 0069-26 be approved, subject to the conditions below, and the conditions of approval attached as **Exhibit B**.

1. Comply with all regulations set forth in Chapter 17.28 Downtown Mixed Use of the Hanford Municipal Code.

2. An active business license shall be maintained for this location.

3. The business shall operate consistent with the operational statement provided, attached as **Exhibit C**.

4. Use of the site shall comply with the uses listed as permitted, permitted with an administrative approval, conditionally permitted, or temporarily permitted in the land use table presented in Chapter 17.08 of the Hanford Municipal Code. The proposed use shall operate in conformance with the “pet grooming” definition in Chapter 17.96 of the Hanford Zoning Ordinance.

5. No expansion of the use or structures which would tend to increase the projected scale of operations beyond the scope and nature described in this Conditional Use Permit shall be permitted except upon application for, and approval of, modification of this application according to all procedures and requirements thereof.

6. Approval of this project does not exempt compliance with all applicable sections of the Zoning Ordinance, Public Works Improvement Standards, fees, or other City Ordinances.

**EXPIRATION**

That this Conditional Use Permit become null and void two (2) years after the effective date of approval, unless, prior to the expiration, the use for which the permit was approved has commenced. Prior to expiration of a permit, a person having authority to file an application may file a written request with the Community Development Director for extension of a permit that may otherwise expire. The request for extension will be taken to the Planning Commission, who may extend the expiration of the permit by one year.

**PASSED AND ADOPTED** at a regular meeting of the Hanford City Planning Commission by the following vote:

| | |
|---|---|
| AYES: | Commissioners |
| NOES: | Commissioners |
| ABSTAIN: | Commissioners |
| ABSENT: | Alternate Commissioner |

STATE OF CALIFORNIA )
COUNTY OF KINGS ) ss
CITY OF HANFORD )

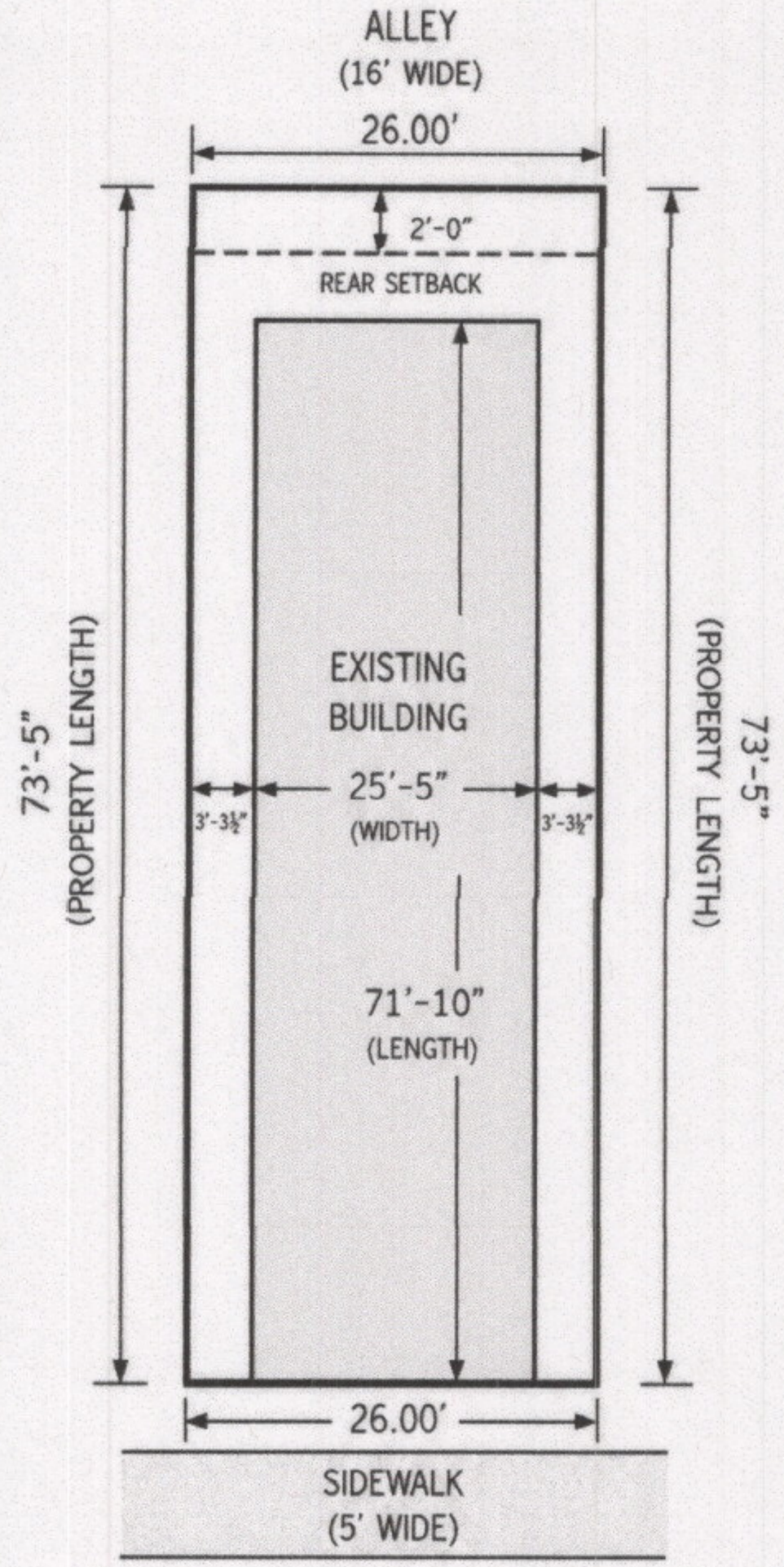
I, **Jason Waters**, Secretary of the City of Hanford Planning Commission, do hereby certify the foregoing Resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the 9th day of June, 2026.

Jason Waters, Secretary

**Exhibit A**
Site Plan

# PLOT PLAN – 610 N IRWIN ST

HANFORD, CALIFORNIA 93230




**OWNER INFORMATION**

Owner: David Lloyd
1388 Semillion st
Hanford, CA 93230
(559) 212-1441

**PROPERTY INFORMATION**

APN: 010-232-007-000
ZONING: MXD
LOT SIZE: ±0.04 ACRES
LEGAL DESCRIPTION:
SEC 25/18/21 N. 36 FT OF E 75 FT OF LOT 16; AND LOT 16 1/2, EX W 50 FT / BLK 183

**LOT DIMENSIONS**

| | |
|---|---|
| FRONTAGE (N IRWIN ST): | 26.00' |
| DEPTH(PROPERTY LENGTH): | 73'-5" |
| AREA: | ±1,875 SQ FT (±0.04 ACRES) |

**BUILDING DIMENSIONS**

| | |
|---|---|
| WIDTH: | 25'-5" |
| LENGTH: | 71'-10" |

**LEGEND**

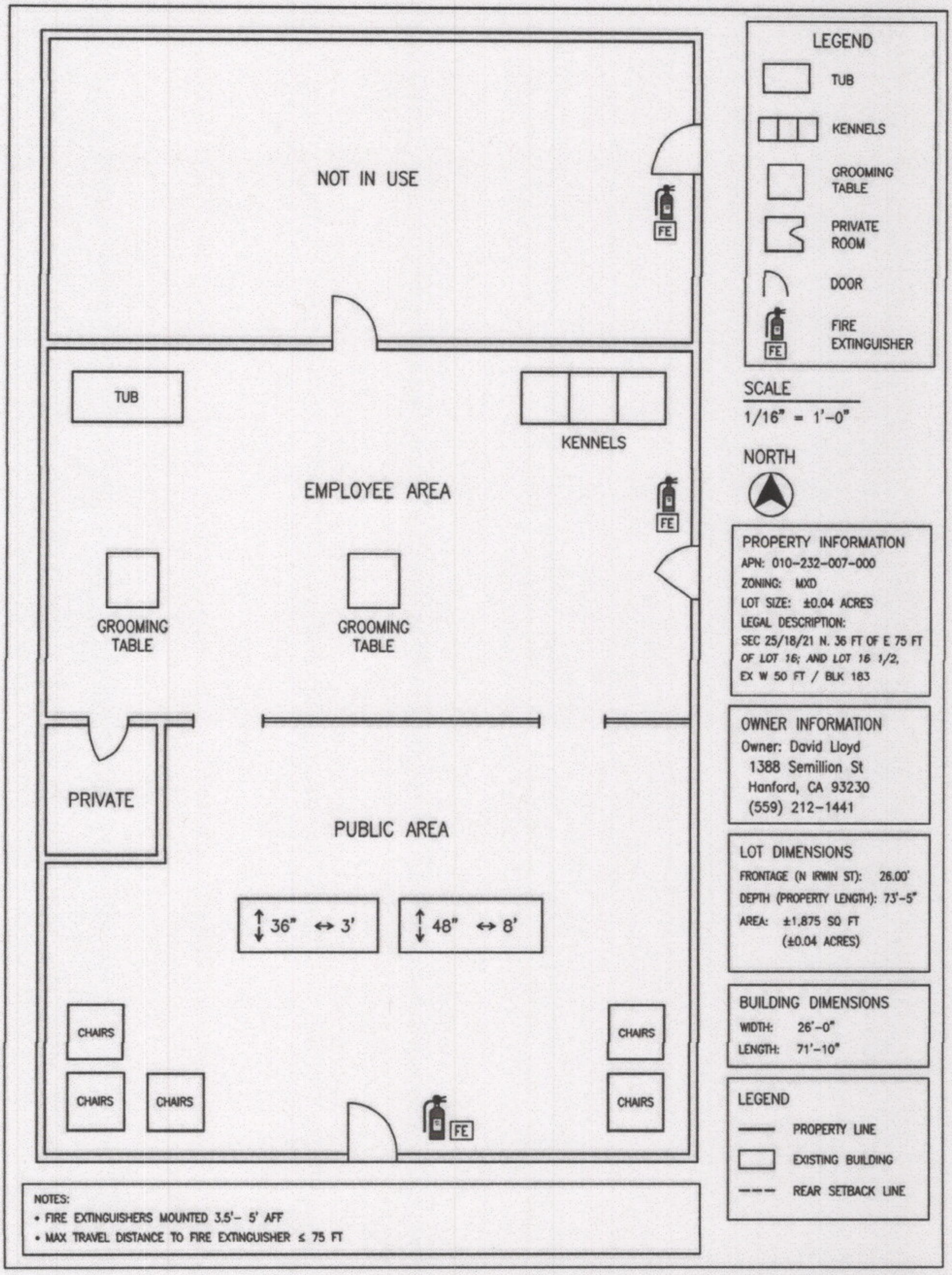
- PROPERTY LINE
- EXISTING BUILDING
- REAR SETBACK LINE

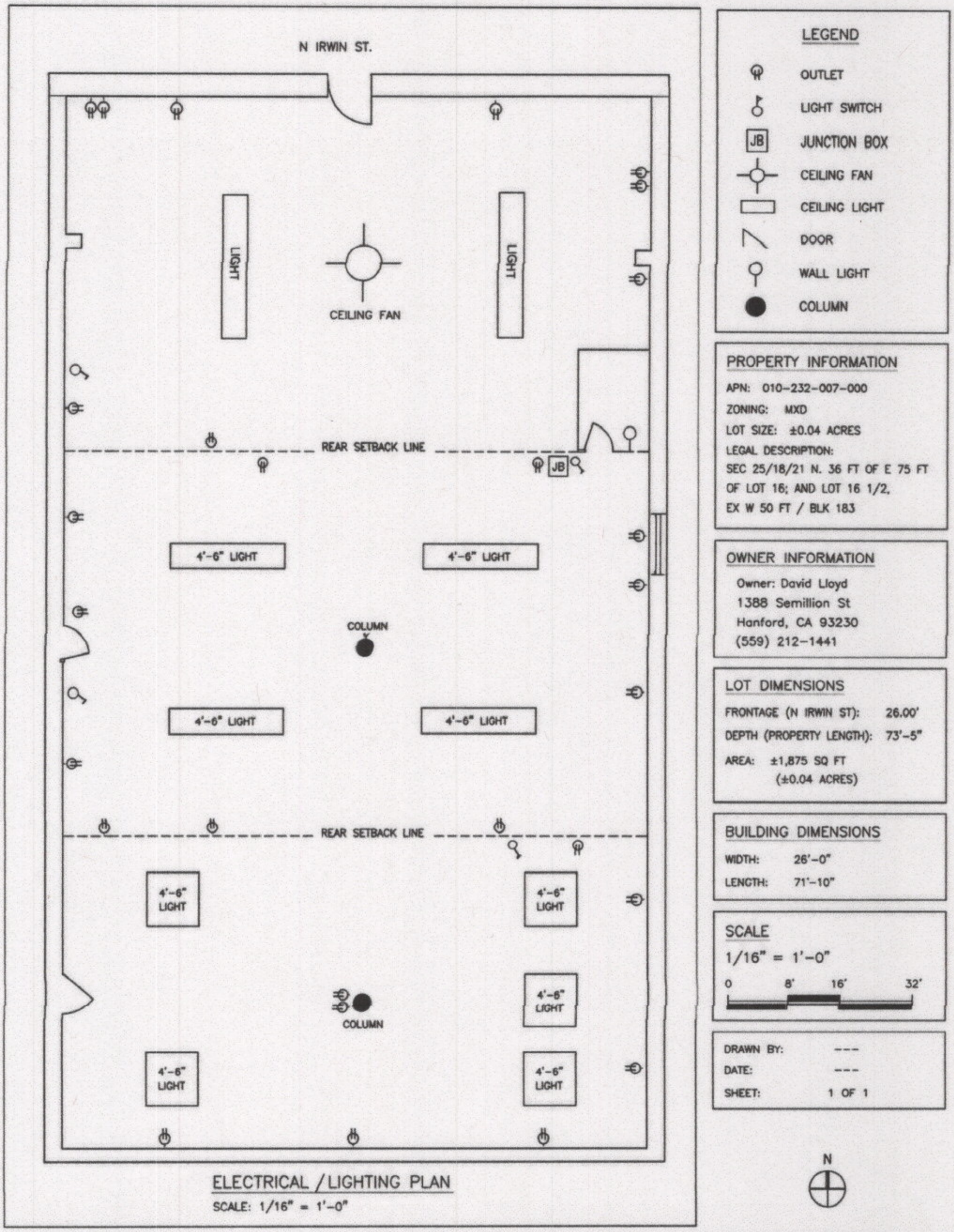
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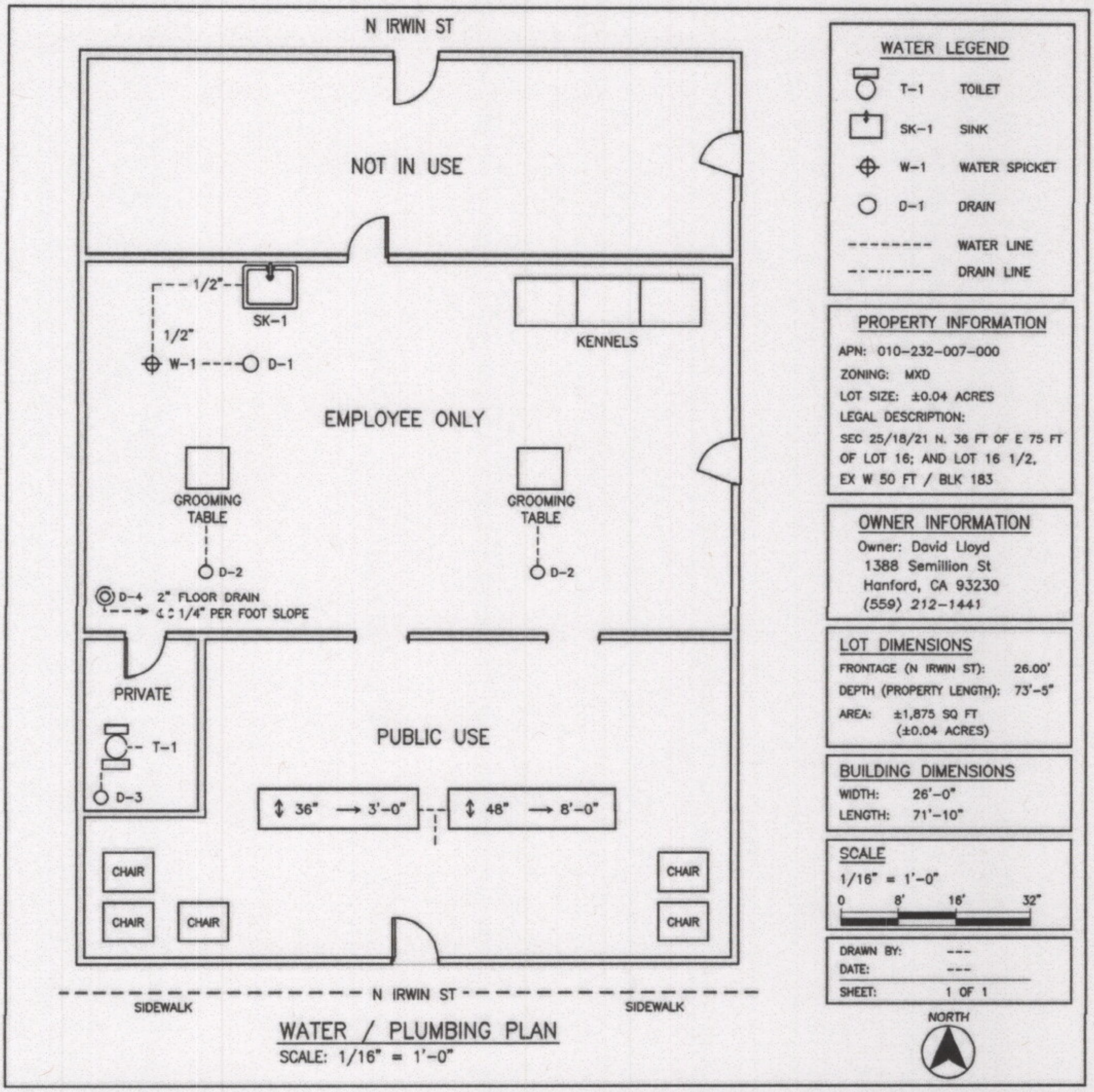
SCALE: 1/16" = 1'-0"

0' 8' 16' 32'

| | |
|---|---|
| PROJECT: 610 N IRWIN ST HANFORD, CA 93230 | DRAWN BY: - - - |
| DATE: 05/20/2024 | SHEET: 1 OF 1 |
| SCALE: 1/16" = 1'-0" | |


NOT IN USE
FE
TUB
KENNELS
EMPLOYEE AREA
FE
GROOMING TABLE
GROOMING TABLE
PRIVATE
PUBLIC AREA
36" ↔ 3'
48" ↔ 8'
CHAIRS
CHAIRS
CHAIRS
CHAIRS
CHAIRS
FE
LEGEND
TUB
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PRIVATE ROOM
DOOR
FIRE EXTINGUISHER
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SCALE
1/16" = 1'-0"
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(559) 212-1441
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AREA: ±1,875 SQ FT
(±0.04 ACRES)
BUILDING DIMENSIONS
WIDTH: 26'-0"
LENGTH: 71'-10"
LEGEND
PROPERTY LINE
EXISTING BUILDING
REAR SETBACK LINE
NOTES:
• FIRE EXTINGUISHERS MOUNTED 3.5'– 5' AFF
• MAX TRAVEL DISTANCE TO FIRE EXTINGUISHER ≤ 75 FT


N IRWIN ST.
LIGHT
CEILING FAN
LIGHT
REAR SETBACK LINE
JB
4'-6" LIGHT
4'-6" LIGHT
COLUMN
4'-6" LIGHT
4'-6" LIGHT
REAR SETBACK LINE
4'-6" LIGHT
4'-6" LIGHT
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COLUMN
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4'-6" LIGHT
LEGEND
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SCALE
1/16" = 1'-0"
0 8' 16' 32'
DRAWN BY: ---
DATE: ---
SHEET: 1 OF 1
N
ELECTRICAL / LIGHTING PLAN
SCALE: 1/16" = 1'-0"




WATER / PLUMBING PLAN

SCALE: 1/16" = 1'-0"

**Exhibit B**
Conditions of Approval

May 13, 2026

**Permit Number:** CUP0069-26
**Address:** 610 N Irwin Street

**Project: Dog Grooming**

1. That building permits must be obtained from the City Building Division for each structure to include but not limited to: buildings, pools, fences, trash enclosures, signs and carports for any structural, plumbing, electrical or mechanical work being done.

2. That no building or structure shall be used or occupied, and no change in the existing occupancy classification of building or structure or portion thereof shall be made until the building official has approved the change and issued a Certificate of Occupancy.

3. That detailed dimensioned plans be provided to the Building Division for each structure prior to obtaining construction permits. Each structure will require a separate submittal and permit.

4. That each structure will require plans and calculations signed by an architect or engineer licensed to practice in the State of California. Submittal shall consist of as applicable:

4.1 1 copy of the City of Hanford Permit Application form
4.2 1 Electronic set of Drawings, unless noted, including:
- 4.2.1 Grading Plan (Civil Drawings, for reference)
- 4.2.2 Site Plan
- 4.2.3 Architectural Drawings
- 4.2.4 Structural Drawings
- 4.2.5 Electrical Drawings
- 4.2.9 Planning Dept. "Conditions of Approval" or "Resolution" printed on the drawings and part of the drawing submittal
- 4.2.10 Original sets shall be stamped and wet signed by an Architect or Engineer licensed in the State of California, if required.

**** Each structure will be considered a separate submittal. Grading, Landscaping, Signage and all Fire permits are separate submittals as well and require separate applications and submittals as applicable. ****

4.3 1 complete electronic set of documentation, unless noted, including:

4.3.1 Architectural Specifications
4.3.2 Structural Calculations
4.3.3 Electrical Calculations, if not included on the drawings
4.3.4 Mechanical Calculations, if not included on the drawings
4.3.5 Plumbing Calculations, if not included on the drawings
4.3.6 Energy Calculations, if not included on the drawings
4.3.7 CalGreen Compliance including C & D Recycle plan
4.3.8 Compliance with the City of Hanford Landscape Ordinance
4.3.9 Original sets shall be stamped and wet signed by an Architect or Engineer licensed in the State of California.

5. That all construction shall conform to the 2025 of the California Residential Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Fire Code, but the 2025 California Energy Code and 2025 CalGreen.
6. When submitting plans to the Building Department, be sure to indicate any accessible countertops (ADA). For example, if you have a sales counter in the lobby area, the maximum height is to be 34 inches. Please indicate this on the plans.
7. On all plan submittals, show plumbing installations and fixtures, door widths, show bathroom location, ect.

**Mitch Couch**
**Building Official, CBO**
**City of Hanford**

559.585.2032 | www.hanfordca.gov
mcouch@hanfordca.gov | 317 N Douty St

# PUBLIC WORKS DIVISION AND UTILITIES & ENGINEERING DIVISION DEVLOPMENT PLAN RQUIREMENTS

| | | |
|---|---|---|
| | **ADRIAN RUBALCABA** (SENIOR ENGINEER) | (559) 585-2596 |
| | **STEVE COODEY** (ASSISTANT ENGINEER) | (559) 585-2582 |
| ✔ | **ROBBIE BUCHANAN** (ASSISTANT ENGINEER) | (559) 585-2556 |
| | **KATLIN ROWEY** (ASSOCIATE SURVEYOR) | (559) 415-7188 |

| | |
|---|---|
| PROJECT NO.: | ***CUP0069-26*** |
| DATE: | ***05/14/26*** |
| PROJECT TITLE: | ***DOG GROOMING BUSINESS*** |
| DESCRIPTION: | ***CONDITIONAL USE PERMIT TENANT IMPROVEMENTS*** |
| | ***TO CONVERT THE EXISTING BUILDING INTO A DOG GROOMING BUSINESS*** |
| APPLICANT: | ***CANDACE BERUMEN ID-000030185*** |
| LOCATION: | ***610 N IRWIN ST HANFORD, CA, 93230*** |
| APN: | ***010232007000*** |

**THE DEVELOPMENT SHALL COMPLY WITH ALL APPLICABLE CITY OF HANFORD STANDARDS AND SPECIFICATIONS, WITH ANY DEVIATIONS REQUIRING PRIOR APPROVAL FROM THE CITY ENGINEER. THE DEVELOPER IS SOLELY RESPONSIBLE FOR ALL FINANCIAL AND OTHER ARRANGEMENTS RELATED TO THE PLANNING, ENGINEERING, SCHEDULING, INSTALLATION, RELOCATION, OR UNDERGROUNDING OF PRIVATELY-OWNED UTILITIES, INCLUDING ELECTRIC, GAS, AND TELECOMMUNICATIONS. SIGNIFICANT PROJECT DELAYS MAY OCCUR IF UTILITY ISSUES ARE NOT RESOLVED BEFORE CONSTRUCTION BEGINS.**

## PROJECT COMMENTS/CONDITIONS

***THE UTILITIES & ENGINEERING DEPARTMENT HAS REVIEWED THE SUBMITTED PLANS FOR THE ABOVE-REFERENCED PROJECT AND APPROVES THE PLANS SUBJECT TO THE CONDITIONS NOTED BELOW AND ON THE SUBMITTAL. ALL LISTED CONDITIONS SHALL BE ADDRESSED AND INCORPORATED INTO THE PROJECT.***

***ALL PUBLIC WORKS, UTILITIES, AND ENGINEERING CONDITIONS, INCLUDING ALL REQUIRED UTILITY IMPROVEMENTS, SHALL BE SHOWN AND INCORPORATED INTO THE TENANT IMPROVEMENT BUILDING PERMIT PLAN SET AND DOCUMENT SUBMITTAL FOR REVIEW AND APPROVAL BY THE ENGINEERING DIVISION.***

***#1. THE APPLICANT SHALL INCLUDE THE PROPOSED BACKFLOW PREVENTION ASSEMBLY LOCATION AND INSTALLATION DETAILS WITH THE BUILDING PLAN SUBMITTAL FOR REVIEW AND APPROVAL BY THE UTILITIES AND ENGINEERING DEPARTMENT PRIOR TO INSTALLATION. THE APPLICANT SHALL ALSO PROVIDE AN ACCURATE FIXTURE UNIT COUNT AND VERIFY THAT THE EXISTING WATER SERVICE SIZE IS ADEQUATE FOR THE PROPOSED WATER USAGE IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM PLUMBING CODE. IF THE EXISTING WATER SERVICE DOES NOT MEET THE REQUIRED SERVICE NEEDS, THE APPLICANT SHALL HOT TAP AN APPROPRIATELY SIZED (NO HALF SIZES) WATER SERVICE FROM THE WATER MAIN ON IRWIN STREET. ANY EXISTING WATER SERVICES NOT UTILIZED SHALL BE ABANDONED AT THE MAIN IN ACCORDANCE WITH CITY REQUIREMENTS AND TO THE SATISFACTION OF THE PUBLIC WORKS INSPECTOR.***

*****NO ADDITIONAL IMPACT FEES WILL BE ASSESSED IN ASSOCIATION WITH THIS PROJECT.***

**Exhibit C**
Operational Statement

**Proposed Use: Dog Grooming Business**
**Location:** 610 N. Irwin Street

I am proposing to operate a small, owner-operated dog grooming business at the above-referenced location. Services will include bathing, clipping, and nail trimming. No boarding or overnight care will be provided.

**Hours of Operation:**
Monday through Friday, 9:00 a.m. to 5:00 p.m.

**Staffing:**
The business will be operated solely by the owner. No additional employees are proposed at this time.

**Operations and Capacity:**
The business is expected to service approximately 7 to 10 dogs per day. Dogs will be scheduled by appointment only to ensure controlled customer flow and minimize traffic and parking impacts. At any given time, there will be no more than 3 to 4 dogs on the premises.

Each dog will be housed in an individual kennel while on-site. This setup is intended to ensure the safety and comfort of the animals and to help mitigate noise levels.

**Noise and Traffic Mitigation:**
Appointment-only scheduling will stagger arrivals and departures, reducing congestion and limiting on-site activity at any one time. The limited number of animals on-site will also assist in maintaining low noise levels.

**Sanitation:**
All kennels and grooming areas will be cleaned and sanitized after each use in accordance with standard health and safety practices to maintain a clean and hygienic environment.

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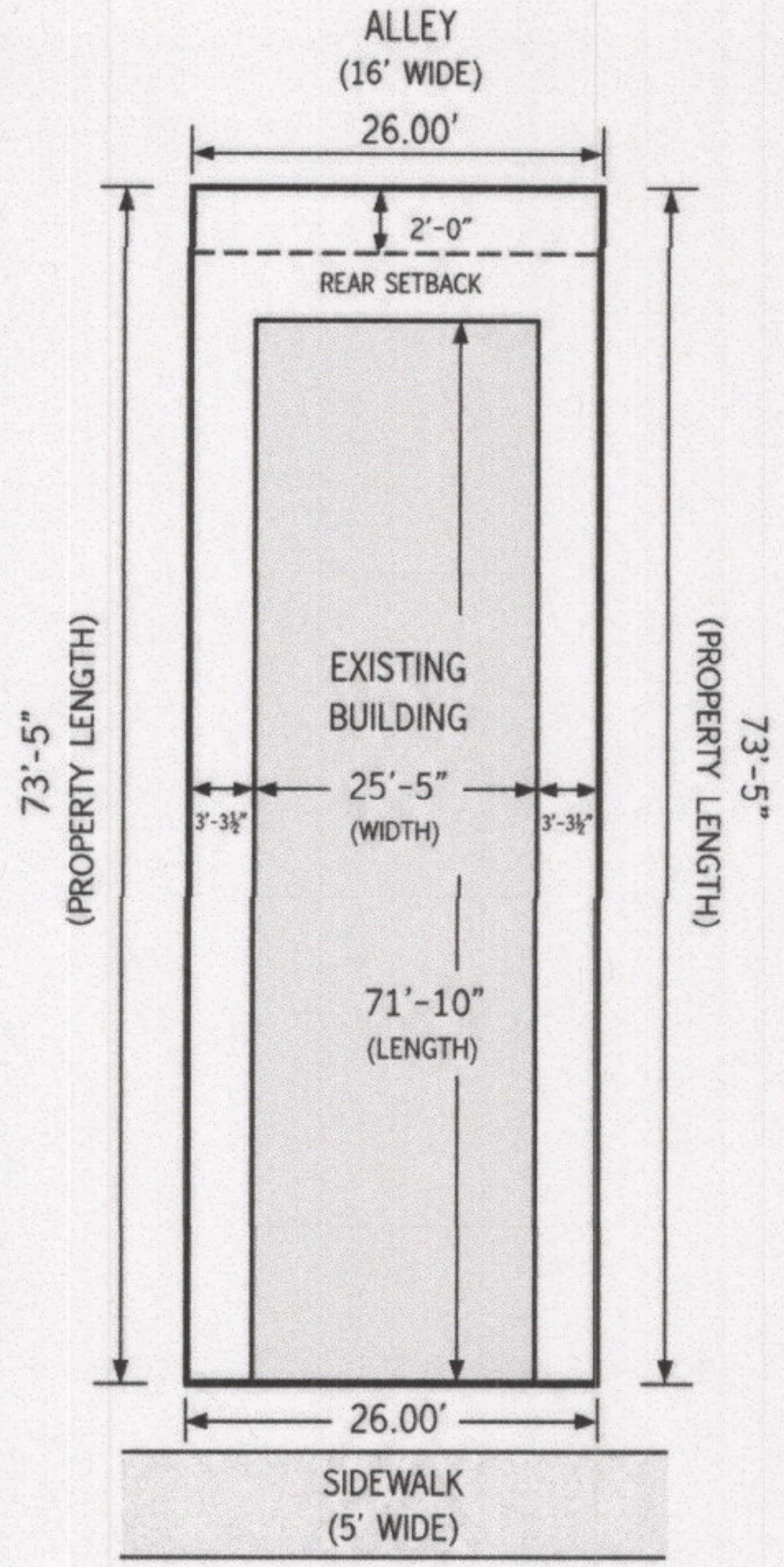
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# PLOT PLAN – 610 N IRWIN ST

HANFORD, CALIFORNIA 93230




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(559) 212-1441

**PROPERTY INFORMATION**

APN: 010-232-007-000
ZONING: MXD
LOT SIZE: ±0.04 ACRES
LEGAL DESCRIPTION:
SEC 25/18/21 N. 36 FT OF E 75 FT OF LOT 16; AND LOT 16 1/2, EX W 50 FT / BLK 183

**LOT DIMENSIONS**

| | |
|---|---|
| FRONTAGE (N IRWIN ST): | 26.00' |
| DEPTH(PROPERTY LENGTH): | 73'-5" |
| AREA: | ±1,875 SQ FT (±0.04 ACRES) |

**BUILDING DIMENSIONS**

| | |
|---|---|
| WIDTH: | 25'-5" |
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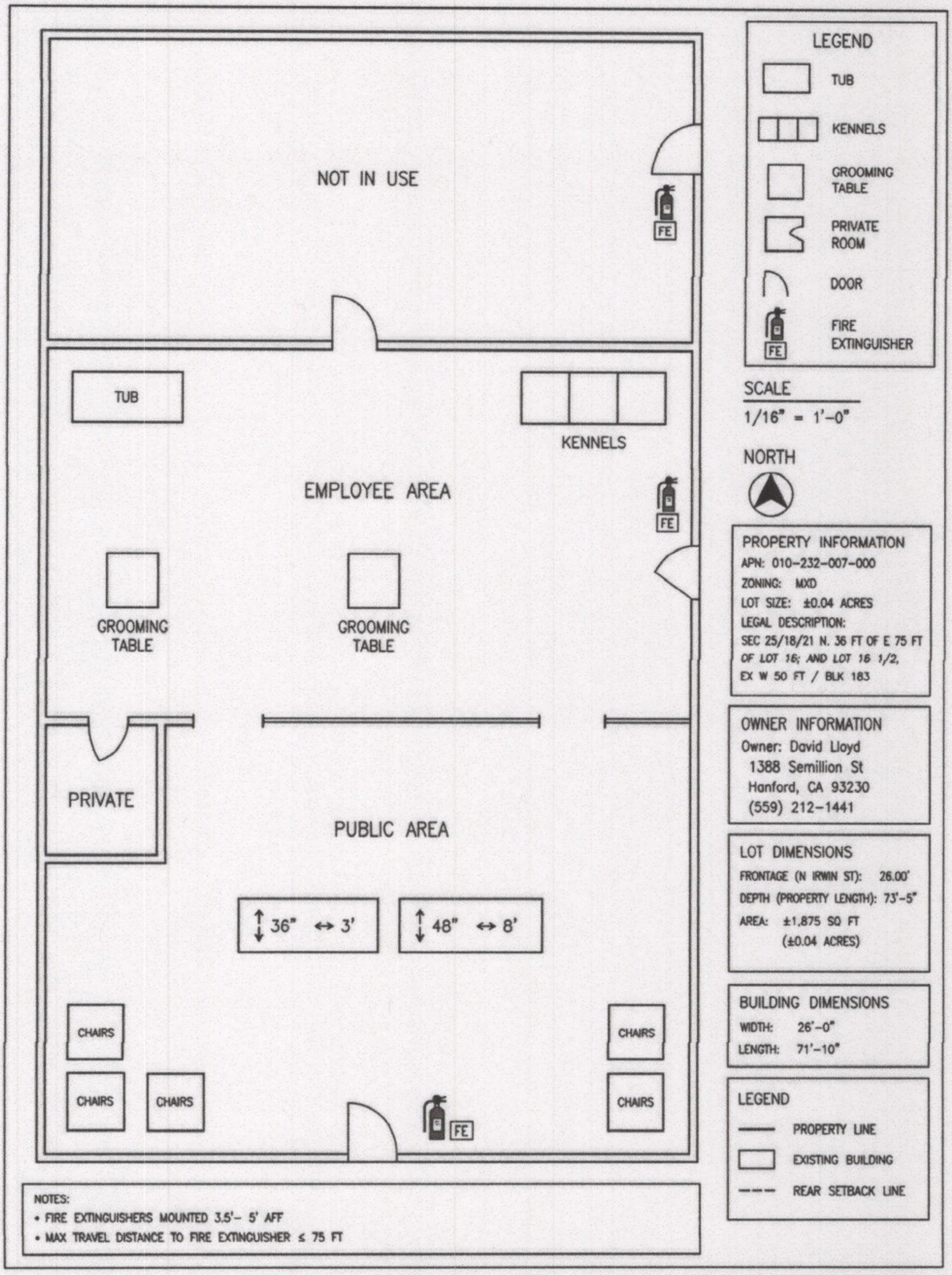
- PROPERTY LINE
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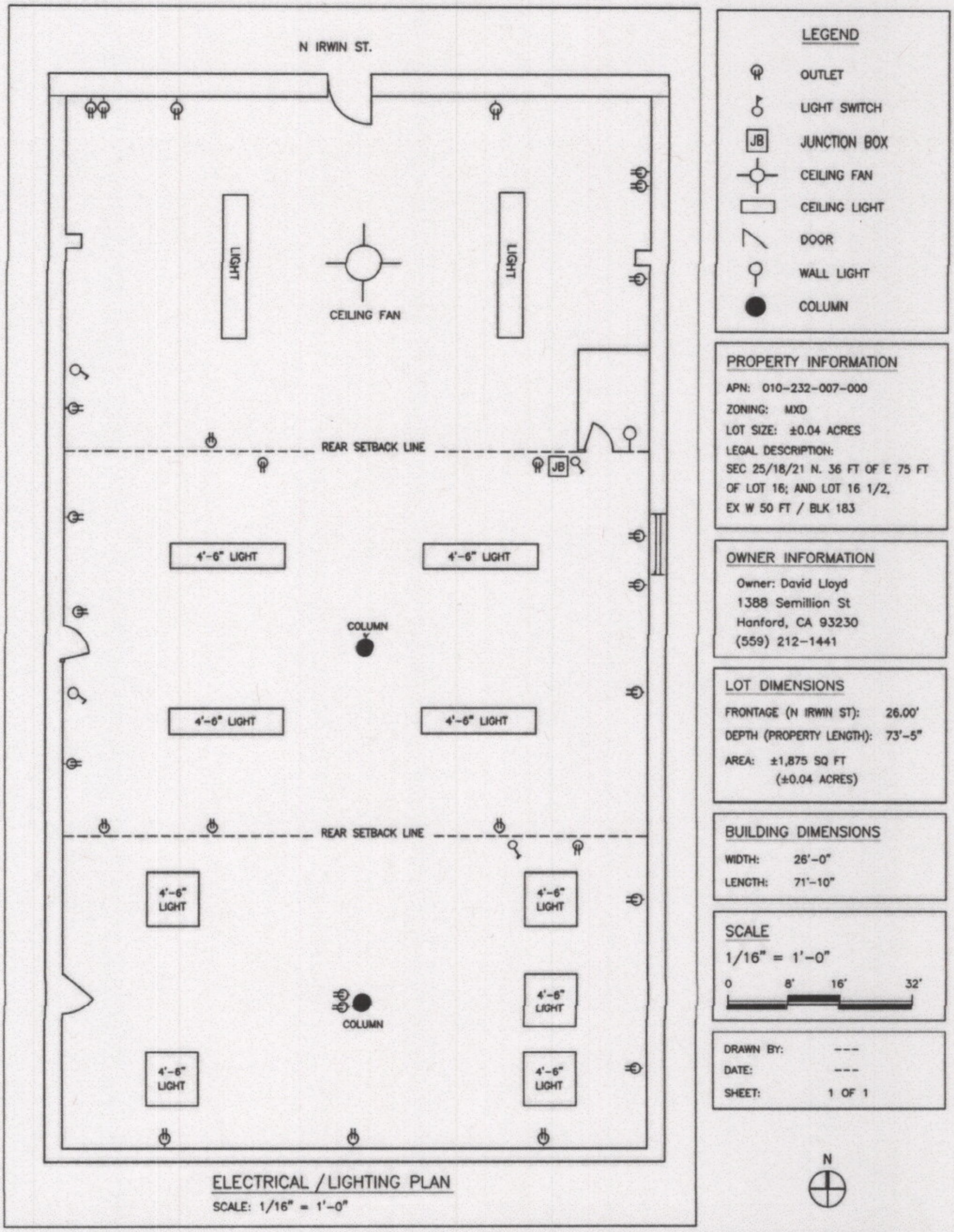
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SCALE: 1/16" = 1'-0"

0' 8' 16' 32'

| | |
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| PROJECT: 610 N IRWIN ST HANFORD, CA 93230 | DRAWN BY: – – – |
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NOT IN USE
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ELECTRICAL / LIGHTING PLAN

SCALE: 1/16" = 1'-0"

## LEGEND

- OUTLET
- LIGHT SWITCH
- JB — JUNCTION BOX
- CEILING FAN
- CEILING LIGHT
- DOOR
- WALL LIGHT
- COLUMN

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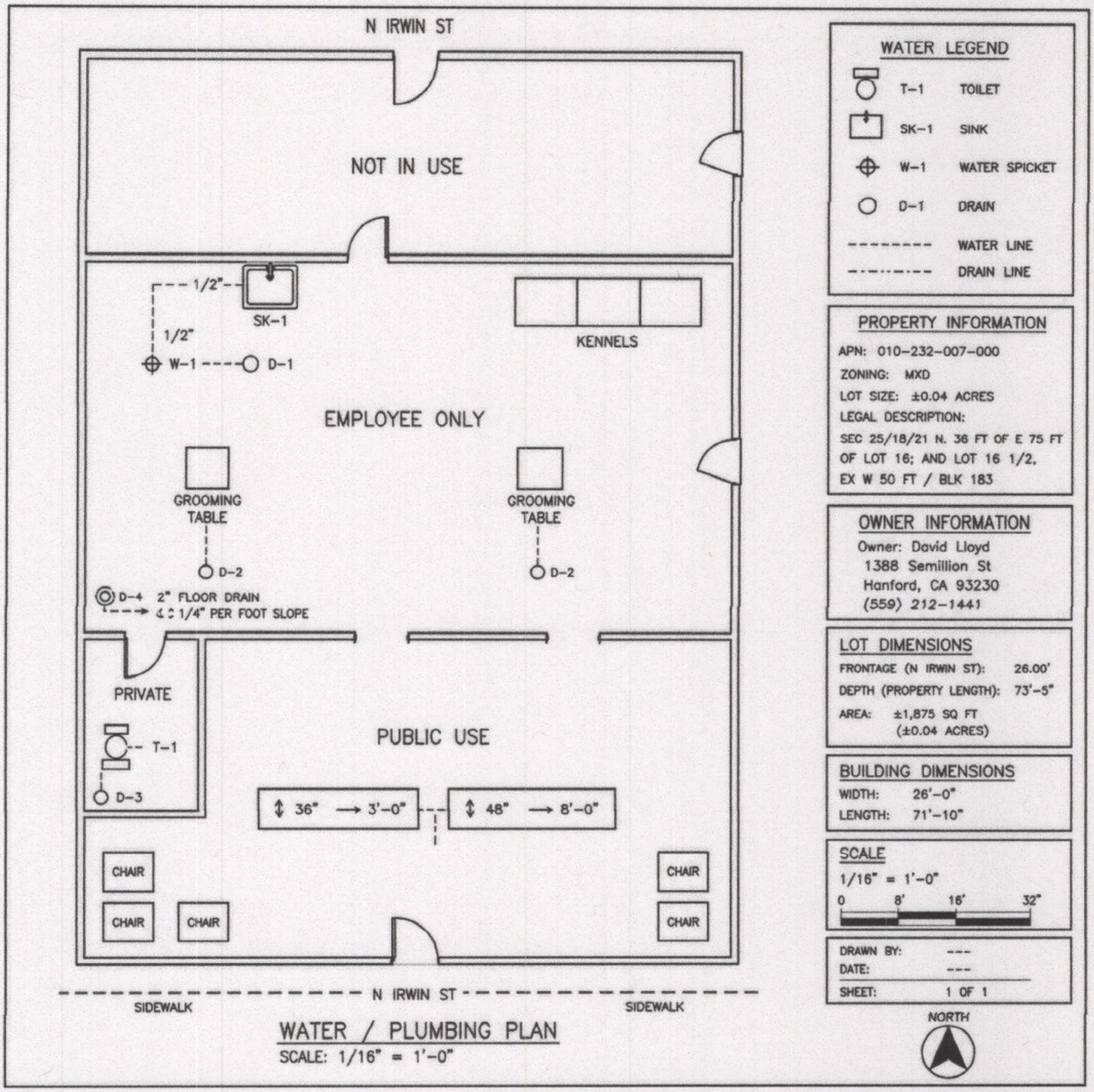
0 8' 16' 32'

DRAWN BY: ---

DATE: ---

SHEET: 1 OF 1

N




WATER / PLUMBING PLAN

SCALE: 1/16" = 1'-0"

**Notice of Exemption 2026-35**

**To:** ☐ Office of Planning and Research
P.O. Box 3044, Room 212
Sacramento, CA 95812-3044

☒ County Clerk
County of Kings
Kings County Government Center
Hanford, CA 93230

**From:** City of Hanford
317 North Douty Street
Hanford, CA 93230

**Project Title:** Conditional Use Permit 0069-26

**Project Location** – 610 N. Irwin St. (APN 010-232-007)

**Project Location – City:** Hanford **Project Location – County:** Kings County

**Description of Nature, Purpose and Beneficiaries of Project:** CUP0069-26, a request to allow an owner-operated pet grooming business to operate at 610 N. Irwin St. in the MX-D Downtown Mixed Use zone district.

Name of Public Agency Approving Project: City of Hanford, Planning Division

Name of Person or Agency Carrying Out Project: Candace Berumen
Address: 901 W. Mulberry Dr. Hanford, CA 93230
Phone Number: (559)670-2841

Exempt Status: **(check one)**

☐ Ministerial (Sec. 21080(b)(1); 15268);
☐ Declared Emergency (Sec. 21080(b)(3); 15269 (a));
☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
☒ Categorical Exemption: State type and section number: 15301 Existing Facilities.
☐ Statutory Exemption. State code number:

Reasons why project is exempt:

The City of Hanford determined the project to be exempt from environmental review pursuant to Section 15301 of the California Environmental Quality Act (CEQA) Guidelines. Section 15301 states that Class 1 exemptions consist of operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. This project involves the leasing of a private structure.

Lead Agency
Contact Person: Maddison Faria Area Code/ Telephone: (559) 415-7183

Signature: _____ Date: June 2, 2026 Title: Assistant Planner

☒ Signed by Lead Agency Date received for filing at OPR: _____
☐ Signed by Applicant

Provided by:
PARCELQUEST

THIS MAP IS FOR ASSESSMENT PURPOSES ONLY.
IT IS NOT TO BE CONSTRUED AS PORTRAYING
LEGAL OWNERSHIP OF DIVISIONS OF LAND FOR
PURPOSES OF ZONING OR SUBDIVISION LAW.
AUGUST 2023

# KINGS COUNTY ASSESSOR'S MAP

10-23

W. IVY ST

PORTER ST.

CENTER ST.

REDINGTON N. ST.

IRWIN ST.

DOUTY N. ST.

KAWEAH ST.

IRWIN COURT

FULLER WAY

184 231

183 232

182 233

179 236

180 235

181 234

PORTION SW 1/4 OF
SECTION 25 T18S R21E

UNPLATTED PORTION OF SE1/4 OF SW1/4
OF SEC 25-18-21

(ROS) LSP 27-27

PM7-43 VOL. II P.81

COMMON AREA

2-091

2-148

1" = 100'

1"

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# AGENDA
# STAFF REPORT

| **MEETING DATE:** 6/9/2026 | **AGENDA SECTION:** PUBLIC HEARING |
|---|---|

**SUBJECT:**
Tentative Parcel Map No. 0015-25: a request to divide two parcels, 55.54 acres and 19.48 acres in size, into three parcels (Parcel 1: 32.00 acres; Parcel 2: 25.24 acres; Parcel 3: 17.79 acres) in the R-L-5 Low Density Residential zone district. The project is located south of Hanford Armona Road, between 12th and 13th Avenues (APN 011-040-040, and -027).

## STAFF RECOMMENDATION

Staff recommends that the Planning Commission:

1. Adopt Resolution No. 2026-09, approving Tentative Parcel Map No. 0015-25.

## RECOMMENDED MOTION

1. I move to adopt Resolution No. 2026-09, approving Tentative Parcel Map No. 0015-25.

## PROJECT DESCRIPTION

Tentative Parcel Map No. 0015-25 is a request to divide two parcels, 55.54 acres and 19.48 acres in size, into three parcels (Parcel 1: 32.00 acres; Parcel 2: 25.24 acres; Parcel 3: 17.79 acres) in the R-L-5 Low Density Residential zone district (see **Attachment 1**). The project is coterminous with Tentative Tract 943 – Silicon Valley Ranch – which was approved by the Hanford City Council on March 18, 2025 in order to subdivide a 75.02-acre project site into 326 single-family residential lots, a 3.58-acre park, and three-acre storm basin. Development of Silicon Valley Ranch is still subject to the conditions approved under Resolution No. 25-09-R (see **Attachment 2**). The applicant is requesting to divide the property into three parcels in order to create separate parcels for each phase of development of Silicon Valley Ranch.

### Project Location

The project is located south of Hanford Armona Road, between 12$^{th}$ and 13$^{th}$ Avenues in the City of Hanford (APN 011-040-040, and -027). The site is designated as Low Density Residential by the General Plan, with a Future Educational Facilities overlay (see Figure 2, below). The site is zoned R-L-5 Low Density Residential, which corresponds with the General Plan designation (see Figure 3, below).

Figure 1: Land Use

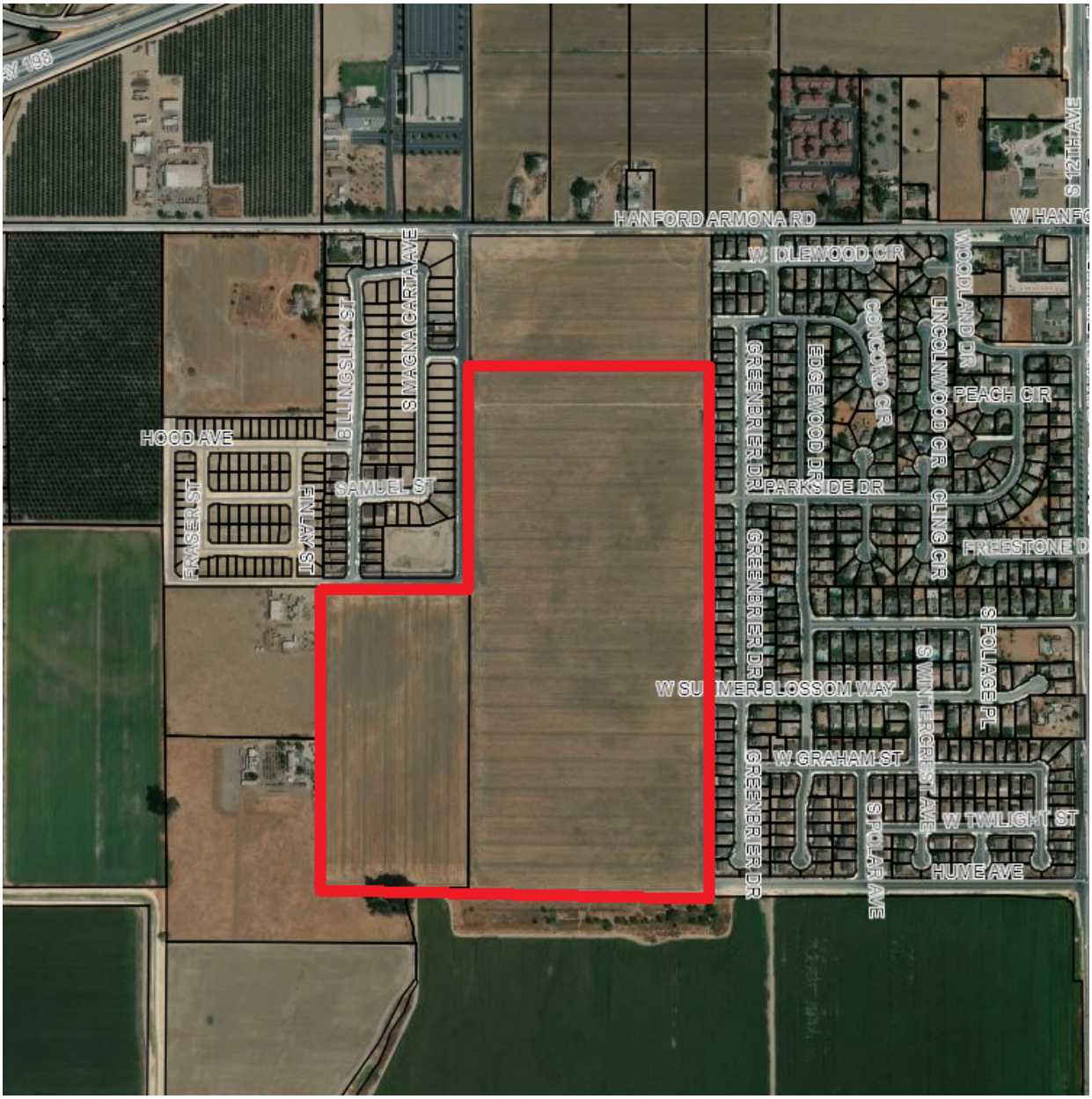


Figure 2: General Plan Designation
Low Density Residential
(Property outlined in bold)

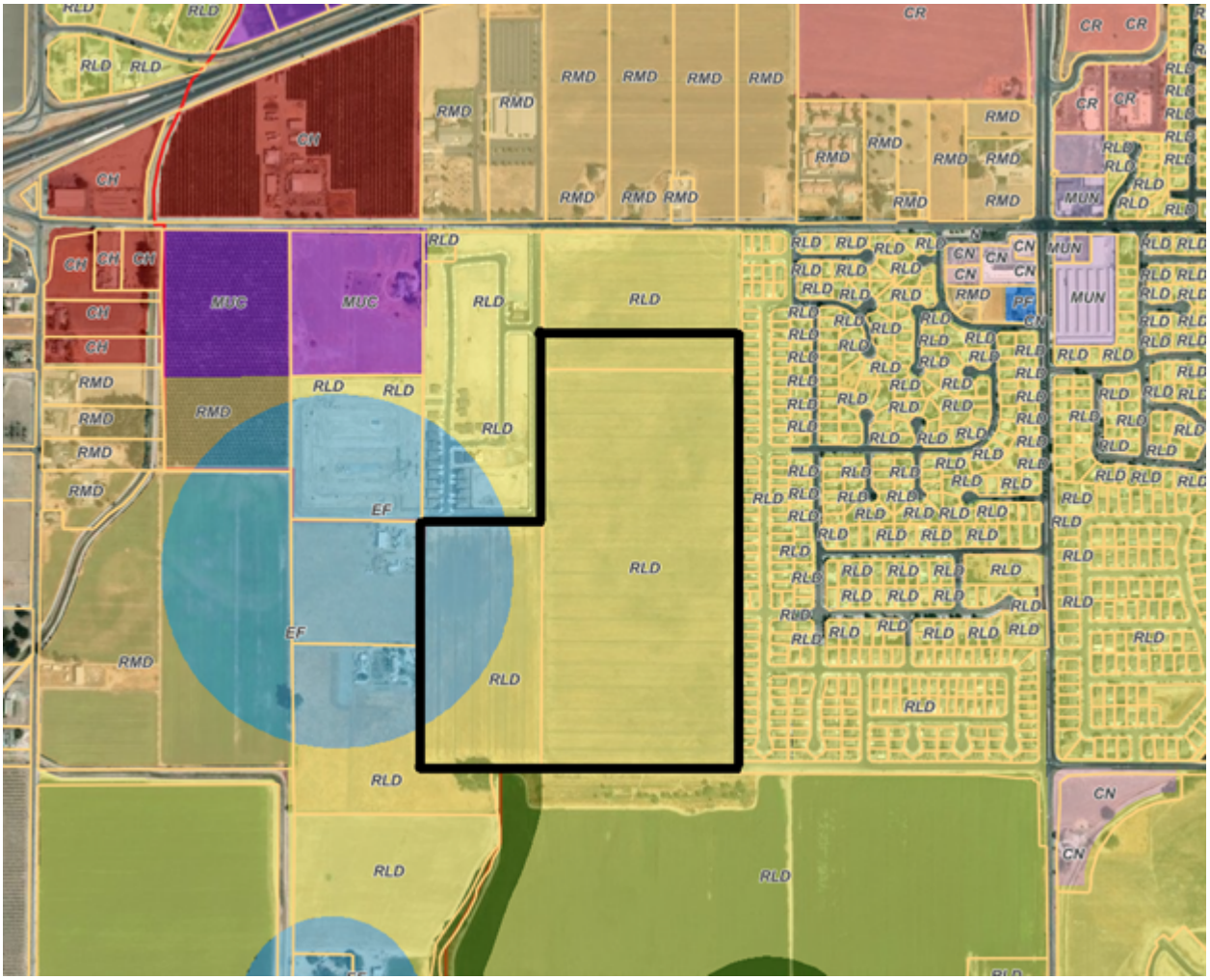
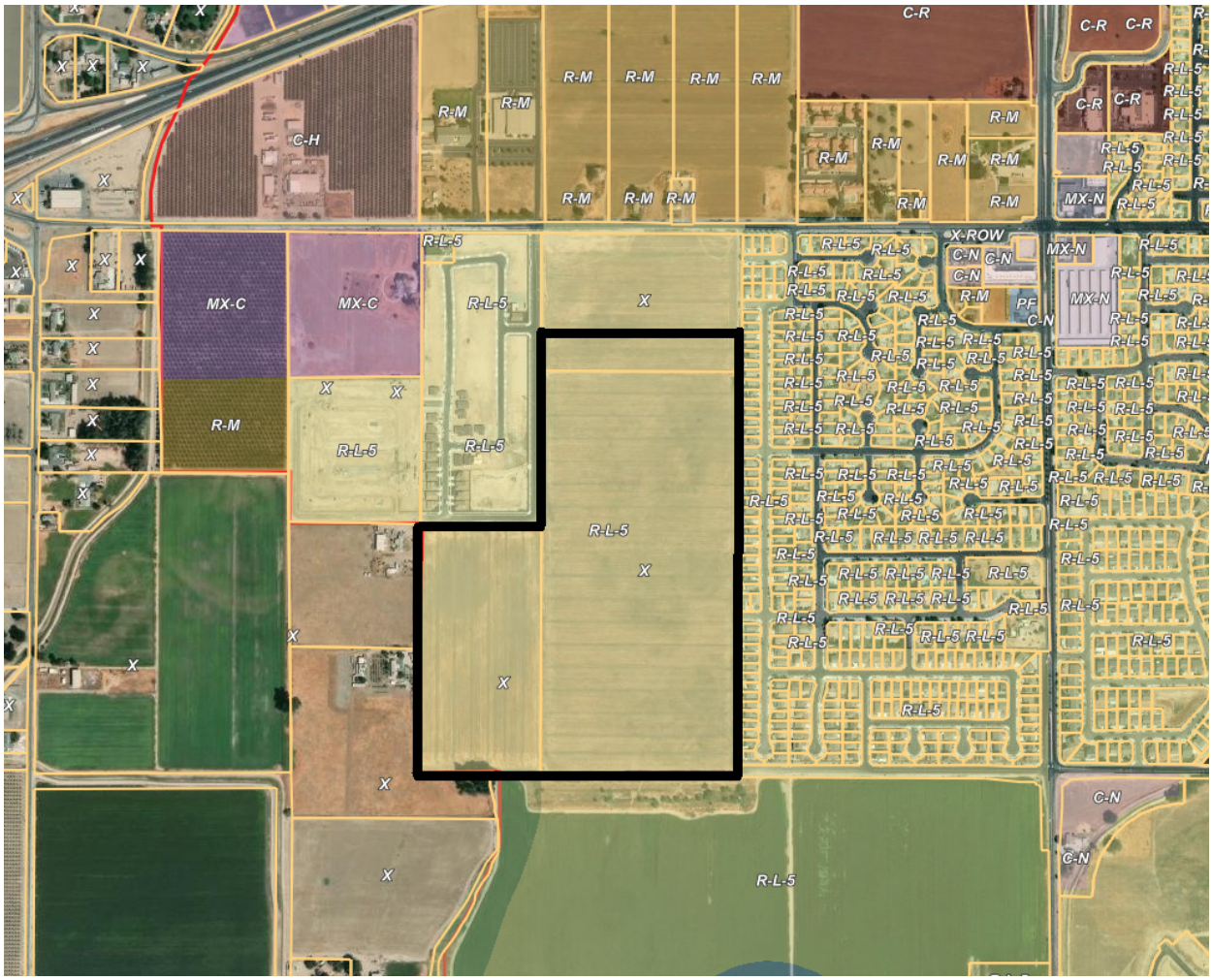


Figure 3: Zoning Designation
R-L-5 Low Density Residential
(Property outlined in bold)




## BACKGROUND

### General Plan Designation

The General Plan designates the property as Low Density Residential. According to General Plan Policy L31, Hanford shall establish the Low Density Residential land use designation to provide mainly single family development on lot sizes typically found in urban settings. According to General Plan Policy L32, Hanford shall define the uses allowed in the Low Density Residential land use designation to include residential uses in a variety of single-family lot types. Duplexes, second dwelling units, and home occupations can also be allowed when made compatible with the residential nature of the neighborhood. According to General Plan Policy L33, while it is recognized that existing lot sizes of 10,000 to 40,000 square feet are included in this designation, new individual lot sizes shall range from 5,000 to 10,000 square feet in size. Under Planned Unit Development provisions, smaller lot sizes at higher densities may be permitted when clustered around shared open space amenities or through density bonus policies. The subdivision of the parcel, as proposed, is consistent with the General Plan, as it will allow the applicant to continue to develop the site as approved under Tentative Tract 943 to create building sites large enough to support development.

The General Plan also designates a portion of the property at Educational Facilities. In accordance with

the General Plan Policy L100, this designation shall be located on existing school facilities, and in new areas planned for residential neighborhoods. Where a site is not yet developed, the land use designation is allowed to "float" on the Land Use Map within the one-mile square section in which it is located. Locations along collector streets are preferred for new elementary schools. During the consultation process for Tentative Tract 943, the local school districts were contacted and did not require use of this site as a school facility.

**Zoning Designation**

The site is zoned R-L-5 Low Density Residential. The project is evaluated for consistency with Section 17.10 of the Hanford Municipal Code, pertaining to the R-L-5 Low Density Residential zone district, below.

## PROJECT EVALUATION

**Project Design**

| | Entire Site | Parcel 1 | Parcel 2 | Parcel 3 |
|---|---|---|---|---|
| **Area:** | 75.02 acres | 32 acres | 25.24 acres | 17.79 acres |
| **Street Frontage:** | 1,788.68 ft. along various streets | 1,128.5 ft. along various streets | 104 ft. along various streets | 556.18 ft. along W. Spring Crest Dr. |
| **Width:** | 1,300 ft. (minimum width); 2,297.68 ft. (maximum width) | 1,076.25 ft. (minimum width); 1,439.87 ft. (maximum width) | 857 ft. (minimum width); 1,221.43 ft. (maximum width) | 556.18 ft. (minimum width); 596.68 ft. (maximum width) |
| **Depth:** | 1,056.13 ft. (minimum width); 1,709.75 ft. (maximum width) | 1,056.13 ft. | 1,113.07 ft. | 1,300 ft. |
| **Sidewalk:** | To be developed as part of TT 943 | To be developed as part of TT 943 | To be developed as part of TT 943 | To be developed as part of TT 943 |
| **Existing Use:** | Vacant | Vacant | Vacant | Vacant |
| **Proposed Use:** | Single-family residential, subdivided under Tentative Tract 943 | Single-family residential, subdivided under Tentative Tract 943 | Single-family residential, subdivided under Tentative Tract 943 | Single-family residential, subdivided under Tentative Tract 943 |

Conformance with the standards of the R-L-5 Low Density Residential zone district

**17.10.030 Lot Area**

In the R-L-5 Low Density Residential zone district, the minimum lot area shall be 5,000 square feet. Tentative Parcel Map No. 0015-25 is a request to divide two parcels, 55.54 acres and 19.48 acres in size, into three separate parcels, resulting in the following lot sizes:

| | **Entire Site** | **Parcel 1** | **Parcel 2** | **Parcel 3** |
|---|---|---|---|---|
| **Area:** | 75.02 acres | 32 acres | 25.24 acres | 17.79 acres |

All parcels from the resulting parcel split will have a lot area greater than 5,000 sq. ft.

**17.10.040 Lot Dimensions**

Lot Frontage

The minimum lot frontage in the R-L-5 Low Density Residential zone district shall be 40 feet. Each parcel will have the following lot frontage:

| | **Entire Site** | **Parcel 1** | **Parcel 2** | **Parcel 3** |
|---|---|---|---|---|
| **Street Frontage:** | 1,788.68 ft. along various streets | 1,128.5 ft. along various streets | 104 ft. along various streets | 556.18 ft. along W. Spring Crest Dr. |

All lots proposed under Tentative Parcel Map No. 0015-25 will exceed the lot frontage requirement in the R-L-5 Low Density Residential zone district.

Lot Width

The minimum lot width in the R-L-5 Low Density Residential zone district shall be 50 feet for interior lots and 60 feet for corner lots. Each parcel will have the following lot width:

| | **Entire Site** | **Parcel 1** | **Parcel 2** | **Parcel 3** |
|---|---|---|---|---|
| **Width:** | 1,300 ft. (minimum width); 2,297.68 ft. (maximum width) | 1,076.25 ft. (minimum width); 1,439.87 ft. (maximum width) | 857 ft. (minimum width); 1,221.43 ft. (maximum width) | 556.18 ft. (minimum width); 596.68 ft. (maximum width) |

All lots proposed under Tentative Parcel Map No. 0015-25 exceed the lot width requirements in the R-L-5 Low Density Residential zone district.

Lot Depth

The minimum lot depth in the R-L-5 Low Density Residential zone district shall be 90 feet. Each parcel will have the following lot depth:

| | **Entire Site** | **Parcel 1** | **Parcel 2** | **Parcel 3** |
|---|---|---|---|---|
| **Depth:** | 1,056.13 ft. (minimum width); 1,709.75 ft. (maximum width) | 1,056.13 ft. | 1,113.07 ft. | 1,300 ft. |

All lots proposed under Tentative Parcel Map No. 0015-25 exceed the lot depth requirement in the R-L-5 Low Density Residential zone district.

**17.10.050 Dwelling Units per Lot**

In the R-L-5 Low Density Residential zone district, not more than one dwelling unit shall be allowed on each lot, unless approved as an accessory use to an allowed or approved conditional use, or approved as an accessory dwelling unit. Under Tentative Tract 943, the proposed use for each lot is single-family residential. All proposed lots shall meet the dwelling unit per lot requirements for the R-L-5 Low Density Residential zone district upon submittal of a permit application for site development.

**17.10.060 Coverage**

The maximum coverage of a lot in the R-L-5 Low-Density Residential zone district shall be determined by the combined building setback requirements, accessory structure limitations, and off-street parking requirements. The coverage for each lot will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the coverage requirements for the R-L-5 Low Density Residential zone district.

**17.10.070 Building Setback Areas**

No structure is permitted to be placed within a building setback area.

Front-Yard Setback

In the R-L-5 Low Density Residential zone district, the front building setback area shall be 15 feet from the front lot line for livable building space and 20 feet for garages, carports, and other non-livable building space. The front-yard setback will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the front-yard setback requirements for the R-L-5 Low Density Residential zone district.

Rear-Yard Setback

In the R-L-5 Low Density Residential zone district, the rear building setback shall be 15 feet from the rear lot line, except where there is a landscape easement with a wall or fence on the rear of the lot then the rear building setback shall be 20 feet. The rear building setback area shall be increased by 10 feet for buildings over one-story high. The rear-yard setback will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the rear-yard setback requirements for the R-L-5 Low Density Residential zone district.

Side-Yard Setback

In the R-L-5 Low Density Residential zone district, the side building setback area shall be five feet from an interior side lot line and ten feet from a street-side property line. The side-yard setback will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the side-yard setback requirements for the R-L-5 Low Density Residential zone district.

The proposed parcel split will not create an encroachment into any required setback areas. Any future development will be evaluated upon submittal of a permit application for site development to ensure consistency with the standards of the R-L-5 Low Density Residential zone district.

**17.10.080 Distance Between Structures**

The minimum distance between structures shall be 10 feet, except as provided by the building code. The distance between structures will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the distance between structures requirement for the R-L-5 Low Density Residential zone district.

**17.10.090 Height of Structures**

The maximum height of structures shall be 35 feet. The height will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the height requirement for the R-L-5 Low Density Residential zone district.

**17.10.110 Driveways**

The width of a driveway and any paved area shall not cumulatively exceed 40% of the width of the lot's street frontage on which the driveway and any paved area faces. In the case of "L-" or "U-" shaped driveways or other configurations, besides perpendicular driveways, the paved area of these driveways shall not exceed 50% of the front building setback area. On key lots, the driveway shall be located on the side of the lot which is not adjacent to the rear lot line of the adjacent reverse corner lot. Any driveways will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the driveway requirement for the R-L-5 Low Density Residential zone district.

**17.10.140 Off-Street Parking**

Single-family dwellings in the R-L-5 Low Density Residential zone district shall provide a minimum of one covered and one uncovered parking space. Required parking spaces may not be provided in any front, side, or rear building setback area, except for uncovered driveways. Any parking will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the parking requirements for the R-L-5 Low Density Residential zone district.

**17.10.150 Usable Open Space**

Lots in the R-L-5 Low Density Residential zone district shall provide for a usable open space area of a minimum 400 square feet that is a minimum 15 feet wide. The open space will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the open space requirements for the R-L-5 Low Density Residential zone district.

**17.10.160 Landscaping**

Except for driveways and approved parking areas, all yard areas and setback areas visible from the street(s) shall be landscaped with live plant materials and ornamentation common to the Hanford area or up to 100% of the yard and setback area may be landscaped with artificial turf and other permeable surfaces. In order to provide a tree lined street, the required parkway shall have either two street trees, a minimum 15-gallon size, planted on all lots 6,000 square feet or greater, and one of the two front yard trees must be planted 12 feet (no greater or no less) from the face of the front lot line street curb; or one street tree a minimum 15-gallon size, shall be planted on all lots less than 6,000 square feet, and if there is no parkway the tree shall be planted four feet behind the sidewalk, or if there is no sidewalk then four feet behind the street curb. There shall be two additional street trees, a minimum 15-gallon size, planted on all corner lots in the parkway adjacent to the street side lot line. Lots developed adjacent to an arterial or collector street are to be designed as walled or fenced back-on or side-on lots with a minimum five and maximum 10-foot-wide landscape easement continuous and adjacent to the street right-of-way line. The landscaping will be evaluated during the building permit review process required for each residence in Tract 943. All proposed residences shall meet the landscaping requirements for the R-L-5 Low Density Residential zone district.

All requirements of the R-L-5 Low Density Residential zone district have been satisfied, in accordance with Section 17.10 of the Hanford Municipal Code. The proposed parcel split will not create a nonconforming zoning condition.

**FINDINGS FOR APPROVAL**

Pursuant to Section 16.04.010 of the Subdivision Ordinance Code and Section 66474 of the Subdivision Map Act, the Planning Commission is required to make the following findings:

1. Consistency Finding: That the proposed map is consistent with applicable general and specific plans.

   Analysis: That the proposed map is consistent with the General Plan. According to General Plan Policy L31, Hanford shall establish the Low Density Residential land use designation to provide mainly single family development on lot sizes typically found in urban settings. According to General Plan Policy L32, Hanford shall define the uses allowed in the Low Density Residential land use designation to include residential uses in a variety of single-family lot types. Duplexes, second dwelling units, and home occupations can also be allowed when made compatible with the residential nature of the neighborhood. According to General Plan Policy L33, while it is recognized that existing lot sizes of 10,000 to 40,000 square feet are included in this designation, new individual lot sizes shall range from 5,000 to 10,000 square feet in size. Under Planned Unit Development provisions, smaller lot sizes at higher densities may be permitted when clustered around shared open space amenities or through density bonus policies. The subdivision of the parcel, as proposed, is consistent with the General Plan, as it will allow the applicant to continue to develop the site as approved under Tentative Tract 943 to create building sites large enough to support development.

   The General Plan also designates a portion of the property at Educational Facilities. In accordance with the General Plan Policy L100, this designation shall be located on existing school facilities, and in new areas planned for residential neighborhoods. Where a site is not yet developed, the land use designation is allowed to “float” on the Land Use Map within the one-mile square section in which it is located. Locations along collector streets are preferred for new elementary schools. During the consultation process for Tentative Tract 943, the local school districts were contacted and did not require use of this site as a school facility.

2. Design Finding: That the design or improvement of the proposed subdivision is consistent with applicable general and specific plans.

Analysis: That the design of the proposed subdivision is consistent with the General Plan. The General Plan designates the project site as Low Density Residential. Each parcel is designed in conformance with Section 17.10 of the Hanford Municipal Code, pertaining to the R-L-5 Low Density Residential zone district. The lot area and dimension requirements of the R-L-5 Low Density Residential zone district will be satisfied, in accordance with Section 17.10 of the Hanford Municipal Code. This is a request to divide the property in order to help facilitate the further division of this property as approved under Tentative Tract 943. Any future residential development will be evaluated upon submittal of a permit application for site development to ensure consistency with the standards of the R-L-5 Low Density Residential zone district.

3. Type of Development Finding: That the site is physically suitable for the type of development.

   Analysis: That approval of the subdivision will yield three parcels with buildable lot configurations which are physically suited for development. Approval of this Tentative Parcel Map will create separate parcels for each phase of development of Tentative Tract 943, which will help facilitate the further division of this property into smaller lots for single-family residential development as approved under Tentative Tract 943. Any future residential development will be evaluated upon submittal of a permit application for site development to ensure consistency with the standards of the R-L-5 Low Density Residential zone district.

4. Density Finding: That the site is physically suitable for the proposed density of the development.

   Analysis: That the Municipal Code prescribes that not more than one dwelling unit shall be allowed on each lot, unless approved as an accessory use to an allowed or approved conditional use, as an additional unit permitted under SB9, or as an accessory dwelling unit in accordance with Section 17.60.030, for the R-L-5 Low Density Residential zone district. The division of the properties, as proposed, will not affect the ability of the property to meet the density required. The lot sizes, pre-subdivision, are 55.54 acres and 19.48 acres. The subdivision of the property into three parcels (Parcel 1: 32.00 acres; Parcel 2: 25.24 acres; Parcel 3: 17.79 acres) for phasing will help facilitate the further division of this property into smaller lots for single-family residential development as approved under Tentative Tract 943, which is consistent with the Municipal Code. The density under Tentative Tract 943 is 4.35 dwelling units per gross acre, which is consistent with the density range of two to 10 units per acre prescribed by the General Plan.

5. Environmental Finding: That the design of the subdivision or the proposed improvements is unlikely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

   Analysis: That on March 18, 2025, the City of Hanford City Council reviewed Tentative Tract 943 – Silicon Valley Ranch, for which a Focused Environmental Impact Report (SCH #2024060956) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Transportation/Traffic. A Notice of Determination was filed with Kings County on April 2, 2025. The changes proposed to the property, proposed herein, do not affect any of the environmental factors evaluated under the Focused Environmental Impact Report (SCH #2024060956) for Tentative Tract 943 – Silicon Valley Ranch. This proposal does not change the scope of Tentative Tract 943 and only serves to facilitate the development of Tentative Tract 943.

6. Public Health Finding: That the design of the subdivision or type of improvements is unlikely to cause serious public health problems.

   Analysis: That this application has been reviewed by various City departments. Any improvements required for public health and safety were applied to the proposal and required in the conditions of approval. The City of Hanford Building Division is responsible for ensuring that future construction of

the site follows adopted building codes, thus reducing exposure to accidents.

7. Improvements and Access Findings: That the design of the subdivision or the type of improvements will not conflict with easements acquired by the public at large for access through or use of, property within the proposed subdivision.

   Analysis: That the design of the proposed subdivision and type of improvements will not conflict with easements acquired by the public at large for access through or use of the property within the proposed subdivision. Any off-site improvements such as curbs, gutters, sidewalks, and drive approaches for future development will be inspected and/or verified to ensure the design, material, and installation of said improvements meet or exceed standards adopted by the City of Hanford. Each parcel will have adequate street frontage to ensure access is maintained to each parcel.

## ENVIRONMENTAL ASSESSMENT

On March 18, 2025, the City of Hanford City Council reviewed Tentative Tract 943 – Silicon Valley Ranch, for which a Focused Environmental Impact Report (SCH #2024060956) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Transportation/Traffic. A Notice of Determination was filed with Kings County on April 2, 2025. The changes proposed to the property, proposed herein, do not affect any of the environmental factors evaluated under the Focused Environmental Impact Report (SCH #2024060956) for Tentative Tract 943 – Silicon Valley Ranch. This proposal does not change the scope of Tentative Tract 943 and only serves to facilitate the development of Tentative Tract 943. Resolution No. 25-07-R certifying the Focused Environmental Impact Report is attached as **Attachment 3**. Additional environmental documents pertaining to Tentative Tract 943 are available online through https://ceqanet.lci.ca.gov/.

## PUBLIC COMMENTS

A Notice of Public Hearing and Notice of a Tentative Parcel Map was published in the newspaper on May 27, 2026, and mailed to property owners within 300 feet of the project site on May 28, 2026. The Community Development Department has not received comments on the project, as of the preparation of this report.

## STAFF RECOMMENDATION

Staff recommends that the Planning Commission:

1. Adopt Resolution No. 2026-09, approving Tentative Parcel Map No. 0015-25.

**Applicant:**
QK
609 N. Irwin St.
Hanford, CA 93230

**Property Owner:**
Middlefield Manor LLC
20900 Boyce Ln
Saratoga, CA 95070

**ATTACHMENTS:**

1. Resolution No. 2026-09
2. Attachment 1 - Tentative Parcel Map
3. Attachment 2 - Resolution No. 25-09-R
4. Attachment 3 - Resolution No. 25-07-R
5. Assessor's Map

**RESOLUTION NO. 2026-09**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD APPROVING TENTATIVE PARCEL MAP NO. 0015-25, A REQUEST TO DIVIDE TWO PARCELS, 55.54 ACRES AND 19.48 ACRES IN SIZE, INTO THREE PARCELS (PARCEL 1: 32.00 ACRES; PARCEL 2: 25.24 ACRES; PARCEL 3: 17.79 ACRES) IN THE R-L-5 LOW DENSITY RESIDENTIAL ZONE DISTRICT. THE PROJECT IS LOCATED SOUTH OF HANFORD ARMONA ROAD, BETWEEN 12TH AND 13TH AVENUES IN THE CITY OF HANFORD (APN 011-040-040, AND -027).**

At a regular meeting of the City of Hanford Planning Commission duly called and held on June 9, 2026 on motion of Commissioner , seconded by Commissioner , and duly carried, the following resolution was adopted:

**WHEREAS**, Tentative Parcel Map No. 0015-25, a request to divide two parcels, 55.54 acres and 19.48 acres in size, into three parcels (Parcel 1: 32.00 acres; Parcel 2: 25.24 acres; Parcel 3: 17.79 acres) in the R-L-5 Low Density Residential zone district has been reviewed by the Planning Commission of the City of Hanford in accordance with Title 16.04 of the Hanford Subdivision Ordinance; and

**WHEREAS**, the project is located south of Hanford Armona Road, between 12th and 13th Avenues in the City of Hanford (APN 011-040-040, and -027); and

**WHEREAS**, the configuration of the proposed parcels is shown on attached **Exhibit A**; and

**WHEREAS**, the various governmental department agencies, staff, and the Planning Commission have given careful consideration to this tentative subdivision map and have made recommendations thereon; and

**WHEREAS,** on March 18, 2025, the City of Hanford City Council reviewed Tentative Tract 943 – Silicon Valley Ranch, for which a Focused Environmental Impact Report (SCH #2024060956) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Transportation/Traffic. A Notice of Determination was filed with Kings County on April 2, 2025;

**WHEREAS,** the changes proposed to the property, proposed herein, do not affect any of the environmental factors evaluated under the Focused Environmental Impact Report (SCH #2024060956) for Tentative Tract 943 – Silicon Valley Ranch. This proposal does not change the scope of Tentative Tract 943 and only serves to facilitate the development of Tentative Tract 943; and

**WHEREAS,** the proposed Tentative Parcel Map will not have an effect on the environment, therefore, this application relies on the previously certified EIR; and

**THEREFORE, BE IT RESOLVED**, on the basis of the facts and evidence provided in the staff report and the written and oral evidence presented at the public hearing, the Planning Commission hereby makes the following findings pursuant to Section 16.04.010 of the Subdivision Ordinance Code and Section 66474 of the Subdivision Map Act:

1. Consistency Finding: That the proposed map is consistent with applicable general and specific plans.

   Analysis: That the proposed map is consistent with the General Plan. According to General Plan Policy L31, Hanford shall establish the Low Density Residential land use designation to provide mainly single family development on lot sizes typically found in urban settings. According to General Plan Policy L32, Hanford shall define the uses allowed in the Low Density Residential land use designation to include residential uses in a variety of single-family lot types. Duplexes, second dwelling units, and home occupations can also be allowed when made compatible with the residential nature of the neighborhood. According to General Plan Policy L33, while it is recognized that existing lot sizes of 10,000 to 40,000 square feet are included in this designation, new individual lot sizes shall range from 5,000 to 10,000 square feet in size. Under Planned Unit Development provisions, smaller lot sizes at higher densities may be permitted when clustered around shared open space amenities or through density bonus policies. The subdivision of the parcel, as proposed, is consistent with the General Plan, as it will allow the applicant to continue to develop the site as approved under Tentative Tract 943 to create building sites large enough to support development.

   The General Plan also designates a portion of the property at Educational Facilities. In accordance with the General Plan Policy L100, this designation shall be located on existing school facilities, and in new areas planned for residential neighborhoods. Where a site is not yet developed, the land use designation is allowed to “float” on the Land Use Map within the one-mile square section in which it is located. Locations along collector streets are preferred for new elementary schools. During the consultation process for Tentative Tract 943, the local school districts were contacted and did not require use of this site as a school facility.

2. Design Finding: That the design or improvement of the proposed subdivision is consistent with applicable general and specific plans.

   Analysis: That the design of the proposed subdivision is consistent with the General Plan. The General Plan designates the project site as Low Density Residential. Each parcel is designed in conformance with Section 17.10 of the Hanford Municipal Code, pertaining to the R-L-5 Low Density Residential zone district. The lot area and dimension requirements of the R-L-5 Low Density Residential zone district will be satisfied, in accordance with Section 17.10 of the Hanford Municipal Code. This is a request to divide the property in order to help facilitate the further division of this property as approved under Tentative Tract 943. Any future residential development will be evaluated upon submittal of a permit application for site development to ensure consistency with the standards of the R-L-5 Low Density Residential zone district.

3. Type of Development Finding: That the site is physically suitable for the type of development.

   Analysis: That approval of the subdivision will yield three parcels with buildable lot configurations which are physically suited for development. Approval of this Tentative Parcel Map will create separate parcels for each phase of development of Tentative Tract 943, which will help facilitate the further division of this property into smaller lots for single-family residential development as approved under Tentative Tract 943. Any future residential development will be evaluated upon submittal of a permit application for site development to ensure consistency with the standards of the R-L-5 Low Density Residential zone district.

4. Density Finding: that the site is physically suitable for the proposed density of the development.

Analysis: That the Municipal Code prescribes that not more than one dwelling unit shall be allowed on each lot, unless approved as an accessory use to an allowed or approved conditional use, as an additional unit permitted under SB9, or as an accessory dwelling unit in accordance with Section 17.60.030, for the R-L-5 Low Density Residential zone district. The division of the properties, as proposed, will not affect the ability of the property to meet the density required. The lot sizes, pre-subdivision, are 55.54 acres and 19.48 acres. The subdivision of the property into three parcels (Parcel 1: 32.00 acres; Parcel 2: 25.24 acres; Parcel 3: 17.79 acres) for phasing will help facilitate the further division of this property into smaller lots for single-family residential development as approved under Tentative Tract 943, which is consistent with the Municipal Code. The density under Tentative Tract 943 is 4.35 dwelling units per gross acre, which is consistent with the density range of two to 10 units per acre prescribed by the General Plan.

5. Environmental Finding: That the design of the subdivision or the proposed improvements is unlikely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

   Analysis: That on March 18, 2025, the City of Hanford City Council reviewed Tentative Tract 943 – Silicon Valley Ranch, for which a Focused Environmental Impact Report (SCH #2024060956) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Transportation/Traffic. A Notice of Determination was filed with Kings County on April 2, 2025. The changes proposed to the property, proposed herein, do not affect any of the environmental factors evaluated under the Focused Environmental Impact Report (SCH #2024060956) for Tentative Tract 943 – Silicon Valley Ranch. This proposal does not change the scope of Tentative Tract 943 and only serves to facilitate the development of Tentative Tract 943.

6. Public Health Finding: That the design of the subdivision or type of improvements is unlikely to cause serious public health problems.

   Analysis: That this application has been reviewed by various City departments. Any improvements required for public health and safety were applied to the proposal and required in the conditions of approval. The City of Hanford Building Division is responsible for ensuring that future construction of the site follows adopted building codes, thus reducing exposure to accidents.

7. Improvements and Access Findings: That the design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.

   Analysis: That the design of the proposed subdivision and type of improvements will not conflict with easements acquired by the public at large for access through or use of the property within the proposed subdivision. Any off-site improvements such as curbs, gutters, sidewalks, and drive approaches for future development will be inspected and/or verified to ensure the design, material, and installation of said improvements meet or exceed standards adopted by the City of Hanford. Each parcel will have adequate street frontage to ensure access is maintained to each parcel.

**THEREFORE, BE IT RESOLVED** that Tentative Parcel Map No. 0015-25 be approved subject to the conditions of approval, attached as **Exhibit B**.

**EXPIRATION**

This Tentative Parcel Map becomes null and void after eighteen (18) months has elapsed from the date of approval if the map has not been recorded. The Commission may grant a time extension if a written request and fee is received from the applicant prior to the expiration date. The time extension, if approved, will be subject to the improvement standards and fees in effect at the time the extension for the Tentative Parcel Map is granted.

**PASSED AND ADOPTED** at a regular meeting of the Planning Commission of the City of Hanford by the following vote:

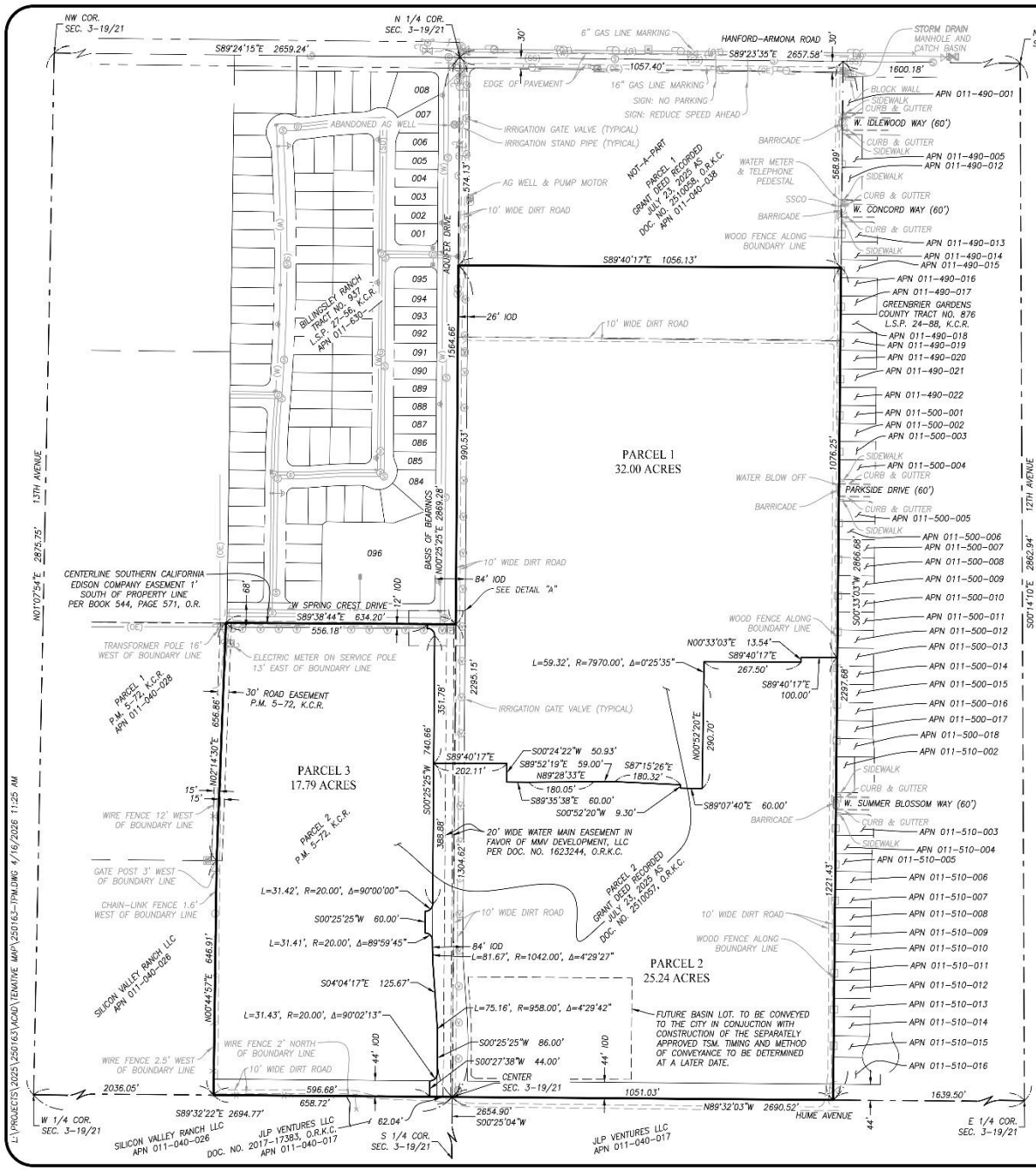
AYES: Commissioners
NOES: Commissioners
ABSTAIN: Commissioners
ABSENT: Commissioners

STATE OF CALIFORNIA)
COUNTY OF KINGS )*ss*
CITY OF HANFORD )

I, **Jason Waters**, Secretary of the City of Hanford Planning Commission, do hereby certify the foregoing Resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the 9th day of June 2026.

Jason Waters, Secretary

**Exhibit A**
Tentative Parcel Map No. 0015-25




# TENTATIVE PARCEL MAP

A PORTION OF THE WEST HALF OF THE NORTHEAST QUARTER & A PORTION OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 21 EAST, MOUNT DIABLO BASE & MERIDIAN, IN UNINCORPORATED AREA OF THE COUNTY OF KINGS, STATE OF CALIFORNIA.

## PROJECT SITE INFORMATION

APN:
011-040-027 & 011-040-010

APPLICANT/OWNER:
SILICON VALLEY RANCH, LLC
PHIL R. BOYCE
20900 BOYCE LANE
SARATOGA, CA 95070
408-867-3737

BY:
QK
WWW.QKINC.COM
1-833-955-7300
BAKERSFIELD, CLOVIS, HANFORD, MERCED, PORTERVILLE, VISALIA
609 N. IRWIN STREET
HANFORD, CA 93230

## BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 21 EAST, MOUNT DIABLO BASE & MERIDIAN WHICH BEARS N00°25'25"E PER MAP RECORDED IN VOLUME 27 OF LICENSED SURVEYORS' PLATS, AT PAGE 56, KINGS COUNTY RECORDS.

## NOTES

1. DATE OF PREPARATION: AUGUST 25, 2025
2. ZONE: AL10 – LIMITED AGRICULTURE
3. ALL DISTANCES SHOWN ARE IN FEET & DECIMALS THEREOF
4. PROPOSED LAND USE: SINGLE FAMILY RESIDENTIAL
5. IMPROVEMENTS TO CONFORM TO APPLICABLE ORDINANCES & STATUTES
6. EASEMENTS FOR PUBLIC UTILITIES TO BE PROVIDED AS REQUIRED
7. NOT SUBJECT TO INUNDATION OR OVERFLOW, UNLESS OTHERWISE NOTED
8. NATURAL GAS BY: THE GAS COMPANY
9. TELEPHONE BY: AT&T
10. POWER BY: SOUTHERN CALIFORNIA EDISON COMPANY
11. CABLE TV. BY: COMCAST
12. DOMESTIC WATER BY: CITY OF HANFORD
13. SEWAGE DISPOSAL BY: CITY OF HANFORD
14. REFUSE COLLECTION BY: CITY OF HANFORD
15. DRAINAGE: ON-SITE BASIN
16. OFF STREET PARKING: NONE
17. UTILITY LOCATIONS ARE ESTIMATED & BASED ON AN ABOVE GROUND FIELD SURVEY
18. ENTITLEMENTS: TENTATIVE PARCEL MAP

## FLOOD ZONE NOTE

THE SUBJECT SITE IS IN ZONE X, AREAS OF MINIMAL FLOOD HAZARD AS SHOWN ON FEMA FIRM PANEL 06031C0195C, EFFECTIVE JUNE 16, 2009.

## LEGAL DESCRIPTION

ALL THAT PORTION OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 21 EAST, MOUNT DIABLO BASE AND MERIDIAN, ACCORDING TO THE APPROVED TOWNSHIP PLATS THEREOF, IN THE UNINCORPORATED AREA OF THE COUNTY OF KINGS, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
BEGINNING AT THE NORTHWEST CORNER OF COUNTY TRACT NO. 876, AS SHOWN ON THAT CERTAIN MAP RECORDED MAY 16, 2014, IN VOLUME 24, PAGE 88, OF LICENSED SURVEYORS' PLATS, KINGS COUNTY RECORDS, AS DOCUMENT NO. 1406961, OFFICIAL RECORDS OF KINGS COUNTY; THENCE, ALONG THE WEST LINE OF SAID TRACT NO. 876, SOUTH 00° 33' 03" WEST A DISTANCE OF 568.99 FEET, TO THE TRUE POINT OF BEGINNING; THENCE, CONTINUING ALONG SAID WEST LINE, SOUTH 00°33' 03" WEST A DISTANCE OF 2297.69 FEET, TO A POINT ON THE SOUTH LINE OF SAID NORTHEAST QUARTER; THENCE, ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER, NORTH 89° 32' 03" WEST A DISTANCE OF 1051.03 FEET, TO THE SOUTHWEST CORNER OF SAID NORTHEAST QUARTER; THENCE, ALONG THE WEST LINE OF SAID NORTHEAST QUARTER, NORTH 00° 25' 25" EAST A DISTANCE OF 2295.15 FEET, TO A POINT LYING 574.13 FEET SOUTH OF THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER; THENCE, LEAVING LAST SAID WEST LINE, SOUTH 89° 40' 17" EAST A DISTANCE OF 1056.13 FEET, TO THE TRUE POINT OF BEGINNING. TOGETHER WITH THE FOLLOWING DESCRIBED PARCEL: THAT PORTION OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 3, BEING PARCEL 2 OF THAT CERTAIN MAP RECORDED DECEMBER 22, 1977, IN BOOK 5, PAGE 72, OF PARCEL MAPS, KINGS COUNTY RECORDS, AS DOCUMENT NO. 16969, OFFICIAL RECORDS OF KINGS COUNTY. THIS LEGAL DESCRIPTION MADE PURSUANT TO PARCEL 2 OF PARCEL MAP WAIVER FOR LOT LINE ADJUSTMENT NO. 24-03 RECORDED JULY 23, 2025 AS DOCUMENT NO. 2510055, OF OFFICIAL RECORDS.
CONTAINING 75.02 ACRES, MORE OR LESS.

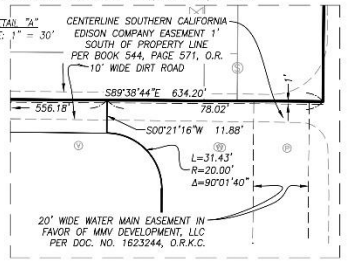
## EASEMENTS NOT PLOTTED

PRELIMINARY TITLE REPORT BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, ORDER NUMBER FBDO-26006638, DATED JANUARY 15, 2026 LISTS THE FOLLOWING EASEMENTS THAT DO NOT PLOT WITHIN THE SUBJECT SITE:

EASEMENT IN FAVOR OF H.G. LACEY COMPANY FOR POLE LINE WITH RIGHT OF INGRESS AND EGRESS PURPOSES PER BOOK 65 OF DEEDS, PAGE 46, K.C.O.R.

EASEMENT IN FAVOR OF GEORGE BENTON ET UX FOR IRRIGATION AND DITCHES AND PIPELINE PURPOSES PER BOOK 151 OF OFFICIAL RECORDS, PAGE 180, K.C.O.R.

EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY FOR PUBLIC UTILITIES PER BOOK 541 OF OFFICIAL RECORDS, PAGE 531, K.C.O.R.

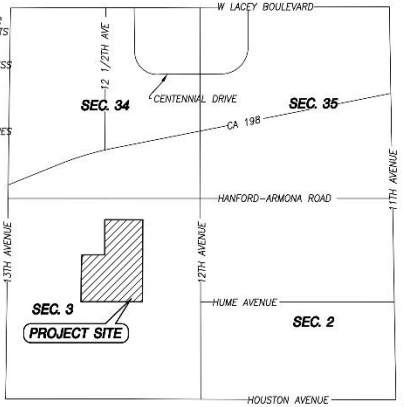



## LEGEND

| | |
|---|---|
| | ADJACENT PROPERTY LINE |
| | PROPERTY LINE |
| | SECTION LINE |
| | CHAIN-LINK FENCE |
| X X X | WIRE FENCE |
| | WOOD FENCE |
| (OE) | OVERHEAD ELECTRIC LINE |
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| APN | ASSESSOR'S PARCEL NUMBER |
| K.C.R. | KINGS COUNTY RECORDS |
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| | SIGN |
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| | TRANSFORMER POLE |
| | WATER VALVE |
| D | STORM DRAIN CATCH BASIN |

## LOCATION MAP

NOT TO SCALE




SHEET 1 OF 1

L:\PROJECTS\2025\250163\CAD\TENATIVE MAP\250163-TPM.DWG 4/16/2026 11:25 AM

**Exhibit B**
Conditions of Approval

## ADMINISTRATION DEPARTMENT

Contact the Community Development Department (559) 585-2580
concerning questions that you may have on the conditions listed below:

**Defense and Indemnification Provisions:**

1. That the applicant shall defend, indemnify, and hold harmless the City of Hanford ("City"), its officials, officers, employees, representatives, agents and attorneys, from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with, the City's act or acts leading up to and including approval of any environmental document and/or granting of any approvals relating to the Project. Applicant's obligation to defend, indemnify and hold the City harmless specifically includes, but is not limited to, any suit or challenge by any third party against the City which challenges or seeks to set aside, void or annul the legality or adequacy of any environmental document approved by the City or any approval related to the Project.

## PLANNING DEPARTMENT

Contact Associate Planner Mark Manha (559) 585-2583
concerning questions that you may have on the conditions listed below:

**General:**

1. That approval of this project does not exempt compliance with all applicable sections of the Uniform Fire and Building Codes, Zoning Ordinance, Public Works Improvement Standards, and other City Ordinances.

2. That all approved proposals of the application be conditions of development if not mentioned herein.

3. That the general design of the parcel map be approved with minor modifications being approved by the Community Development and Public Works Departments.

4. That prior to recording the parcel map, it is to be submitted to the City Engineer and Community Development Department for compliance with the tentative approval.

5. That in accordance with California Government Code Section 66020, the applicant is hereby notified that the 90-day appeal period identified in California Government Code Section 66020 during which you may protest the imposition of the fees, dedications, reservations and other extractions identified in this Tentative Parcel Map No. 0015-25 will begin to run on the date of the approval of this application by the Planning Commission.

6. That the applicant hereby agrees to hold the City of Hanford and all of its departments, officers, agents, and employees free and harmless of and from all claims of any kind or nature arising out of or by reason of the approval of this project.

7. That any development of the site be subject to the applicable regulations of the Hanford Municipal Code, specifically the R-L-5 Low Density zone district.

HANFORD
CALIFORNIA

6-4-2026

All conditions, as stated in resolution 25-09-R for TSM 943, run with the land and apply to this Tentative Parcel Map.

Staff reaffirms the following conditions:

1. That developer dedicate to the City, additional street right of way along the east side of Aquifer Drive, between Hanford Armona Road and the southerly ultimate alignment of W. Spring Crest Drive property frontage to facilitate an overall street right of way width of 84 feet in conformance with City Standard Detail ST-23 (“Major Collector Street”).

2. That the developer dedicate to the City, full right of way between the southerly ultimate alignment of W. Spring Crest Drive and Hume Avenue, a width of 84 feet to establish the extension of Aquifer Drive in conformance with City Standard Detail ST-23 (“Major Collector Street”). Aquifer shall include offset as shown on the tentative map to align with the approved tentative map for Live Oak West Tract 909.

3. That the developer dedicate to the City, street right of way along the Hume Avenue property frontage to facilitate an overall street right of way width of 88 feet in conformance with City Standard Detail ST-23 modified for additional parkway strip equaling 12 feet for a total street right of way of 88 feet.

# TENTATIVE PARCEL MAP

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011-040-027 & 011-040-010

APPLICANT/OWNER:
SILICON VALLEY RANCH, LLC
PHIL R. BOYCE
20900 BOYCE LANE
SARATOGA, CA 95070
408-867-3737

BY:

QK
WWW.QKINC.COM
1-800-955-7599
BAKERSFIELD, CLOVIS, HANFORD, MERCED, PORTERVILLE, VISALIA
609 N. IRWIN STREET
HANFORD, CA 93230

SCALE: 1"= 200'

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CONTAINING 75.02 ACRES, MORE OR LESS.

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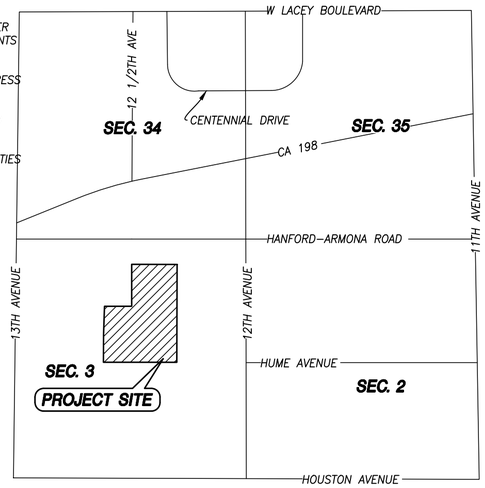
EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY FOR PUBLIC UTILITIES PER BOOK 541 OF OFFICIAL RECORDS, PAGE 531, K.C.O.R.

## LEGEND

- ADJACENT PROPERTY LINE
- PROPERTY LINE
- SECTION LINE
- CHAIN-LINK FENCE
- WIRE FENCE
- WOOD FENCE
- (OE) OVERHEAD ELECTRIC LINE
- (G) GAS LINE
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- SANITARY SEWER CLENOUT
- SANITARY SEWER MANHOLE
- SIGN
- STORM DRAIN MANHOLE
- TRANSFORMER POLE
- WATER VALVE
- STORM DRAIN CATCH BASIN

## LOCATION MAP

NOT TO SCALE



**RESOLUTION 25-09-R**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD APPROVING VESTING TENTATIVE TRACT 943, A REQUEST, BY SILICON VALLEY RANCH, LLC, TO SUBDIVIDE 75.02 ACRES PROPOSED TO BE PREZONED R-L-5 LOW-DENSITY RESIDENTIAL INTO 326 SINGLE-FAMILY RESIDENTIAL LOTS, A 3.58-ACRE PARK, AND THREE-ACRE STORM BASIN. THE PROJECT IS LOCATED SOUTH OF HANFORD ARMONA ROAD, BETWEEN 12TH AND 13TH AVENUES (APN 011-040-008, -010, AND -027).**

At a regular meeting of the City Council of the City of Hanford duly called and held on March 18, 2025 by motion of Councilmember Paden, and seconded by Councilmember Howze, and duly carried, the following resolution was adopted:

**WHEREAS**, Vesting Tentative Subdivision Map No. 943, filed by Marc Freiler on behalf of Silicon Valley Ranch, LLC, a request to subdivide 75.02 acres, proposed to be prezoned R-L-5 Low-Density Residential into 326 single-family residential lots, a 3.58-acre park, and three-acre storm basin, as shown in **Exhibit A,** has been reviewed by the City Council of the City of Hanford, in accordance with the Subdivision Map Act and Title 16 of the Hanford Municipal Code; and

**WHEREAS,** the City Council has carefully considered recommendations and testimony presented at the public hearing of March 18, 2025, and

**WHEREAS**, all affected public utility companies, various governmental department agencies, staff, and the City Council, have given careful consideration to this tentative subdivision map and have made recommendations thereon; and

**WHEREAS,** the Final Environmental Impact Report and all notices related thereto were prepared in compliance with the California Environmental Quality Act ("CEQA") and the City of Hanford Municipal Code and Policies; and

**WHEREAS,** on the basis of the application, the documentation and information provided in the staff report and the evidence and testimony submitted at the public hearing, and the

Environmental Impact Report prepared for the Silicon Valley Ranch Residential Project, the City Council of the City of Hanford hereby makes findings in accordance with Section 15091 of the CEQA Guidelines and as specifically articulated in an appendix to the Final EIR and incorporated herein by this reference; and

**WHEREAS,** the Project's effect on Transportation and Traffic remains significant and unavoidable with mitigation incorporation, the Mitigation Monitoring and Reporting Program is attached – **Exhibit B**; and

**WHEREAS,** Section 15093 of the CEQA Guidelines requires the City to balance the benefits of the Project against its unavoidable environmental impacts in determining whether or not to approve the Project; and

**WHEREAS,** the City Council certified the Final Environmental Impact Report, which included findings and a statement of overriding considerations for the unavoidable significant environmental impacts identified by the Final Environmental Impact Report; and,

**WHEREAS**, the City Council has made the following findings, pursuant to Section 16.04.010 of the Hanford Subdivision Ordinance, Section 66474 of the Subdivision Map Act and Hanford's Zoning Ordinance:

1. Consistency Finding:

   ANALYSIS: That a consistency finding can be made, because the proposed subdivision map is consistent with the State Subdivision Map Act, General Plan, Zoning Ordinance, and Subdivision Ordinance. The subdivision is consistent with the General Plan Designation for the property, Low-Density Residential. All requirements of the R-L-5 Low-Density Residential zone district are met for lot size, frontage, width, and depth. Compliance with the regulations set forth in the Hanford Municipal Code for the R-L-5 Low-Density Residential zone district will be a condition of approval for the subdivision.

2. Design Finding:

ANALYSIS: That the design and improvement of the subdivision is consistent with the State Subdivision Map Act, General Plan, Zoning Ordinance, and Subdivision Ordinance. The subdivision is consistent with the General Plan Designation for the property, Low-Density Residential. All requirements of the R-L-5 Low-Density Residential zone district are met for lot size, frontage, width, and depth. Compliance with the regulations set forth in the Hanford Municipal Code for the R-L-5 Low-Density Residential zone district will be a condition of approval for the subdivision.

3. Type of Development Finding:

ANALYSIS: That the site is physically suitable for the single-family residential development proposed under Tentative Tract 943. The lots proposed meet the minimum lot size of the R-L-5 Low-Density Residential Zone District. All parcels have adequate street frontage on a public street and meet the minimum depth and width required for the district.

4. Density Finding:

ANALYSIS: That a density finding can be made, because the site is physically suitable for the proposed density of development. The General Plan prescribes a density range between two and 10 units per acre, with an expected average of four units per gross acre. The project has a density of 4.35 dwelling units per gross acre.

5. Environmental Finding:

ANALYSIS: That a focused environmental impact report was prepared for the project. On the basis of the Focused EIR, the City of Hanford, as the Lead Agency, has determined the project described above would have a significant effect on the environment based relating

to the project's transportation/traffic impacts and recommended a Statement of Overriding Considerations be adopted for the project's significant impact.

6. Public Health Finding:

ANALYSIS: That the design of the subdivision and type of improvements are not likely to cause serious health problems. The City of Hanford Building Division is responsible for ensuring that future construction of the site follows adopted building codes, thus reducing exposures to accidents to the general public. Consultation was sent for Tentative Tract 943 to interested agencies, including the County Health Department, Public Works Department, Fire Department, and Building Division. Any improvements or mitigations required for public health and safety were applied to the proposal and required in the conditions of approval and the mitigation monitoring and reporting program.

7. Improvements and Access Findings:

ANALYSIS: That the design of the subdivision and type of improvements will not conflict with easements acquired by the public at large for access through or use of the property within the proposed subdivision. All easements will be designated on the final subdivision map, as required by the utility companies and where needed for providing service to streetlights and landscape improvements, as designated by the City Public Utilities and Engineering Division. Additional easements are required, as follows:

a) A 20-foot easement established south of the centerline of Hume Avenue is required to be dedicated to the city for the purposes of street right-of-way.

b) An easement for storm drainage purposes is required to be dedicated to the City, where necessary, to facilitate installation of storm drainage facilities connecting the portion of the development located on the west side of Aquifer Drive to the proposed storm drainage basin located on the east side of Aquifer Drive.

c) All easements for irrigation ditches and/or irrigation pipelines will be legally abandoned or relocated to the satisfaction of the City Engineer prior to acceptance of the subdivision improvements.

d) An easement for sanitary sewer along the south side of Hume Avenue for gravity sewer pipeline, sewer lift station and force main is required to be dedicated to the city. This dedication requirement is contingent on whether Tract 943 develops before Live Oak West Tract 909.

e) All proposed landscape/public utility easements, as shown on the tentative map, are required to be dedicated to the City and be included on the subdivision final map.

**NOW, THEREFORE, BE IT RESOLVED, the** City Council of the City of Hanford finds the project to be consistent with the Final Environmental Impact Report (FEIR) (SCH 2024060956) associated with the Silicon Valley Ranch Residential Project, and for which said FEIR was certified precedent to its consideration of the annexation, consistent with the California Environmental Quality Act (CEQA) and the City of Hanford Municipal Code and Policies.

**THEREFORE, BE IT FURTHER RESOLVED** that the City Council of the City of Hanford hereby approves Vesting Tentative Tract 943, subject to the conditions of approval, attached as **Exhibit C,** and the following:

That this tentative subdivision map becomes null and void after 24 months has elapsed from the date of approval, if the above conditions have not been satisfied or bonded for, and a final map recorded. A time extension may be granted by the approving body upon written request by the applicant. The time extension, if approved, will be subject to the improvement standards and fees in effect at the time the extension for the tentative subdivision map is granted.

**PASSED AND ADOPTED** at a regular meeting of the City Council of the City of Hanford held on the 18th day of March 2025 by the following vote:

**AYES:** Martinez, Paden, Howze, Regan, Kairis

**NOES:** 0

**ABSTAIN:** 0

**ABSENT:** 0

**Lou Martinez, MAYOR**

*STATE OF CALIFORNIA)*
*COUNTY OF KINGS )*
*CITY OF HANFORD ) SS*

I, **Natalie Corral,** City Clerk of the City of Hanford, do hereby certify that the foregoing Resolution was duly passed and adopted by the City Council of the City of Hanford at a regular meeting thereof held on the 18th day of March, 2025.

Dated: 3/15/25

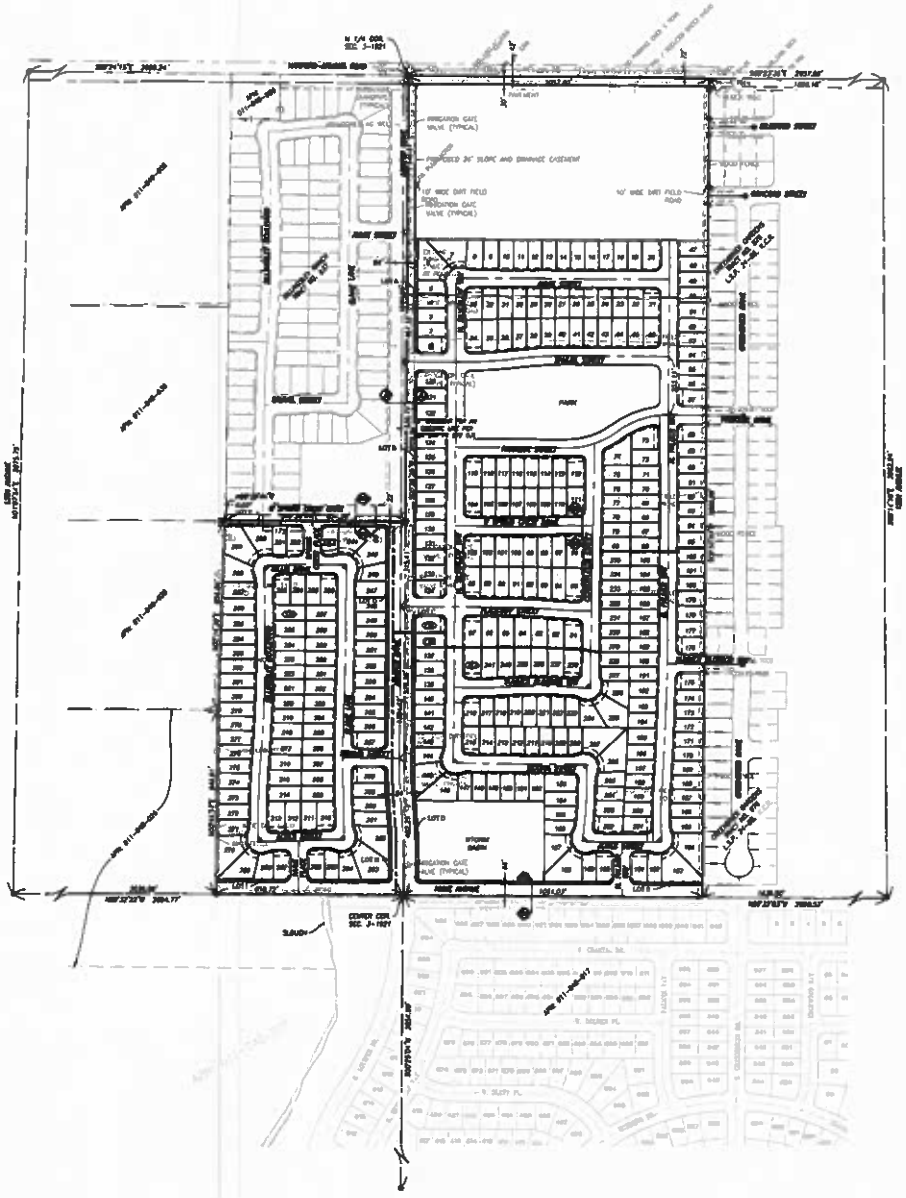
**City Clerk**

**Exhibit A:**

Vesting Tentative Tract 943

# VESTING TENTATIVE SUBDIVISION MAP TRACT #943
# SILICON VALLEY RANCH

A PORTION OF THE WEST HALF OF THE NORTHEAST QUARTER & A PORTION OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 21 EAST, MOUNT DIABLO BASE & MERIDIAN, IN THE CITY OF HANFORD, COUNTY OF KINGS, STATE OF CALIFORNIA






APPLICANT/OWNER
SILICON VALLEY RANCH, LLC
ATTN: R. BEDROS
2000 BONNIE LANE
SANTA ROSA, CA 95404
408-207-1727

ZUMWALT HANSEN INC.
A CMF Company

## LOT INFORMATION

| | |
|---|---|
| PHASE 1 LOTS: | 139 |
| PHASE 2 LOTS: | 167 |
| PHASE 3 LOTS: | 84 |
| TOTAL LOTS: | 390 |

## AREA

| | |
|---|---|
| PHASE 1 GROSS: | 31.64±AC |
| PHASE 2 GROSS: | 34.85±AC |
| PHASE 3 GROSS: | 16.33±AC |
| TOTAL GRO: | 79.82±AC |
| | |
| HANFORD STREET DEDICATION: | 17.49±AC |
| PHASE 1: | 6.85±AC |
| PHASE 2: | 4.38±AC |
| PHASE 3: | 4.85±AC |
| EXTERIOR STREET DEDICATION: | 4.81±AC |
| PHASE 1: | 1.70±AC |
| PHASE 2: | 2.40±AC |
| PHASE 3: | 1.76±AC |
| TOTAL STREET DEDICATION: | 22.30±AC |
| | |
| STORM BASIN DEDICATION: | 3.60±AC |
| PARK: | 3.88±AC |
| | |
| LANDSCAPE DEDICATION: | |
| PHASE 1: LOTS A-C | 0.36±AC |
| PHASE 2: LOTS D-F | 0.36±AC |
| PHASE 3: LOTS F-H | 0.43±AC |
| TOTAL LANDSCAPE DEDICATION: | 1.05±AC |

## LEGAL DESCRIPTION

PARCEL 1: 011-040-020 AND 011-040-019

ALL THAT PORTION OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 21 EAST, MOUNT DIABLO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER; THENCE SOUTH ALONG THE WEST LINE THEREOF A DISTANCE OF 1,630 CHAINS, MORE OR LESS, TO THE SOUTHWEST CORNER OF SAID NORTHEAST QUARTER; THENCE EAST ALONG THE SOUTH LINE OF SAID QUARTER SECTION, 15.64 CHAINS TO THE CENTER OF A WATER DITCH; THENCE NORTHERLY ALONG THE CENTER LINE OF SAID WATER DITCH 42.65 CHAINS TO A POINT IN THE NORTH LINE OF SAID NORTHEAST QUARTER; THENCE WEST ALONG SAID NORTH LINE A DISTANCE OF 14.30 CHAINS, MORE OR LESS, TO THE POINT OF BEGINNING.

PARCEL 2: 011-040-022

THAT PORTION OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 19 SOUTH, RANGE 21 EAST, MOUNT DIABLO BASE AND MERIDIAN, IN THE COUNTY OF KINGS, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS PARCEL 1 OF PARCEL MAP RECORDED AS BOOK 8, PAGE 72, OF PARCEL MAPS RECORDED IN BOOK 8, PAGE 72 OF PARCEL MAPS, KINGS COUNTY RECORDS.

## LEGEND

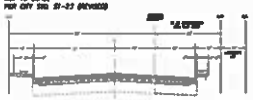
| | | | |
|---|---|---|---|
| AC | ASPHALT PAVING | ⊡ | ELECTRIC METER |
| BW | BACK OF WALK | ☀ | EXISTING STREET LIGHT |
| CRN | ASPHALT CROWN | | FIRE HYDRANT |
| | EDGE OF PAVEMENT | | FLOW LINE |
| GP | GUARD POST | | GATE POST |
| GV | GAS VALVE | | GUY POLE |
| GW | GUTTER | | IRRIGATION AG WELL |
| OG | ORIGINAL GROUND | | IRRIGATION STANDPIPE |
| SSCO | SANITARY SEWER CLEANOUT | | IRRIGATION VALVE |
| SW | SIDEWALK | | TOPO |
| TC | TOP OF CURB | | SANITARY SEWER CLEANOUT |
| TP | TELEPHONE POLE | | SANITARY SEWER MANHOLE |
| WBO | WATER BLOW-OFF | | SIGN |
| | EXISTING ELECTRIC LINE (OVERHEAD) | | S.D. CATCH BASIN MANHOLE |
| | EXISTING GAS LINE | | STORM DRAIN MANHOLE |
| | EXISTING WOOD FENCE | | TELEPHONE CHRISTY BOX |
| | EXISTING CHAINLINK FENCE | | TELEPHONE PEDESTAL |
| | EXISTING POST & WIRE FENCE | | TRANSFORMER POLE |
| | EXISTING AC SURFACING | | UTILITY POLE |
| | EXISTING CONCRETE SURFACE | | WATER METER |
| | NO REAR OR SIDE ACCESS | | WATER VALVE |
| | BENCHMARK | | |
| | DOWN GUY | | |

## NOTES

1. DATE OF PREPARATION: MARCH 21, 2024
2. GENERAL PLAN DESIGNATION: LOW DENSITY RESIDENTIAL
3. CITY ZONING: R-1-6
4. ALL DISTANCES SHOWN ARE IN FEET & DECIMALS THEREOF AND ARE APPROXIMATE
5. OFFSITE STREETS = 4.81 AC; SHARE STREETS = 17.49 AC; LOTS = 49.88 AC; PARK & BASIN = 7.88 AC
6. EXISTING LAND USE: AG
7. PROPOSED LAND USE: SINGLE FAMILY RESIDENTIAL (1 UNIT OF SFR)
8. NATURAL GAS BY: SOC COMPANY
9. TELEPHONE BY: AT&T
10. POWER BY: SOUTHERN CALIFORNIA EDISON CO
11. CABLE T.V. BY: COMCAST
12. SEWERS WITHIN BY: CITY OF HANFORD
13. STORM DISPOSAL BY: CITY OF HANFORD
14. REFUSE COLLECTION BY: CITY OF HANFORD
15. DRAINAGE: SEE BASIN
16. STORM DRAIN BASIN (PHASE 1)

## SECTION A-A
### AQUIFER DRIVE

NOT TO SCALE
PER CITY STD. ST-23 (REVISED)



## SECTION B-B
### W SPRING CREST DRIVE

NOT TO SCALE
PER CITY STD. ST-26



## SECTION C-C
### INTERIOR STREETS

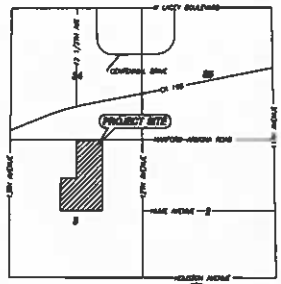
NOT TO SCALE
PER CITY STD. ST-22



## SECTION D-D
### HUME AVENUE

NOT TO SCALE
PER CITY STD. ST-23






## LOCATION MAP
NOT TO SCALE

PAGE 1 OF 2

**Exhibit B:**

Mitigation Monitoring and Reporting Program

| Mitigation Monitoring Program | | | | | |
|---|---|---|---|---|---|
| **Impact** | **Mitigation Measure** | **Time Frame for Implementation** | **Responsible Monitoring Agency** | **Date** | **Initials** |
| | **Aesthetics** | | | | |
| | No Mitigation required. | | | | |
| | **Agriculture and Forest Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Air Quality** | | | | |
| | No Mitigation required. | | | | |
| | **Biological Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Cultural Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Energy** | | | | |
| | No Mitigation required. | | | | |
| | **Geology and Soils** | | | | |
| | No Mitigation required. | | | | |
| | **Greenhouse Gas Emissions** | | | | |
| | No Mitigation required. | | | | |
| | **Hazardous Materials** | | | | |
| | No Mitigation required. | | | | |
| | **Hydrology and Water Quality** | | | | |
| | No Mitigation required. | | | | |
| | **Land Use and Planning** | | | | |
| | No Mitigation required. | | | | |
| | **Mineral Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Noise** | | | | |
| | No Mitigation required. | | | | |
| | **Population and Housing** | | | | |

| Mitigation Monitoring Program | | | | | |
|---|---|---|---|---|---|
| **Impact** | **Mitigation Measure** | **Time Frame for Implementation** | **Responsible Monitoring Agency** | **Date** | **Initials** |
| | No Mitigation required. | | | | |
| | **Public Services** | | | | |
| | No Mitigation required. | | | | |
| | **Recreation** | | | | |
| | No Mitigation required. | | | | |
| | **Traffic and Transportation** | | | | |
| **#1** | **MM 4.17-1:** The Project proponent or developer shall be required to pay their fair share costs for the needed improvements. This includes changing the 12th Avenue and Hanford Armona Road intersection eastbound right turn lane to an eastbound through lane and a right turn lane.<br>The fair share cost for the improvement is calculated at 18.94% and shall be collected by the City of Hanford at the appropriate time. | Prior to issuance of building permit | Project Proponent/Lead Agency | | |
| | | A. The Lead Agency shall determine total improvement cost of intersections and provide it to the Project proponent.<br>B. The Project Proponent shall pay their equitable share of the cost for intersection improvements as indicated in the Mitigation Measure and the Traffic Study prior to the issuance of building permits. | | | |
| | **Tribal Cultural Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Utilities and Service Systems** | | | | |
| | No Mitigation required. | | | | |
| | **Wildfire** | | | | |
| | No Mitigation required. | | | | |

**Exhibit C:**

Conditions of Approval

**ADMINISTRATION DEPARTMENT**

Contact the City Attorneys' Office: (559) 584-6656
Concerning questions that you may have on the conditions listed below:

**Defense and Indemnification Provisions:**

1. That the applicant shall defend, indemnify, and hold harmless the City of Hanford ("City"), its officials, officers, employees, representatives, agents and attorneys, from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with, the City's act or acts leading up to and including approval of any environmental document and/or granting of any approvals relating to the Project. Applicant's obligation to defend, indemnify and hold the City harmless specifically includes, but is not limited to, any suit or challenge by any third party against the City which challenges or seeks to set aside, void or annul the legality or adequacy of any environmental document approved by the City or any approval related to the Project.

**PLANNING DIVISION**
**SITE PLAN REVIEW COMMENTS**

**TENTATIVE TRACT NO. 943**
**CONTACT:** Gabrielle Myers, Senior Planner: (559) 585-2578

---

**General Plan Designation:** Low-Density Residential

**Zoning:** R-L-5 Low-Density Residential

**Other Special Districts:** N/A

**Entitlements Required:**

1. Annexation – the property is currently in the Kings County Jurisdiction

2. Prezone – the property is designated as Low-Density Residential in the General Plan, prezone proposed R-L-5 Low-Density Residential

**Planning Division Recommendation** ☒ Revise and Proceed ☐ Resubmit

**General Requirements:**

☒ That the applicant hereby agrees to hold the City of Hanford and all of its departments, officers, agents, and employees free and harmless of and from all claims of any kind or nature arising out of or by reason of the approval of this project.

☒ That approval of this project does not exempt compliance with all applicable sections of the Uniform Fire and Building Codes, Zoning Ordinance, Public Works Improvement Standards, and other City Ordinances.

☒ That the final map be submitted to the City Engineer and Community Development Department for compliance with the Tentative Subdivision Map approval prior to recording the final map.

☒ That all conditions of approval listed in this resolution by the City of Hanford be contained in the line drawing submitted for building permits.

☒ That in accordance with Title 16 of the Hanford Municipal Code, all conditions of this subdivision listed herein, and contained in subsequent improvement agreements, excluding the landscape district, must be completed and accepted for maintenance by the City Council prior to the final building inspection and occupancy permits being issued for the first house in the subdivision.

☒ That Vesting Tentative Tract 943 be developed consistent with the approved tentative tract map, attached as **Exhibit A.**

☒ That the tentative tract is subject to the mitigations cited in the Mitigation Monitoring and Reporting Program, attached as **Exhibit B.**

**Right-to-Farm:**

☒ Notwithstanding any other provision in this Chapter, agricultural operations are the principal and favored use of land in the areas of Kings County designated "Agricultural" in the Kings County General Plan and included in the agricultural zone districts of the Kings County zoning ordinance. In order to implement Policy LU 8.2 and Program LU 8.2-A of the city of Hanford General Plan, there is hereby adopted in the city of Hanford a policy to (1) protect agricultural land, operations, and facilities from conflicting use due to the encroachment of incompatible, non-agricultural uses of the land in agricultural areas of the county, and (2) to advise developers, owners, and subsequent purchasers of property in the city of Hanford within one (1) mile of the city's urban limit line of the inherent potential inconveniences and discomforts often associated with agricultural activities and operations, including, but not limited to, equipment and animal noise; farming activities conducted on a 24-hour a day, 7-days a week basis; odors from manure, fertilizers, pesticides, chemicals, or other sources; the aerial and ground application of chemicals and seeds; dust; flies and other insects; and smoke from agriculture operations.

☒ That no lawfully established and otherwise lawful agricultural activity, operation, or facility, or appurtenances thereto, conducted or maintained for commercial agricultural purposes in a manner consistent with proper and accepted customs and standards as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, including, but not limited to, the encroachment of non-agricultural uses such as residences.

☒ In order to carry out the goals and policies of the city of Hanford General Plan, and the provisions of this chapter, the following notices and disclosures shall be required:

☒ All approvals for improvement or development of property including without limitation application for rezonings, land divisions, zoning permits, and residential building permits, on property in the city of Hanford within one (1) mile of the city's urban limit line, shall include a condition that notice and disclosure of this agricultural land use policy be given by the applicant, or the owner if different from the applicant. The applicant, or owner if different from the applicant, shall also acknowledge the contents of the notice and disclosure, which includes a description of the property the notice and disclosure pertains to, in the Official Records of the Kings County Recorder, and recorded at the applicant's own expense.

**Zoning:**

☒ That all requirements of the R-L-5 Low-Density Residential district shall apply.

**Dwelling Units per Lot** (Section 17.10.050)

☒ That not more than one dwelling unit shall be allowed on each lot, unless approved as an accessory use to an allowed or approved conditional use, or approved as an accessory dwelling unit, in accordance with Section 17.60.030 of the Hanford Municipal Code.

**Coverage** (Section 17.10.060)

☒ That the maximum overage shall be determined by the combined building setback requirements, accessory structure limitations, and off-street parking requirements.

**Building Setback Area** (Section 17.10.070)

☒ That no structure shall be placed within a building setback area.

☒ The front building setback area shall be 15 feet from the front lot line for livable space and 20 feet for garages, carports, and other non-livable building space.

☒ That the rear building setback shall be 15 feet from the rear lot line, except where there is a landscape easement with a wall or fence on the rear of the lot, then the rear building setback shall be 20 feet.

☒ The rear building setback area shall be increased by 10 feet for buildings over one-story high.

☒ That where there is a landscape easement with a wall or fence on the street side of the lot the side yard setback area shall be measured from the easement area instead of the side lot line.

**Distance between Structures** (Section 17.10.080)

☒ The minimum distance between structures shall be 10 feet, except as provided by the building code.

**Height of Structures** (Section 17.10.090)

☒ The maximum structure height shall be 35 feet.

**Driveways** (Section 17.10.110)

☒ That the width of a driveway and any paved area shall not cumulatively exceed 40% of the width of the lot's street frontage on which the driveway and any paved area faces. In the case of "L" or "U" shaped driveways or other configurations besides perpendicular driveways, the paved area of these driveways shall not exceed 50% of the front building setback area.

☒ That on corner lots, the driveway shall be located on the side of the lot adjacent to the interior lot line.

☒ That on key lots, the driveway shall be located on the side of the lot, which is not adjacent to the rear lot line of the adjacent reverse corner lot.

**Usable Open Space** (Section 17.10.150)

☒ That each lot shall provide for a usable open space area of a minimum 400 square feet that is a minimum 15 feet wide.

**Landscaping** (Section 17.10.160)

☒ That landscaping be provided in accordance with Section 17.52 Landscape Standards of the Hanford Municipal Code.

☒ That except for driveways and approved parking areas all yard areas and setback areas visible from the street shall be landscaped with live plant materials and ornamentation common to the Hanford area or up to 100% of the yard and setback area may be landscaped with artificial turf and other permeable surfaces.

☒ That two street trees, a minimum 15 gallon size, shall be planted on all lots 6,000 square feet or greater. One of the two shall be planted 12 feet (no greater or no less) from the face of the font lot line street curb.

☒ That one street tree, a minimum 15 gallon size, shall be planted on all lots less than 6,000 square feet. The tree shall be planted in the parkway. If there is no parkway, the tree shall be planted four feet behind the sidewalk.

☒ That there shall be two additional street trees, a minimum 15 gallon size, planted on all corner lots in the parkway adjacent to the street side lot line.

☒ That all species of trees shall be selected from a list approved by the City Parks and Recreation Commission.

☒ That each lot owner within Tentative Tract 943 shall care for and maintain the trees and lawn area located in the parkway in front of their lot(s).

☒ For corner lots, the lot owner shall care for and maintain the parkway trees and land area along the street-side of their lot. The parkway is defined as that land area located between the street curb and the public sidewalk.

**Noise**:

☒ That construction equipment is muffled and construction activities be limited to the hours between 7:00 a.m. to 10:00 p.m., Monday through Friday, unless the construction is within the enclosed structure or approved by the Community Development Department.

☒ That noise from fixed mechanical equipment, when measured at the property line, meets the standard of the Hanford Noise Element.

**Rooftop Equipment** HMC Section 17.50.100

☒ That all elevator housing and mechanical equipment located on the roof of any building shall be screened from adjacent views and contained within a completely enclosed penthouse or portion of the same building having walls and roofs with construction and appearance similar to the building.

**Outdoor Lighting Standards** HMC Section 17.50.140

☒ That all lights and light fixtures, except public street lights, shall be located, aimed or shielded so as to minimize light trespassing across property boundaries or skyward.

☒ That no lights or light fixtures shall flash, revolve, blink or otherwise resemble a traffic control signal or operate in such a fashion to create a hazard for passing traffic.

☒ That building mounted lighting fixtures shall be attached only to the walls of the building. The top of a light fixture attached to a building wall shall not be higher than the top of the building parapet or the top of the roof eave, whichever is lower.

☒ That canopy ceiling light fixtures shall be recessed or the sides of the lens area shall be shielded in order to eliminate emission of horizontal light.

☒ That mercury vapor lamps shall be a fully shielded fixture with all light directed on-site.

☒ That freestanding light fixtures shall not exceed eighteen (18) feet in height measured from the top of a light fixture to the adjacent grade at the base of the support for that light fixture.

**Tents, Tarps, and Other Coverings** (Section 17.50.130)

☒ That no front or side building setback area shall be covered by tents, tarps, cloth, fabric, or a wood or metal covering or structure except for the following:

- ☒ Standard window and door awnings
- ☒ Ornamental covers, such as a sidewalk or entry awning trellis, or other similar improvement intended as an improved passageway or for aesthetic purposes providing architectural integrity with the building to which it is attached. Supports shall be ninety (90) percent open and shall not be enclosed.

**Dust Control:**

☒ That the appropriate dust-control practices of the San Joaquin Valley Air Pollution Control District shall be implemented.

☒ That the any necessary permits be obtained through the San Joaquin Valley Air Pollution Control District.

## BUILDING DIVISION
## TT 943

**Contact Building Official: Tom Webb (559) 585-2584**
**Concerning questions that you may have on the conditions listed below:**

**Soils**:

1. That a preliminary soils report, prepared by a qualified soil's engineer, be provided to the Engineering and Building Departments prior to approval of Subdivision Improvement Plans.

2. That a final soils report, prepared by a qualified soils engineer, be provided to the Engineering Department and Building Division prior to acceptance of the subdivision improvements by the City or issuance of building permits or whichever comes first.

3. That the developer retains the design engineer to inspect and verify that grading within the subdivision was constructed as per the approved design, and a copy of the report be provided to the Building Division prior to building permit issuance.

**Street Names and Addresses:**

1. That street addresses for each lot, as provided by the Building Division, be included on the subdivision final map.

2. That street names, as shown on the tentative subdivision map, be included on the subdivision final maps.

3. That all single family dwellings within the subdivision have illuminated address numbers 2-¼ inches high or be within an illuminated area with 3-½ inch high address numbers installed on the front most part of the building leading to the entrance. In either case the address numbers shall be of contrasting colors with the background.

4. That all landscaping requires permits and must meet requirements at time of installation.

5. That a map must be provided to show existing streets names of surrounding subdivisions that have City maintained streets.

**City of Hanford Fire Department**

**Fire Prevention and Community Risk Reduction Division**

**Fire Marshal**

**Nikkie Chamberland**

# City Of Hanford Fire Department Plan Review

Approval of all projects does not exempt compliance with all applicable sections of the adopted Fire Codes and local city ordinances. All fire protection systems must be installed and operational prior to occupying the building. All permits shall be issued and paid for prior to scheduling any inspections with the fire department. Please contact the building department for the submittal process. To schedule an inspection please contact the building department at 559-585-2580

The scope of work shall be clearly stated on all the plans submitted for the permit. All deferred submittals shall be listed on the building plan page. All deferred submittals are required to be submitted within 30 days of building permit issuance.

Plan review number: TSM0009-23

Address: 12405 Hanford Armona Road, Hanford, CA 93230

Plan Reviewer: Nikkie Chamberland

Date: 9-30-2024

The following are comments that are applicable and pertain to the plans submitted: This project must comply with the latest California Fire Code.

- Project shall meet the minimum fire flow requirements per Appendix B & C of the CFC 2022; Provide the fire flows within one year
- New and existing residences that have an automatic sprinkler system, proposed accessory dwelling units shall have an automatic sprinkler system. A separate fire department permit will be required.
- Fire Riser Room:
    1. a separate room that contains the Fire Riser shall contain one man door, the room shall be a 2-hour rated room with adequate spacing to perform

maintenance, riser room shall be properly labeled with 4" lettering with contrasting background and a knox box shall be installed to contain the riser room key, fire sprinkler coverage required, emergency lighting and illuminated lighting required. The riser shall be interconnected with the fire alarm

- When a sprinkler system is required with more than 21 heads, the system shall be monitored by a central monitoring station. Fire alarm and fire detection systems required by Chapter 9 of CFC, CBC, shall be installed per NFPA 72.
- Knox FDC Locking Caps are required on all Fire Department Connections.
  A fire department access road is required for facilities that are protected by fire sprinklers and are more than 400 feet away; on-site fire hydrants and mains shall be provided where required by the AHJ. Provide a letter of certification from a licensed soil engineer on non-paved all-weather roads that provide fire access, which shall support a 40,000-lb fire apparatus at a minimum.
- All dead-end access roads of more than 150 must provide an approved turnaround or hammerhead and comply with city standards.
- All access roads shall not be less than 20 ft wide and 13 ft 6 inches
- Access road turning radius for fire apparatus/
  1. Inside turn: 20ft 10 inch
  2. Curb to Curb: 37 ft 3 inches
  3. Wall to Wal: 42 ft

- Temporary or permanent fire department access roads shall be constructed in accordance with City Standards ST-36. All weather access roads shall be in place prior to any combustible construction being brought onto the premises unless approved by the fire department.

- Additional Hydrants may be required, all hydrants shall be installed and accepted prior to combustibles being dropped on site. All hydrants shall be protected by bollards Hydrant spacing shall be as follows CFC 2022 Appendix C;
  1. Residential area- 500ft
  2. Commercial area-300ft
  3. A hydrant will be required within 50' of the Fire Department connection.
  4. Provide a turning template on Plan Review

- No traffic calming devices shall be installed without the Fire Department's approval
- Areas identified as "**Fire lanes**" must be identified as such per requirements set forth in the California Vehicle Code Section 22500.1.

  1. **Access roads 20-26 feet in width:** Fire lanes shall be on both sides of the fire apparatus access roads.
  2. **Access roads 26 to less than 32 feet in width**: Fire lanes shall be on one side of the fire apparatus access roads.
  3. **Access roads 32 feet in width or more:** No fire lanes required.
  4. **Markings shall include "No Parking- Fire Lane"**
- Locked gates installed across fire department access roads:

1. **Manual gates** with a chain lock require a **Knox Padlock** to be installed on them, or a **Knox Box** shall be installed on the exterior of the gate and a key to the lock on the gate must be placed in the Knox Box. **(See www.knoxbox.com for current models)**
2. **Electric Gates** shall be equipped with an electric **Knox Key Switch,** at the gate location.
3. In case of a loss of power, electrically operated gates shall have a means of backup power or shall default in the open position for immediate fire department access.
4. At no time shall the width of the fire department access road be reduced below **20 feet wide through or at any gates** along the fire department's emergency access roads due to protruding objects from gate supports, frames, signs, access booths, curbs, etc.
5. Provide a Knox Box for all structures and gates. In accordance with the 2019 CFC 506.1. Hanford Fire Department shall approve the location.
6. Ordering Knox Box products can be done directly at www.knoxbox.com. Click to choose your local fire department agency, enter "Hanford Fire Dept", and a list of products will populate for you to order.

- All address numbers shall be installed onto the building and shall be visible from the frontage street. The color of the address numbers shall be in a contrasting color to the building.
  Size of Address Numbers:

  1. Downtown area (existing buildings): 4 inch numbers
  2. Buildings 20 ft. or less from the street: 6-inch numbers
  3. Buildings 21- to 40-ft. from the street: 8-inch numbers
  4. Buildings more than 40 ft. from the street: 12-inch numbers
- Operational Fire Permit is Required

- Fire permits are required for all underground fire lines, overhead sprinklers, and fire alarms. These are all separate permits and will be charged accordingly. All deferred submittals shall be submitted, stamped, and approved prior to combustible on site.

- Refer to the 2022 California Fire Code in governing codes

## PUBLIC WORKS DEPARTMENT

**Contact Assistant Engineers: Steve Coodey or Robert Buchanan**
**Concerning questions that you may have on the conditions listed below:**

## Tentative Tract 943- Silicon Valley Ranch

**Maps and Plans**:

1. That the developer submit to the City Engineer a set of construction plans on 24" x 36" sheets for all required improvements. Plans shall be prepared by a registered civil engineer, and shall include a drainage and utility plan identifying sizes and location of sanitary sewer, storm drainage and water mains, curbs, gutters, sidewalks, masonry wall, street improvements and other infrastructure required for development. All plans shall be approved by the City Engineer and all other involved agencies before the release of the building permits.

2. That the developer shall submit to the City Engineer a set of construction plans on 24" X 36" size sheets for all required improvements. The plans shall be prepared by a licensed civil engineer and shall include a site plan showing all on-site and off-site improvements, including but not limited to, sanitary sewer, storm drainage, and water system infrastructure, refuse enclosure locations, public street & parking lot improvements, landscape & irrigation systems and all other improvements as required by the project conditions of approval and the City of Hanford Standards and Specifications. Improvement plans shall include all City of Hanford Construction Standard Detail's pertinent to the project. Plans must be approved by the City of Hanford and any other affected agencies before issuance of building or encroachment permits.

**Easements**:

1. That easements be designated on the recorded final map as required by the utility companies and where needed for providing service to streetlights as designated by the City of Hanford Engineering Department.

2. That a 20 foot easement established south of the centerline of Hume Avenue shall be dedicated to the city for the purposes of street right of way.

3. That an easement for storm drainage purposes be dedicated to the City where necessary to facilitate installation of storm drainage facilities connecting the portion of the development located on the west side of Aquifer Drive to the proposed storm drainage basin located on the east side of Aquifer Drive.

4. That all easements for irrigation ditches and/or irrigation pipelines be legally abandoned or relocated to the satisfaction of the City Engineer prior to acceptance of the subdivision improvements.

5. That an easement for sanitary sewer along the south side of Hume Avenue for gravity sewer pipeline, sewer lift station and force main shall be dedicated to the city. This dedication requirement is contingent on whether Tract 943 develops before Live Oak West Tract 909.

6. That all proposed landscape/public utility easements as shown on the tentative map be dedicated to the City and be included on the subdivision final map.

**Dedications:**

1. That all proposed streets and street extensions as shown on the tentative map be dedicated to the City, as public right-of-way, and any alterations of existing utilities be the responsibility of the developer.

2. That developer dedicate to the City, additional street right of way along the east side of Aquifer Drive, between Hanford Armona Road and the southerly ultimate alignment of W. Spring Crest Drive property frontage to facilitate an overall street right of way width of 84 feet in conformance with City Standard Detail ST-23 ("Major Collector Street").

3. That the developer dedicate to the City, full right of way between the southerly ultimate alignment of W. Spring Crest Drive and Hume Avenue, a width of 84 feet to establish the extension of Aquifer Drive in conformance with City Standard Detail ST-23 ("Major Collector Street"). Aquifer shall include offset as shown on the tentative map to align with the approved tentative map for Live Oak West Tract 909.

4. That the developer dedicate to the City, additional street right of way along the south alignment of W. Spring Crest Drive property frontage to facilitate an overall street right of way width of 68 feet in conformance with City Standard Detail ST-26 ("Minor Collector Street").

5. That the developer dedicate to the City, street right of way along the Hume Avenue property frontage to facilitate an overall street right of way width of 88 feet in conformance with City Standard Detail ST-23 modified for additional parkway strip equaling 12 feet for a total street right of way of 88 feet.

6. That developer dedicate to the City, the proposed onsite drainage basin for Tract 943 drainage purposes.

7. That the developer shall dedicate the park land to the City.

**Park Improvements:**

1. The applicant proposes a 3.58-acre park which shall be fully developed with Phase I of the subdivision.

2. That all park facility improvements shall conform to PUD master plan requirements and City Standards and Specifications. Developer shall retain the services of a landscape architect to design all park facility improvements. Improvements shall include, but not be limited to, installation of concrete walking path, covered picnic areas, decorative security lighting, drinking fountains, park benches and trash receptacles, landscaping and irrigation systems, play feature picnic table(s). Park improvements shall be constructed concurrent with the first phase of the development.

3. Park improvement reimbursement will not exceed Park Impact Fees for all phases combined.

**Street Improvements**:

1. That the improvements consisting of sanitary sewers, storm sewers, water mains, concrete curbs, gutters, sidewalks, street lights, street subgrading and surfacing, signage and striping and all other improvements be installed in accordance with Chapter 16.24 "Improvements" of the Hanford Municipal Code, and this resolution pertaining to subdivision improvements in effect at the time of filing the tentative map.

2. That all streets within the subdivision shall be developed to residential street standards (City standard ST-33 cul-de-sacs and ST-32 residential through streets), except the following:

    a) Aquifer Drive shall be developed as a Major Collector street with an 84 foot right of way width in conformance with City Std. ST-17 and ST-23 and a traffic index of 8. Developer shall be required to construct the remaining width of right of way on the east side of Aquifer Drive from Spring Crest to Hanford Armona Road. North of the project boundary, curb and gutter as well as the curb return at the southeast corner of Hanford Armona Road and Aquifer Drive shall be installed. Sidewalk can be deferred until such time as the Not A Part parcel is developed.

    b) Develop Aquifer Drive full width right of way (84 feet) street improvements in conformance with City Standard ST-17 and ST-23 along both east and west boundary of property being developed south of Spring Crest Drive to Hume Avenue. With a traffic index of 8.

    c) Spring Crest Drive shall be developed as a Minor Collector street with a 68 foot width in conformance with City Standard Detail ST-17 and ST-26 with a traffic index of 6. Developer shall be required to construct the remaining width of right of way on the south side of Spring Crest Drive from the west boundary of the development to Aquifer Drive.

    d) Hume Avenue shall be developed as a Major Collector street with an 88 foot right of way width in conformance with City Standard Detail ST-17 and ST-23, modified to allow for additional park strip behind curb with a traffic index of 8. Developer will only be required to construct two-thirds (2/3) road width along project frontage. The eastbound lane shall include

a 12 foot travel lane with a 4 foot paved shoulder and a 4 foot unpaved shoulder containing a swale. If Tract 943 develops prior to Live Oak West Tract 909, the striping for Hume Avenue shall consist of matching the centerline striping as installed with Live Oak North Tract 902. If Live Oak West Tract 909 develops Hume Avenue prior to Tract 943, then striping shall be removed and a 14 foot continuous left turn lane shall be installed from Aquifer Drive to 12th Avenue.

3. That streetlights be installed throughout subdivision in conformance with City standard GE-56. Streetlights shall be located as designated by City Engineer.

4. That the development is subject to a transportation mitigation impact fee as required by City Ordinance No. 90-09 and any revisions thereof. Developer shall be entitled to a credit against subject development fee for improvements constructed by developer within Hume Avenue and Aquifer Drive, consisting of 22 feet of asphalt pavement section as measured from centerline of road. Reimbursement are paid according to the City of Hanford Development Impact Fee Study dated September 2019.

**Backup Parkway Improvements:**

1. That the developer shall design and construct the following improvements along Hume Avenue, Spring Crest Drive and Aquifer Drive frontages of proposed subdivision.

   a. A six (6) ft. minimum high ornamental, masonry block fence with continuous footing. Wall shall be treated with an anti-graffiti repellent.

   b. A 4 ½ ft. wide sidewalk per City Standard Detail CO-14.

   c. Soil preparation, automatic irrigation and landscaping.

   d. Landscape plans for right-of-way and 12 ft. wide landscape easement area along Hume Avenue property frontage from the back of curb to the block wall.

2. The species of tree and plants are to be selected from a list approved by the City Street Tree Commission.

3. That the design location of the masonry wall and landscape plans shall be approved by the Community Development Department and City Engineering Department prior to recording a subdivision final map. And the approval of block wall and landscape improvements shall be submitted with initial submittal of project improvement plans.

4. All above ground pedestals and other utility boxes shall be located between back of sidewalk and masonry wall/fence.

**Existing Wells:**

1. That all existing wells on the property be abandoned in accordance with State of California standards.

**Restricted Access**:

1. That a one-foot reservation strip be established at the end or sides of the roads abutting unsubdivided property and indicated on the subdivision final map.
2. That all access be restricted from the Hume Avenue, Aquifer Drive and Spring Crest Drive right-of-way for lots backing or siding onto said rights-of-way. A restricted access designation shall be depicted on all recorded final maps.
3. That the developer construct a barricade to City standards at the end of each future through streets.

**Sewer Improvements**:

1. That the developer's engineer provide a sanitary sewer master plan complete with calculations for the entire subdivision that coincides with the Live Oak West Sanitary Sewer Master Plans for City review and approval prior to recording a subdivision final map for the first phase of development. Consideration shall be given for future areas of development located adjacent to proposed subdivision per the City Sanitary Sewer Master Plan.
2. That a minimum 8-inch diameter sanitary sewer main be installed within Aquifer Drive between Spring Crest Drive and Hume Avenue.
3. That in the event that the subdivision is constructed prior to the Live Oak West Tract 909 subdivision, developer shall install a sanitary sewer lift station per the Live Oak West Tract 909 Sanitary Sewer Master Plan, located at the southwest corner of Hume Avenue and Aquifer Drive.
4. That developer shall install a 12 inch sewer main in Hume Avenue from the west development boundary to Aquifer Drive. Applicant shall be entitled to a reimbursement for over sizing in accordance with City Municipal Code Section 13.08, or any revisions thereof.
5. That a 6-inch diameter sanitary sewer force main be installed within Hume Avenue from the sanitary sewer lift station west of Aquifer Drive along development frontage and connecting to an existing gravity manhole located near the east project boundary.
6. That developer is entitled to a reimbursement for the completion of the sanitary sewer lift station in accordance with City Municipal Code section 13.08 and in conformance with the City of Hanford Development Impact Fee Study dated September of 2019. The development will be eligible for reimbursement for lift station

costs beyond the proportional need of the development. Developer to provide calculations to the City for their portion of reimbursement.

7. That developer is entitled to a reimbursement agreement in accordance with City Municipal Code section 13.08 for sanitary sewer main improvements constructed within Hume Avenue, which also provides a benefit to others. Costs for sanitary sewer main improvements installed within Hume Avenue, if applicable, shall be per the City of Hanford Development Impact Fee Study document dated September of 2019. Reimbursement cost shall be per the Fee Study at time of acceptance.

**Storm Drainage Improvements**:

1. That the developer's engineer provide a storm drainage master plan complete with calculations for the entire subdivision for City review and approval prior to recording a subdivision final map for the first phase of development.

2. That the developer is required to complete construction of the storm drain basin with the first phase of the subdivision. The basin shall be designed in conformance with the City of Hanford's Storm Drainage Design Criteria specifications and shall include a six (6) ft. minimum high ornamental, masonry block fence with continuous footing along the Aquifer Drive and Hume Avenue frontages, a 24' wide drive approach per City Standard Detail CO-41 and access gates per City Standard Detail GE-26. A chain-link fence with continuous footing per City Standard Detail GE-23 shall be constructed along non street fronting basin boundaries.

3. That developer is required to comply with the State of California Water Resources Control Board requirements specifically related to the National Pollution Elimination System Permit process.

**Water System**:

1. That the developer's engineer provide a Water System Master Plan complete with calculations for the entire subdivision for City review and approval prior to recording a subdivision final map for the first phase of development. Consideration shall be given for future areas of development located adjacent to proposed subdivision, as shown on the city Water Master Plan.

2. That a minimum 18 inch diameter water main and appurtenances, be extended along property frontage within Aquifer Drive. Applicant shall be entitled to a refund for water main oversizing in accordance with City Municipal Code Section 13.04.

3. That a minimum 12 inch diameter water main and appurtenances, be extended along property frontage within Hume Avenue. Applicant shall be entitled to a refund for water main oversizing in accordance with City Municipal Code Section 13.04.

4. That all existing water wells be abandoned in conformance with State of California Department of Health Standards.

**Assessment District:**

1. That the developer enters into an agreement for the formation of a Community Facilities District (CFD) for the maintenance of landscaping, decorative block wall/ fencing, roadways, streetlights, curb and gutter, sidewalk, signage, storm drain system and basin and emergency services.

2. That prior to funds of the tax assessment district being obtained, the developer will be responsible for the maintenance of all items listed above.

**Special Requirements:**

1. That a right-to-farm provision be recorded with the recording of the final subdivision map to insure that future residents of the homes in the subdivision are aware of the adjacent agricultural uses and their right to continue to operate.

2. That each lot owner within Tract No. 943 shall care for and maintain the trees and lawn area located in the parkway in front of their lot(s). For corner lots, the lot owner shall also care for and maintain the parkway trees and lawn area along the street side of their lot. All species of trees shall be selected from a list approved by the City Street Tree Commission. The parkway is defined as that land area located between the street curb and the public sidewalk.

3. That the tree(s) and lawn area are to be properly pruned, mowed, sprayed, watered and fertilized on a regular on-going basis in order to preserve the health and life of the tree(s) and lawn area.

4. That should the tree(s) and lawn area become damaged, severely pruned, neglected, removed or die, the lot owner shall replace said tree(s) and lawn area within thirty (30) days after the date of written notice from the City of Hanford. The tree(s) shall be replaced with a 15 gal. size tree of the same species that was originally planted. The lawn area shall be replaced with lawn. Rocks, bark, ground cover, plants or paving are not allowed in the parkway

5. That the "NOTICE, DISCLOSURE, ACKNOWLEDGMENT AND AGREEMENT OF CONTINUED CARE AND MAINTENANCE BY LOT OWNER OF THE TREES AND LAWN AREA PLANTED IN THE PARKWAY" be recorded concurrent with the recording of the subdivision final map to insure that future residents of homes in the subdivision are aware of the obligation to maintain the landscaping within the park strip. Each lot owner is to be provided a copy of said Notice, Disclosure, Acknowledgement, and Agreement, attached as in Exhibit B.

**Impact Fees:**

1. That development is subject to a Police Development Impact Fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.

2. That development is subject to a Fire Development Impact Fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.

3. That development is subject to a Park Development Impact Fee as required by City Ordinance No. 90-10 and any revisions thereof. Fee payable with each building permit.

4. That development is subject to a Transportation mitigation impact fee as required by City Ordinance No. 90-09 and any revisions thereof. Fee payable with each building permit.

5. That the development is subject to a Wastewater System Development Impact fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.

6. That development is **NOT** subject to a Storm Drainage Development Impact fee, as required by City Ordinance No. 98-14, and any revisions thereof. The development will be constructing a storm basin.

7. That development is subject to a Water System Development Impact Fee as required by City Ordinance No. 98-14 or any revisions thereof. Fee payable with each building permit.

8. That development is subject to a Sanitary Sewer area of benefit assessment fee in accordance with City Ordinance No. 92-03 and any revisions thereof. Subject fee shall be paid prior to recording a subdivision final map.

**RESOLUTION 25-07-R**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD CERTIFYING THE FINAL FOCUSED ENVIRONMENTAL IMPACT REPORT PREPARED FOR SILICON VALLEY RANCH RESIDENTIAL PROJECT TO THE CITY COUNCIL OF THE CITY OF HANFORD. THE PROJECT IS LOCATED SOUTH OF HANFORD-ARMONA ROAD, BETWEEN 12TH AND 13TH AVENUES (APN 011-040-008, -010, AND -027).**

**STATE CLEARINGHOUSE #2024060956**

**WHEREAS,** pursuant to the requirements of the California Environmental Quality Act (CEQA), the City of Hanford prepared an initial study for the Silicon Valley Ranch Residential Project, Annexation 161, Prezone No. 0005-23, and Vesting Tentative Tract 943; and

**WHEREAS,** pursuant to the requirements of CEQA, the City of Hanford prepared a Notice of Preparation (NOP), which was sent to the State Clearinghouse to solicit statewide agency participation in determining the scope of the Draft Focused Environmental Impact Report (Draft Focused EIR); and

**WHEREAS,** the NOP was released for a 30-day period, during which the NOP was also posted at the State Clearinghouse, CEQANet, and the City of Hanford's website; and

**WHEREAS,** the City of Hanford prepared written responses to all comments received during the Notice of Preparation Phase and prepared a Draft Focused EIR which was completed in accordance with CEQA and was distributed to the commenting agencies and individuals on November 22, 2024; and

**WHEREAS,** a Final Focused EIR was prepared, which addressed any comments received during the public review period of the Draft EIR, and a Notice of Intent to Certify the Final EIR was distributed publicly on February 14, 2025; and

**WHEREAS,** the Final Focused Environmental Impact Report consisted of the Initial Study, Draft Focused EIR and revisions of or additions to, the Draft Focused EIR, the written comments, responses to comments by the City of Hanford to significant environmental points raised in the review and consultation process, errata to the foregoing and other information added by the City of Hanford as specified in the EIR; and

**WHEREAS,** the Planning Commission held a public hearing on the proposed project and Final Focused EIR on February 25, 2025 and took public comment; and

**WHEREAS,** the Planning Commission of the City of Hanford has reviewed and considered the Final Focused EIR prepared for the Silicon Valley Ranch Residential Project, in its entirety on February 25, 2025, took public comment and recommended that the City Council certify the Final EIR by adopting Resolution 2025-01; and

**WHEREAS,** no additional public comments have been received since the public hearing by the Planning Commission and prior to the proceeding to consider this Resolution; and

**WHEREAS,** the City Council of the City of Hanford has reviewed and considered the Final Focused EIR prepared for the Silicon Valley Ranch Residential Project, in its entirety, and has determined that it reflects the independent judgment of the City of Hanford; and

**WHEREAS,** the City of Hanford is required under CEQA to adopt all feasible mitigation measures or feasible project alternatives that can substantially lessen or avoid any significant project related effects; and

**WHEREAS,** the Project's effect on Transportation and Traffic remains significant and unavoidable with mitigation incorporation, the Mitigation Monitoring and Reporting Program is attached – **Exhibit A**; and

**WHEREAS,** because mitigation measures were determined not to be feasible and would not substantially lessen the or avoid all significant effects on the environment that will result from the project, the Planning Commission must consider the alternatives set forth in the Final Focused EIR that will have a lessened impact on the environment than the proposed project; and

**WHEREAS,** the Planning Commission and City Council have determined that for the reasons set forth in the Final Focused EIR, the project is the preferred alternative and that the other alternatives considered are not feasible, do not lessen the impact, or they fail to meet the objectives of the project; and

**WHEREAS,** because the identified significant environmental effects that may result from the proposed project, CEQA requires that the City Council adopt a Statement of Overriding Considerations for those unavoidable effects; and

**WHEREAS,** the City Council of the City of Hanford determined that it is appropriate to certify the Final Focused EIR and to adopt the Findings of Fact (CEQA 15091) and Statement of Overriding Consideration (CEQA 15093), pursuant to the requirements of CEQA; and

**WHEREAS,** as required by CEQA, the City Council adopts the Finding of Fact and Statement of Overriding Consideration, due to the Final Focused EIR's identification of significant and unavoidable effects to Transportation and Traffic; and

**NOW, THEREFORE, BE IT RESOLVED,** that the City Council finds that the Silicon Valley Ranch Residential Project, Final Focused Environmental Impact Report, SCH# 2024060956, was prepared in compliance with the California Environmental Quality Act.

**BE IT FURTHER RESOLVED,** that the City Council certifies Final Focused Environmental Impact Report, SCH# 2024060956, prepared for the Silicon Valley Ranch Residential Project, based on the Findings of Fact contained in **Exhibit B,** hereto, the following specific findings and the evidence in the record:

1. That full and fair public hearings have been held on the Final Focused Environmental Impact Report and the Planning Commission having considered all comments received thereon, said Final Focused Environmental Impact Report is hereby determined to be adequate and complete; and said Focused Environmental Impact Report, SCH#2024060956 is hereby incorporated herein by reference.

2. That the City Council hereby determines that the Final Focused Environmental Impact Report, SCH SCH#2024060956 has been prepared in compliance with the California Environmental Quality Act (CEQA) and the state and local environmental guidelines and regulations, that is has independently reviewed and analyzed the information contained

therein, including the written comments received during the EIR review period and the oral comments received at the public hearing; and that the Final Focused EIR represents the independent judgment of the City of Hanford, as the Lead Agency for the project.

3. That the City Council hereby make the following findings of fact attached to this resolution as **Exhibit B,** which includes a Statement of Overriding Considerations, attached as **Exhibit C,** with respect to the unavoidable significant effect on the environmental resulting from the project, as identified in the Final Focused Environmental Impact Report, SCH#2024060956 with the stipulation that all the information in these findings is intended as a summary of the full administrative record supporting the Final Focused Environmental Impact Report.

**BE IT FURTHER RESOLVED** that the City Council of the City of Hanford adopts the Statement of Overriding Considerations for the project contained in **Exhibit C.** In adoption of the Statement of Overriding Consideration, the City Council hereby finds that the Project has eliminated, or substantially lessened all significant effects on the environmental where feasible, and finds that the remaining significant unavoidable impacts resulting from the project are acceptable in light of the environmental, economic, social or other considerations set forth herein because the benefits of the project outweigh the significant and adverse effects to Transportation/Traffic as identified in the Final Focused Environmental Impact Report:

1. **Accommodates the Need for Housing.** At buildout, the Project proposes to construct approximately 326 dwelling units. As discussed in EIR Section 4.1 Land Use and Planning Table 4,1-2 the Project is consistent with the applicable City General Plan Goals and Policies. As noted in Section 6.4- Alternatives Considered and Evaluated -, the Project would help the City achieve its need to accommodate residential growth. It would also (a) address the City's current and projected housing needs by providing a range of single-family residences; (b) meet any of the General Plan policies or objectives related to meeting the housing needs of all citizens, or provide; (c) provide residential housing opportunities for a wide range of housing choices that insure opportunities for a variety of age groups, lifestyles, and income levels that are visually attractive and accommodate the future housing demand in Hanford; (d) establish a mixture of housing types, sizes and densities that collectively provide for local and regional housing demand; (e) provide infrastructure that meets the City standards and is integrated with existing and planned facilities and connections; and (f) develop a project that meets City standards by implementing a logical phasing plan for development of public infrastructure improvements.

   The Project aligns with the City's General Plan, specifically with the policies within the Urban Form, Land Use, and Design Element, such as Goal L1, to promote a well-planned community that grows in an organized fashion, Goal L3, limiting urban sprawl, Goal L4 Adequate land available to meet housing needs for all citizens through the year 2035, Goal L6 , which encourages the City to support development with a wide range of housing choices that insure opportunities for a variety of age groups, lifestyles, and income levels, L7 that promotes the City's SOI to be coterminous to the Planned Area Boundary, L18 that new development is compatible with existing and surrounding neighborhoods, L27 that encourages mixing of residential densities and lot sizes within neighborhoods . As noted,

the Project would help fulfill the goals and housing objectives of the City and implement the projected population growth of the City and surrounding area .

2. **Provides Orderly Expansion and Consistent with General Plan and Zoning Ordinance.** The proposed Project provides new development in an orderly manner and is coordinated with the General Plan Policy L15 regarding the criteria needed to initiate annexation of land into the City boundary, Policy L24 that ensures new residential developments have the sufficient urban infrastructure and public facilities needed, and Goal L32, to improve Hanford's quality of life through use of practical design principles and standards. The Project proposes to eliminate several dead end roads by the development of new through streets, and will connect the dead-end roads along the eastern boundary so that residents have another access to Hanford Armona Road, which allows for a more efficient traffic flow in that area of the City. In addition, the proposed Project provides a safe and efficient street system that links all Project areas and allows for the movement of both vehicle and non-vehicle traffic. The Project will be required to use and expand upon the existing local road system and contribute to certain transportation improvements that will help to develop the orderly development of the roadway system in the area.

   Further, per the 2016 Island Study prepared by LAFCO the Project would fill in an undeveloped island of county land surrounded by development and will build the infrastructure to connect to the City's existing infrastructure of roads, water, sewage and drainage. As analyzed in the EIR, the City concurs that it can support the proposed residential development without significant impacts to public services or facilities.

3. **Provides More Efficient Use of Land and Existing Resources.** The property was previously farmed with animal feed and fodder such as wheat, milo and corn. The last two years only had enough water for a portion of the property and the crops grown, corn and milo, which are considered low-income crops generating a small net income. Permanent crops such as almonds, pistachios, vineyard and olives were no longer viable due to reduced water availability. The property owner states that surface water supplied by the local water district can no longer reach the property due to adjacent developments. This left only underground water available for agriculture, which the property owner stated was too expensive.

   The General Plan identifies the Project parcel as within the Planned Area Boundary and is designated Low Density Residential. The parcels to the north are designated as Medium Density Residential and all other abutting properties as Low Density Residential. The designations indicate that the City anticipates future non-agricultural development in this area. Chapter 5.2 of the City of Hanford General Plan contains several goals and policies for agricultural resources. Goal 1 strives for the conservation and long-term protection of agricultural resources and soils located outside of the Planned Area Boundary. Policy 4 under Goal 1 states "retain existing agricultural areas as an interim use inside the Planned Area Boundary and support agricultural operations until such time that the areas are needed for logical urban expansion."

4. **Will Provide Additional Economic Benefits.** Farming the site required less than two workers for the entire year, as noted by the property owner. The economic benefit and revenue were marginal to the City and County.

   The Project will result in creating affordable housing at lower market rates, in addition to providing good paying construction jobs. According to available data, the median home price in the City is approximately $217,260. The typical annual property tax rate is 1.08%, and tax bills run at approximately $2,159 annually, which is below the national median of $2,690.[1] To be conservative, using a median home cost of $217,260 and a tax rate of 1.08% the tax revenue per home is anticipated to be $2,346/year or $760,236 of tax revenue paid annually at full buildout of the Project.

**BE IT FURTHER RESOLVED** that the City Council of the City of Hanford hereby determines that the Focused EIR prepared for the Silicon Valley Ranch Project is adequate and complete, pursuant to the requirements of the California Environmental Quality Act and so certifies it.

**PASSED AND ADOPTED** at a regular meeting of the City Council of the City of Hanford, held on the 18th day of March, 2025, by the following vote:

**PASSED AND ADOPTED** at a regular meeting of the City Council of the City of Hanford held on the 18th day of March 2025 by the following vote:

| | | |
|---|---|---|
| **AYES:** | Council Member | Martinez |
| | | Paden |
| | | Regan |
| | | Howze |
| | | Kains |
| **NOES:** | Council Member | ~~0~~ |
| **ABSTAIN:** | Council Member | ~~0~~ |
| **ABSENT:** | Council Member | ~~0~~ |

[1] Ownwell- Hanford California Property Taxes: https://www.ownwell.com/trends/california/kings-county/hanford

**MAYOR**

*STATE OF CALIFORNIA)*
*COUNTY OF KINGS )*
*CITY OF HANFORD ) SS*

**I, Natalie Corral,** City Clerk of the City of Hanford, do hereby certify that the foregoing Resolution was duly passed and adopted by the City Council of the City of Hanford at a regular meeting thereof held on the 18th day of March, 2025.

Dated: 3/18/25

**City Clerk**

**Exhibit A**

Mitigation Monitoring and Reporting Program

| Mitigation Monitoring Program | | | | | |
|---|---|---|---|---|---|
| **Impact** | **Mitigation Measure** | **Time Frame for Implementation** | **Responsible Monitoring Agency** | **Date** | **Initials** |
| | **Aesthetics** | | | | |
| | No Mitigation required. | | | | |
| | **Agriculture and Forest Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Air Quality** | | | | |
| | No Mitigation required. | | | | |
| | **Biological Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Cultural Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Energy** | | | | |
| | No Mitigation required. | | | | |
| | **Geology and Soils** | | | | |
| | No Mitigation required. | | | | |
| | **Greenhouse Gas Emissions** | | | | |
| | No Mitigation required. | | | | |
| | **Hazardous Materials** | | | | |
| | No Mitigation required. | | | | |
| | **Hydrology and Water Quality** | | | | |
| | No Mitigation required. | | | | |
| | **Land Use and Planning** | | | | |
| | No Mitigation required. | | | | |
| | **Mineral Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Noise** | | | | |
| | No Mitigation required. | | | | |
| | **Population and Housing** | | | | |

| Mitigation Monitoring Program | | | | | |
|---|---|---|---|---|---|
| **Impact** | **Mitigation Measure** | **Time Frame for Implementation** | **Responsible Monitoring Agency** | **Date** | **Initials** |
| | No Mitigation required. | | | | |
| | **Public Services** | | | | |
| | No Mitigation required. | | | | |
| | **Recreation** | | | | |
| | No Mitigation required. | | | | |
| | **Traffic and Transportation** | | | | |
| #1 | **MM 4.17-1:** The Project proponent or developer shall be required to pay their fair share costs for the needed improvements. This includes changing the 12th Avenue and Hanford Armona Road intersection eastbound right turn lane to an eastbound through lane and a right turn lane.<br>The fair share cost for the improvement is calculated at 18.94% and shall be collected by the City of Hanford at the appropriate time. | Prior to issuance of building permit | Project Proponent/Lead Agency | | |
| | | A. The Lead Agency shall determine total improvement cost of intersections and provide it to the Project proponent.<br>B. The Project Proponent shall pay their equitable share of the cost for intersection improvements as indicated in the Mitigation Measure and the Traffic Study prior to the issuance of building permits. | | | |
| | **Tribal Cultural Resources** | | | | |
| | No Mitigation required. | | | | |
| | **Utilities and Service Systems** | | | | |
| | No Mitigation required. | | | | |
| | **Wildfire** | | | | |
| | No Mitigation required. | | | | |

**Exhibit B**

Findings of Fact

**FINDINGS OF FACT IN SUPPORT OF FINDINGS**
**RELATED TO SIGNIFICANT ENVIRONMENTAL IMPACTS**

**State CEQA Guidelines Section 15091**

**for**

**Silicon Valley Ranch Residential Development (Tract No. 943) Project**

**Final Environmental Impact Report**
**SCH# 2024060956**

**Lead Agency: City of Hanford**

## SECTION I. INTRODUCTION

The following findings of fact are based in part on the information contained in the draft and final Environmental Impact Report (EIR) for the Silicon Valley Ranch Residential Development Project (Project) as well as additional facts found in the complete record of proceedings. The final focused EIR is hereby incorporated by reference and is available for review at the City of Hanford (City), City of Hanford Community Development Department, 317 N Douty St, Hanford, CA 93230.

## SECTION II. FINDINGS REGARDING THE POTENTIAL ENVIRONMENTAL EFFECTS OF THE PROJECT

The City issued a notice of preparation of a draft focused EIR on June 21, 2024. Based on the initial study, technical studies and Notice of Preparation, a determination was made that the final focused EIR would contain a comprehensive analysis of environmental issues not screened out during the Notice of Preparation. With respect to all impacts identified as "less than significant" or as having "no impact" in the final focused EIR, the Planning Commission finds that those impacts have been described accurately and are less than significant or have no impact. Despite concluding that certain impacts would be less than significant or would have no impact, the final focused EIR nonetheless incorporates mitigation measures in the form of complying with the goals, policies, and implementation measures of the City of Hanford General Plan or other adopted regulations. The Planning Commission finds that these effects are less than significant or have no impact before and after implementation of these mitigation measures.

In addition, one impact in the final focused EIR was found to be "significant and unavoidable." The Planning Commission finds that this impact has been described accurately and is significant and unavoidable.

### LAND USE AND PLANNING

#### *A. Environmental Effects of the Project Found to Have No Impact on the Environment or Have a Less Than Significant Impact on the Environment.*

*The Project could cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (Impact 4.2-1)*

The City of Hanford General Plan establishes land use policies and regulations that are applicable to the Project. In addition to the City of Hanford General Plan, applicable policies and regulations of the Kings County General Plan and Kings County LAFCo were identified as they pertain to annexations of land.

The Project site has a General Plan designation of Low Density Residential and would be prezoned R-L-5. Per the City General Plan zoning matrix, the R-L-5 zone district is compatible with the General Plan designation. Approval of the tentative map subject to the provisions of the City of Hanford municipal code would allow subdivision of the Project area into lot sizes consistent with the R-L-5 zone district. Pursuant to Table 17.08.020, the proposed development of single-family dwellings throughout the subdivided Project area is permitted uses under the R-L-5 zone district.

The Project is consistent with the goals and policies of the City of Hanford General Plan and Kings County General Plan. Therefore, the Project would not 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 mitigation an environmental effect. Impacts of the Project are less than significant, and no mitigation is required.

### *B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.*

The Project would not have any environmental effects on land use and planning that are potentially significant and that can be mitigated to less than significant levels.

### *C. Effects of the Project that Cannot Be Mitigated to a Level Less Than Significant.*

The Project would not have any environmental effects on land use and planning that cannot be mitigated to a less than significant level.

**Findings**

The proposed Project would not have any potentially significant environmental effects related to land use and planning. No mitigation would be required, and impacts are less than significant.

**Level of Significance**

Impacts would be less than significant.

**Brief Explanation of the Rationale for the Finding**

CEQA requires that all feasible and reasonable mitigation be applied to the project to avoid or substantially lessen significant impacts. However, impacts related to land use and planning would be less than significant, and no mitigation measures are required.

### *D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.*

As discussed in the Cumulative Project List section of the draft EIR, 12 similar projects are proposed within a one and a half-mile radius of the proposed Project, the geographic scope being the City of Hanford General Plan planning area. The Project and future development are required to be consistent with the City of Hanford General Plan and other applicable planning documents. Cumulative projects requiring additional

consideration including rezones, General Plan Amendments, and annexation would require approval by the County. Consistency with the City's applicable General Plan policies and Zoning Ordinance (and any other applicable planning documents) would ensure compliance and orderly development of the proposed Project and other related cumulative projects. Additionally, all cumulative projects are subject to environmental review and compliance with all federal, State, and local policies and plans. As such, the proposed Project's incremental contribution to the less than significant cumulative impacts would not be cumulatively considerable Cumulative impacts related to land use and planning would result in a less than significant impact on the environment.

***E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant Impact on the Environment.***

The Project would not have any cumulative effects on land use and planning that would have a significant impact.

**Findings**

The proposed Project would not have any potentially cumulative significant environmental effects related to land use and planning. No mitigation would be required and impacts are less than significant.

**Level of Significance**

Impacts would be cumulatively less than significant.

**Brief Explanation of the Rationale for the Finding**

CEQA requires that all feasible and reasonable mitigation be applied to the project to avoid or substantially lessen significant impacts. However, cumulative impacts would be less than significant, and no mitigation measures are required.

## TRANSPORTATION AND TRAFFIC

***A. Environmental Effects of the Project Found to Have No Impact on the Environment or Have a Less Than Significant Impact on the Environment.***

***B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.***

*The Project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (Impact 4.2-1).*

The Hanford General Plan has policies related to traffic systems. The General Plan has established LOS E as the acceptable level on streets and intersections within the area bounded by State Route (SR) 198, 10th Avenue, 11th Avenue, and Florinda Avenue, and a peak hour LOS D on all other streets and intersections within the Planned Growth Boundary. The County of Kings has established LOS D as the acceptable level of traffic congestion on County roads. Since the study facilities for this Project lie outside of the SR 198, 10th Avenue, 11th Avenue, and Florinda Avenue boundary, the LOS D threshold was utilized to evaluate the potential significance of LOS impacts to the City of Hanford roadway facilities and the County of Kings facilities.

As noted in the Traffic Impact Study (TIS) prepared for the Project, signal warrant criteria was met for the 13th Avenue and Hanford Armona Road intersection, which is included in the City's traffic impact fee program. However, it is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered to determine whether signals are truly justified. Pursuant to General Plan Policy T36, the Project proponent will be required to pay traffic development impact fees. The provision of an intersection signalization would be determined by the City of Hanford. Improvement costs for signalization are within the purview of traffic development impact fees as required in Policy T36, therefore eventual signalization of the intersection by the City would address the LOS deficiency caused by General Plan buildout (2044) and Project development (2044+Project).

For the 12th Avenue and Hanford Armona Road intersection, the TIS recommends improvements be made to the eastbound roadway to include changing the existing eastbound right turn lane (EBR) to an eastbound through and right turn lane (EBTR). The Project proponent would be required to pay their fair share cost for the needed improvement to ensure that the intersection by the year 2044, operates at an acceptable LOS (Ruettgers and Schuler Civil Engineers, 2024). The inclusion of fair share cost payment as determined in the TIS is recommended as a Mitigation Measure and is included as MM 4.2-1. Implementation of MM 4.2-1 would allow the intersection studied to operate at an acceptable LOS under City LOS standards and reduce impacts to less than significant.

***Mitigation Measures***

MM 4.2-1: The Project proponent or developer shall be required to pay their fair share of costs for the improvements needed. This includes changing the 12th Avenue and Hanford Armona Road intersection eastbound right turn lane to an eastbound through lane and a right turn lane.

The fair share cost for the improvement is calculated at 18.94% and shall be collected by the City of Hanford at the appropriate time

***Level of Significance***

Impacts would be ***less than significant with implementation of mitigation measures.***

***Finding***

The proposed Project would not have any potentially significant environmental effects related to LOS and the impacts that the Project may have on the surrounding roadway network. With implementation of Mitigation Measure MM 4.2-1 would reduce impacts to less than significant.

***Brief Explanation of the Rational for Finding***

CEQA requires that all feasible and reasonable mitigation be applied to the project to avoid or substantially lessen significant impacts related to General Plan policies related to LOS. Implementation of Mitigation Measure MM 4.2-1 as described above, would reduce impacts to a less than significant level.

***C. Effects of the Project that Cannot Be Mitigated to a Level Less Than Significant.***

*Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) (Impact 4.2-2)*

Land use developments meeting one or more of the screening criteria contained in the VMT Guidelines are presumed to create a less than significant transportation impact and no further VMT analysis is required. These criteria relate to project type, size, location, proximity to transit, and trip-making potential. The Project does not meet any of the screening criteria. Therefore, a detailed VMT analysis was prepared for the Project (Ruettgers and Schuler Civil Engineers, 2024).

An analysis of Project VMT was conducted in accordance with the *VMT Thresholds and Implementation Guidelines*, City of Hanford, dated November 2022 (VMT Guidelines). The analysis involved comparing an estimate of VMT attributable to the project to a threshold VMT and assessing whether project VMT would result in a significant transportation impact under the California Environmental Quality Act (CEQA). For projects that are not screened out, a quantitative analysis of VMT impacts must be prepared and compared against the adopted VMT thresholds of significance. According to the VMT Guidelines, residential developments that generate more than 8.99 daily VMT for residential VMT per capita would be considered to have a significant transportation impact.

Based on the VMT analysis included in the TIS, the Project would result in 9.61 VMT per capita and exceeds the 8.99 VMT per capita threshold. As a result, it is recommended that the Project implement VMT mitigation measures for the residential component to reduce VMT per capita. In order to reduce VMTs, a project must decrease the number of vehicle miles travels to and from the Project site. For land development projects, VMT mitigation focuses on measures that reduce the number and/or length of single-occupant vehicle trips generated by the project.

The VMT Guidelines cite the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health Equity: Designed for Local Governments, Communities, and Project Developers*, California Air Pollution Control Officers Association, December 2021 (CAPCOA Handbook) as a source for mitigation measures with quantitative methods for estimating VMT reduction. Below are quantitative measures contained in the CAPCOA Handbook for residential projects in suburban areas. Measure identifiers are shown within parentheses, and italicized text addresses the applicability of each measure to the Project.

- Increase residential density to a level higher than the national average (T-1)

  ***Applicable, but not feasible**: The residential density for the project is 6.5 dwelling units/acre (326 single-family homes/50 acres of developable land). As stated in the CAPCOA Handbook, the national average is 9.1 dwelling units/acre and includes apartments, townhomes and condominiums in addition to detached single-family housing.*

  *Below is the VMT reduction formula in the CAPCOA Handbook for this measure (-0.22 = VMT elasticity factor).*

  *VMT reduction = [ (project du/acre – 9.1 du/acre) / 9.1 du/acre] x (-0.22)*

  *Assuming no change in the amount of developable land, the project would need at least 455 dwelling units to reach the national average and be credited for any reduction in project VMT. Moreover, the project would require a total of 590 dwelling units to mitigate the impact of project VMT to a less than significant level. Such an increase in project residential density (approximately 80 percent) would not be feasible.*

  *Per the General Plan and the allowable density in the zone district, an increase in density is not feasible without a zone change and General Plan Amendment to increase residential density beyond what is allowed.*

- Provide easy access to high-quality public transit (T-3)
  ***Not applicable:*** *Because the project does not meet implementation requirements. Project must be located within 0.5 miles of a high frequency transit station (either rail or bus rapid transit with headways of less than 15 minutes).*

- Integrate affordable and below market rate housing (T-4)
  ***Not applicable****: Because the project does not meet implementation requirements. Project must be a multifamily residential development permanently dedicated as affordable housing for lower income families. This project is not a low income housing project, therefore it is not applicable and the VTM analysis applies*

- Provide electric vehicle charging infrastructure (T-14)
  ***Not applicable to single-family residential projects****: Mitigation potential available only to developments with buildings that have designated parking areas (e.g., commercial, educational, retail and multifamily housing).*

- Limit residential parking supply (T-15)
  ***Not applicable:*** *The measure is ineffective in locations where unrestricted street parking or other off-street parking is available and has adequate capacity to accommodate project-related vehicle parking demand.*

- Unbundle residential parking costs from property costs (T-16)
  ***Not applicable****: There are no residential parking costs associated with the project.*

As noted, the measures listed above are found to be infeasible (Ruettgers and Schuler Civil Engineers, 2024). There are no applicable and feasible mitigation measures available to reduce VMT below the adopted City and County thresholds. Other valley cities have adopted VTM thresholds and applicable mitigation measures. Kings County and the City have not adopted mitigation measures or other measures to implement or guidance to create feasible mitigation. Therefore, the Project is expected to result in a significant transportation impact under CEQA

***Mitigation Measures***
No mitigation measures

***Level of Significance***

Impacts would be ***significant and unavoidable***

***Finding***

As noted above, there are no feasible and applicable mitigation measures that would be able to reduce VMT for the Project under City adopted thresholds. Therefore, impacts are considered significant and unavoidable.

***Brief Explanation of the Rationale for the Finding***

CEQA requires that all feasible and reasonable mitigation be applied to the Project to reduce impacts. However, no mitigation measures were identified that are feasible and applicable to the Project that would reduce VMT under the City adopted thresholds.

***D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.***

There are no cumulative impacts related to transportation and traffic would result in a less than significant impact on the environment.

***E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant Impact on the Environment.***

*Significant Effect*

The Project would conflict or be inconsistent with CEQA Guidelines 15064.3, Subdivision (b). In combination with other approved or reasonably foreseeable projects, cumulative impacts to VMT would also be significant and unavoidable.

*Description of Significant Impact*

The Project's VMT would exceed the City's adopted VMT per capita thresholds.

*Finding*

There are no feasible and applicable mitigation measures that would be able to reduce VMT for the Project under City adopted thresholds. Other valley cities have adopted VTM thresholds and applicable mitigation measures. Kings County and the City have not adopted mitigation measures or other measures to implement or guidance to create feasible mitigation. Measures such as purchasing bicycles for home buyers, adding bike lanes and new bus routes have either not been accepted by the City, or are shown to be an effective way to reduce VTM. Therefore, impacts are considered significant and unavoidable. This impact is overridden by Project benefits as set forth in the statement of overriding considerations. There are no other feasible mitigation measures or changes to the Project that would reduce this impact to a less than significant level

*Brief Explanation of the Rationale for the Finding*

CEQA requires that all feasible and reasonable mitigation be applied to the Project to reduce impacts. However, no mitigation measures were identified that are feasible and applicable to the Project that would reduce VMT under the City adopted thresholds.

## SECTION III. FINDINGS REGARDING CONSIDERATIONS, WHICH MAKE CERTAIN ALTERNATIVES, ANALYZED IN THE FINAL ENVIRONMENTAL IMPACT REPORT INFEASIBLE.

The following findings and brief explanation of the rationale for the findings regarding Project alternatives identified in the EIR are set forth to comply with the requirements of Section 15091(s)(3) of the *CEQA Guidelines*.

The consideration of alternatives is an integral component of the CEQA process. The selection and evaluation of a reasonable range of alternatives provides the public and decision-makers with information on ways to avoid or lessen environmental impacts created by a Project. When selecting alternatives for

evaluation, CEQA requires alternatives that meet most of the basic objectives of the Project, while avoiding or substantially lessening the Project's significant effects. Thus, the objective of the Project was considered by this board in evaluating the alternatives. This objective is to build and operate an economically viable and competitive development with a mix of commercial and residential uses in compliance with applicable laws and regulations, optimally utilizing the available land resource, and while minimizing any environmental impacts to the extent feasible. Thus, objectives for the Project were considered in evaluating the alternatives.

The Project has the following objectives:

- Provide a variety of housing opportunities with a range of styles, sizes, and values that will be designed to satisfy existing and future demand for quality housing in the area.
- Provide a sense of community and walkability within the development through the use of street patterns, parks/open space areas, landscaping, and other Project amenities.
- Create a successful and financially feasible Project by meeting the housing needs of the area.
- Provide a residential development that assists the City in meeting its housing goals and objectives.

The alternatives considered in this EIR include two land use alternatives, a reduced construction alternative, and the No-Project Alternative. CEQA requires that alternatives that have been considered but rejected by the lead agency be addressed in the EIR. This portion of the EIR is also to determine which alternative is considered to be environmentally superior. This evaluation is to be based on which alternatives have the fewest unmitigated impacts and this comparison is to be made even for alternatives that may not completely fulfill all of the Project objectives. For the purpose of this evaluation, the following impacts were determined to be unmitigable after implementation of the mitigations recommended in the EIR.

***Significant Impacts Listed***

- Transportation and Traffic – The project and the project in conjunction with cumulative projects would conflict or be inconsistent with CEQA Guidelines 15064.3, Subdivision (b).

All other impacts can be mitigated to a relative level of insignificance through the implementation of the mitigation measures. Mitigation measures that reduced these impacts to a level below the Thresholds of Significance are detailed in the EIR.

**Alternative A- No Project Alternative**

Under the No Project Alternative, the Project area would remain unchanged and there would be no residential units or parks constructed. Under the No Project Alternative, the Project area would remain unchanged and there would be no residential units or parks constructed. The No Project Alternative would keep the site as agriculture and remain under the jurisdiction of Kings County. As no change would occur, the Project site would continue to be consistent with the Kings County General Plan land use designation and zoning of Limited Agriculture, 10 acres (AL10). The No Project Alternative would not: (a) address the City's current and projected housing needs by providing a range of single-family residences; (b) meet any of the General Plan policies or objectives related to meeting the housing needs of all citizens, or provide; (c) provide residential housing opportunities for a wide range of housing choices that insure opportunities for a variety of age groups, lifestyles, and income levels that are visually attractive and accommodate the future housing demand in Hanford; (d) establish a mixture of housing types, sizes and densities that collectively provide for local and regional housing demand; (e) provide infrastructure that meets the City standards and is integrated with existing and planned facilities and connections; and (f) develop a project that meets City standards by implementing a logical phasing plan for development of public infrastructure improvements.

With regard to transportation impacts, the No Project Alternative would result in no new trips generated. The No Project Alternative would reduce the significant and unavoidable impact relating to VMT; however, none of the General Plan goals and objectives for new housing in the City would be met.

**Alternative B- Reduced Project Alternative**

This alternative would decrease the number of single-family residential houses from 326 to 242. As described in this draft EIR, the proposal to approve the tentative tract map, annex the site into the City, and prezoning the site to R-L-5 would remain the same. A similar outcome to the proposed Project would occur with regard to County and City General Plan consistency. The annexation would meet County and LAFCo objectives in addition to providing planned City expansion within their SOI. This alternative will meet all Project objectives but would have a reduced positive effect of assisting the City in meeting the City's housing needs. Under this Alternative, overall VMT for the Project would decrease; however, per capita VMT impacts would remain *significant and unavoidable.*

With regard to City LOS thresholds, overall trip generation would be reduced, resulting in lessened impacts on studied intersections. However, this reduction is still likely to exceed LOS thresholds cumulatively, and require mitigation as indicated in this draft EIR to improve the impacted intersection of 12$^{th}$ Avenue and Hanford Armona Road. Impacts regarding LOS would continue to be *less than significant with mitigation incorporated.*

**Alternative C- Multi-Family Alternative**

This alternative would replace the proposed single-family residential with multi-family apartments at a density of at least 14.5 dwelling units per gross acre (1,088 units). The Project site is currently designated by the General Plan for low-density residential and prezoned R-L-5. The proposed Project request would be modified to include a General Plan Amendment and a Zone Change to Medium Density Residential (R-M) to allow multi-family apartments. With regard to the addition of a General Plan Amendment, consistency findings with General Plan goals and policies would be necessary to determine if the proposed Medium Density Residential land use would comply. Although it is not guaranteed that the multifamily housing would be rented at rates to meet the criteria as very low or low incoming housing, if such units were constructed and rented at those rates, they would help the City meet the housing requirements for new very low or low income housing in the City under the Housing Element of the City General Plan.

Under Alternative C, the overall density increase could result in higher trips generated, which in turn, may cause impacts to LOS and VMT. It has been theorized that residents who live in very low or low income housing tend to utilize mass transit. Although it is unknown, if the multifamily housing met the criteria for very low or low income housing, LOS might not increase with the use in mass transit. However, if the multifamily units were considered as moderate or above moderate income units, the Project could generate a rise in vehicle trips due to an increased number of residents originating from the Project site, and would result in higher utilization of intersections in the vicinity of the site. Therefore, depending on the income category of the multifamily housing units, Alternative C could decrease LOS impacts or could negatively impact LOS for the studied intersections and would potentially require additional mitigation/improvements to intersections to meet LOS standards.

In regard to VMT, the City of Hanford has adopted VMT Thresholds and Implementation Guidelines, which was utilized for the proposed Project to determine impacts, as noted in the TIS prepared for the Project (Ruettgers and Schuler Civil Engineers, 2024). With regard to the adopted screening criteria and VMT thresholds, Alternative C does not meet the screening criteria and could generate more than 1,000 average daily trips, is not located within 0.5 miles of a transit priority area and is not located within an area where existing VMT per capita is low. The City's VMT Guidelines cite the Handbook for Analyzing Greenhouse

Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health Equity: Designed for Local Governments, Communities, and Project Developers, California Air Pollution Control Officers Association, December 2021 (CAPCOA Handbook) as a source for measures with quantitative methods for estimating VMT reduction.

It was found in CAPCOA Handbook that an increase in density over the national average (9.1 dwelling units per acre) can result in a VMT reduction. Assuming no change in the amount of developable land, the Project would need at least 455 dwelling units to reach the national average and be credited for any reduction in project VMT. Moreover, the project would require a total of 590 dwelling units to mitigate the impact of project VMT to a less-than-significant level. (Ruettgers and Schuler Civil Engineers, 2024). As Alternative C proposes a density larger than the national average, it can be seen that a reduction in Project VMT would occur. Therefore, VMT under Alternative C would result in a less than significant impact.

**Alterative D- Different Site Alternative**

This alternative would relocate the Project to a different site in order to be located nearer to corridor mixed use where a mix of commercial and office uses would be available in addition to be located closer to major transit corridors. This alternative would place the Project on the east side of the City, bounded by Lacey Boulevard to the south, 9 1/4 Avenue to the west, SR 43 to the west, and Grangeville Boulevard to the north. This alternative will meet all Project objectives and would assist the City in meeting its housing needs.

Additionally, Alternative D would result in similar conditions as the proposed Project, consistency findings with Kings County and LAFCo for annexation, and General Plan conformity with the City can be made. With regard to LOS standards, the alternative site would require an analysis of intersections in the vicinity of the site and the comparisons of future conditions at the chosen intersections. It can be assumed that under Alternative D, impacts to LOS at intersections could occur similar to the proposed Project. Dependent on the LOS grade found as a result of Project implementation, mitigation measures for intersection improvements and the use of transportation impact fees per General Plan policy would be applicable to Alternative D and therefore result in similar impacts as the proposed Project.

Under Alternative D, overall VMT per capita for the Project would still exceed City VMT thresholds as the majority of the site is located within a high VMT area and cannot be screened out using the City's screening thresholds, the VMT Guidelines cite the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health Equity: Designed for Local Governments, Communities, and Project Developers, California Air Pollution Control Officers Association, December 2021 (CAPCOA Handbook) as a source for mitigation measures with quantitative methods for estimating VMT reduction (Ruettgers and Schuler Civil Engineers, 2024), in addition to no changes made to the Project lot count. Therefore, per capita, VMT would remain similar to the proposed Project as there are no other factors including proximity to high-quality transit corridors that could provide VMT reductions. Impacts would continue to be significant and unavoidable. In addition, the applicant does not currently own either of these properties and it is not known if the current owners are willing to sell these properties. As noted, available land for new development within the Low-Density Residential land use designation is limited in the southwest planning area of the City. The majority of the properties designated for Low-Density Residential development have been developed or entitled, as shown in Figure 4.1-1, below. The proposed Project is considered implementation of the General Plan..

***Environmentally Superior Alternative***

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6(e)(2) of the CEQA Guidelines requires that an

environmentally superior alternative be designated, and states, "[I]f the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." In Chapter 6-Alternatives, Table 6-1 displays the environmental impacts of alternatives to the Project in terms of the impact areas that were analyzed in this Draft EIR in Chapter 4, Environmental Impact Analysis. As shown, No Project is environmentally superior, but does not meet any of the objectives of the Project or the City. The Multi-Family Alternative could be considered the environmentally superior alternative if the criteria for very low or low income units was met, LOS impacts would not increase with the increased density of units. while fulfilling most of the objectives of the proposed Project.

Selection of an environmentally superior alternative is based on an evaluation of the extent to which the alternatives reduce or eliminate the significant impacts associated with the Project on a comparison of the remaining environmental impacts of each alternative. In conducting this comparative evaluation, it can be difficult to make a determination of relative significance because some categories are relatively more or less important and cannot be simply summed. In some cases, these categories do not create a picture of the nuances of the alternatives.

***Finding:*** The Planning Commission finds that the No Project alternative is the environmentally superior alternative, but that the No Project Alternative would be less desirable than the Project because it would not achieve any of the City General Plan policies or goals for new housing or any Project objectives.

***Facts Supporting the Finding***: The EIR contains facts and analyses supporting the Finding, some of which are set forth here. The No Project Alternative would not help the City to meet General Plan goals and policies for new housing in the City. The Alternative would not fulfill the objectives of the Project. Demand for residential development would be met by other projects that may have greater impacts than the proposed Project. Moreover, employment opportunities would not be generated for construction workers in Handford or Kings County. In short, the No Project Alternative does not meet overall Project objectives.

***Environmentally Superior" Build Alternative"***

Where, as here, the environmentally superior alternative is the" No Project Alternative", the State CEQA Guidelines require the identification of an environmentally superior alternative from among the remaining alternatives. (CEQA Guidelines, Section 15126.6(e)(2).)

***Finding***: The Planning Commission evaluated the Project and Alternatives A, B, C and D to the Project, and finds that Alternative C is the environmentally superior alternative. Alternative C – Multi-Family would reduce significant and unavoidable environmental impacts relating to VMT while fulfilling most of the objectives of the proposed Project. However, as discussed in the Section 6.4- Alternatives Considered and Evaluated of the EIR, while Alternative C could incrementally reduce LOS and VMT impacts of the Project, it possibly would not reduce significant and unavoidable impacts of the Project to below a level of significance. Moreover, it may not be economically feasible to implement, thereby impeding the ability to meet the Project objectives set forth by the applicant.

**Exhibit C**

Statement of Overriding Considerations

**STATEMENT OF OVERRIDING CONSIDERATIONS**

**State CEQA Guidelines Section 15093**

**for**

**Silicon Valley Ranch Residential Development (Tract No. 943) Project**

**Final Environmental Impact Report**
**(SCH# 2024060956)**

**Lead Agency: City of Hanford**

The California Environmental Quality Act (CEQA) allows a public agency to balance the benefits of a proposed Project against its significant unavoidable adverse impacts in determining whether to approve the Project. Section 15093 of the CEQA Guidelines states:

> CEQA requires the decision making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed Project against its unavoidable environmental risks when determining whether to approve the Project. If the specific economic, legal, social, technological, or other benefits of a proposed Project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

As discussed in more detail in the final EIR and CEQA Findings of Fact (Section 15091), the Project will result in environmental impacts related to Vehicle Miles Traveled (VMT), which cannot be feasibly mitigated by the implementation of mitigation measures, will remain significant and unavoidable adverse impacts. These significant unavoidable impacts are summarized below and constitute those impacts for which this Statement of Overriding Considerations is made. These impacts are summarized below and constitute those impacts for which this statement of overriding considerations is made.

## Significant and Unavoidable Impacts

1. Transportation and Traffic The Project's Vehicle Miles Travelled (VMT) and Cumulative VMT would exceed the City's VMT thresholds and is considered significant and unavoidable.

CEQA requires that all feasible and reasonable mitigation be applied to the Project to reduce impacts. However, no mitigation measures were identified that are feasible and applicable to the Project that would reduce VMT under the City adopted thresholds. The Project would conflict or be inconsistent with CEQA Guidelines 15064.3, Subdivision (b). In addition, in combination with other approved or reasonably foreseeable projects, cumulative impacts to VMT would also be significant and unavoidable.

### Findings

The City Planning Commission (Commission) finds and determines in recommending approval of the development of the Project that it has considered the identified means of lessening or avoiding the Project's significant effects. The Commission further finds and determines that the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits of the project, as discussed below, outweigh its unavoidable adverse environmental effects. Therefore, this Commission

finds and determines in recommending approval that such benefits override, outweigh, and make "acceptable" any such remaining environmental impacts of the project (CEQA Guidelines Section 15092 (a) and (b)).

The following benefits and considerations outweigh such significant and unavoidable adverse environmental impacts. All of these benefits and considerations are based on the facts set forth in the findings, the final focused EIR, and the record of proceedings for the project. Each of these benefits and considerations constitutes a separate and independent basis that justifies approval of the project, so that if a court were to set aside the determination that any particular benefit or consideration justifies project approval, the Commission would stand by its determination that the remaining benefits or considerations are sufficient to justify and substantiate project approval.

**Facts in Support of Statement of Overriding Considerations**

The objective of the Project is to build and operate an economically viable and competitive development with residential uses in compliance with applicable laws and regulations, optimally utilizing the available land resource, and while minimizing any environmental impacts to the extent feasible.

Each benefit set forth below constitutes an overriding consideration warranting approval of the project, independent of the other benefits, and the City Council determines that the adverse environmental impacts of the project are "acceptable" if any of these benefits would be realized. The project would provide benefits as follows:

1. **Accommodates the Need for Housing.** At buildout, the Project proposes to construct approximately 326 dwelling units. As discussed in EIR Section 4.1 Land Use and Planning Table 4,1-2 the Project is consistent with the applicable City General Plan Goals and Policies. As noted in Section 6.4- Alternatives Considered and Evaluated -, the Project would help the City achieve its need to accommodate residential growth. It would also (a) address the City's current and projected housing needs by providing a range of single-family residences; (b) meet any of the General Plan policies or objectives related to meeting the housing needs of all citizens, or provide; (c) provide residential housing opportunities for a wide range of housing choices that insure opportunities for a variety of age groups, lifestyles, and income levels that are visually attractive and accommodate the future housing demand in Hanford; (d) establish a mixture of housing types, sizes and densities that collectively provide for local and regional housing demand; (e) provide infrastructure that meets the City standards and is integrated with existing and planned facilities and connections; and (f) develop a project that meets City standards by implementing a logical phasing plan for development of public infrastructure improvements.

   The Project aligns with the City's General Plan, specifically with the policies within the Urban Form, Land Use, and Design Element, such as Goal L1, to promote a well-planned community that grows in an organized fashion, Goal L3, limiting urban sprawl, Goal L4 Adequate land available to meet housing needs for all citizens through the year 2035, Goal L6 , which encourages the City to support development with a wide range of housing choices that insure opportunities for a variety of age groups, lifestyles, and income levels, L7 that promotes the City's SOI to be coterminous to the Planned Area Boundary, L18 that new development is compatible with existing and surrounding neighborhoods, L27 that encourages mixing of residential densities and lot sizes within neighborhoods . As noted, the Project would help fulfill the goals and housing objectives of the City and implement the projected population growth of the City and surrounding area .

2. **Provides Orderly Expansion and Consistent with General Plan and Zoning Ordinance.** The proposed Project provides new development in an orderly manner and is coordinated with the

General Plan Policy L15 regarding the criteria needed to initiate annexation of land into the City boundary, Policy L24 that ensures new residential developments have the sufficient urban infrastructure and public facilities needed, and Goal L32, to improve Hanford's quality of life through use of practical design principles and standards. The Project proposes to eliminate several dead end roads by the development of new through streets, and will connect the dead-end roads along the eastern boundary so that residents have another access to Hanford Armona Road, which allows for a more efficient traffic flow in that area of the City. In addition, the proposed Project provides a safe and efficient street system that links all Project areas and allows for the movement of both vehicle and non-vehicle traffic. The Project will be required to use and expand upon the existing local road system and contribute to certain transportation improvements that will help to develop the orderly development of the roadway system in the area.

Further, per the 2016 Island Study prepared by LAFCO the Project would fill in an undeveloped island of county land surrounded by development and will build the infrastructure to connect to the City's existing infrastructure of roads, water, sewage and drainage. As analyzed in the EIR, the City concurs that it can support the proposed residential development without significant impacts to public services or facilities.

3. **Provides More Efficient Use of Land and Existing Resources.** The property was previously farmed with animal feed and fodder such as wheat, milo and corn. The last two years only had enough water for a portion of the property and the crops grown, corn and milo, which are considered low-income crops generating a small net income. Permanent crops such as almonds, pistachios, vineyard and olives were no longer viable due to reduced water availability. The property owner states that surface water supplied by the local water district can no longer reach the property due to adjacent developments. This left only underground water available for agriculture, which the property owner stated was too expensive.

   The General Plan identifies the Project parcel as within the Planned Area Boundary and is designated Low Density Residential. The parcels to the north are designated as Medium Density Residential and all other abutting properties as Low Density Residential. The designations indicate that the City anticipates future non-agricultural development in this area. Chapter 5.2 of the City of Hanford General Plan contains several goals and policies for agricultural resources. Goal 1 strives for the conservation and long-term protection of agricultural resources and soils located outside of the Planned Area Boundary. Policy 4 under Goal 1 states "retain existing agricultural areas as an interim use inside the Planned Area Boundary and support agricultural operations until such time that the areas are needed for logical urban expansion."

4. **Will Provide Additional Economic Benefits.** Farming the site required less than two workers for the entire year, as noted by the property owner. The economic benefit and revenue were marginal to the City and County.

   The Project will result in creating affordable housing at lower market rates, in addition to providing good paying construction jobs. According to available data, the median home price in the City is approximately $217,260. The typical annual property tax rate is 1.08%, and tax bills run at approximately $2,159 annually, which is below the national median of $2,690.[1] To be conservative, using a median home cost of $217,260 and a tax rate of 1.08% the tax revenue per home is anticipated to be $2,346/year or $760,236 of tax revenue paid annually at full buildout of the Project.

[1] Ownwell- Hanford California Property Taxes: https://www.ownwell.com/trends/california/kings-county/hanford

**Conclusion**

As the CEQA Lead Agency for the proposed action, the City has reviewed the project description for the Project and the FEIR and fully understands the Project proposed by the applicant. Based on the entire record before the Commission, and having considered the unavoidable adverse impacts of the Project, the Commission hereby determines that all feasible mitigation has been adopted to reduce the potentially significant impacts identified in the FEIR, and that no additional feasible mitigation is available to further reduce significant impacts.

The Commission finds that economic, social, technological, and other considerations of the Project outweigh the unavoidable adverse impacts described above. Further the Commission finds that each of the separate benefits of the Project is hereby determined to be, in itself and independent of the other Project benefits, a basis for overriding all unavoidable environmental impacts identified in the FEIR and in the CEQA Findings. In making this finding, the Commission has balanced the benefits of the Project against its unavoidable environmental impacts and has indicated its willingness to accept those risks

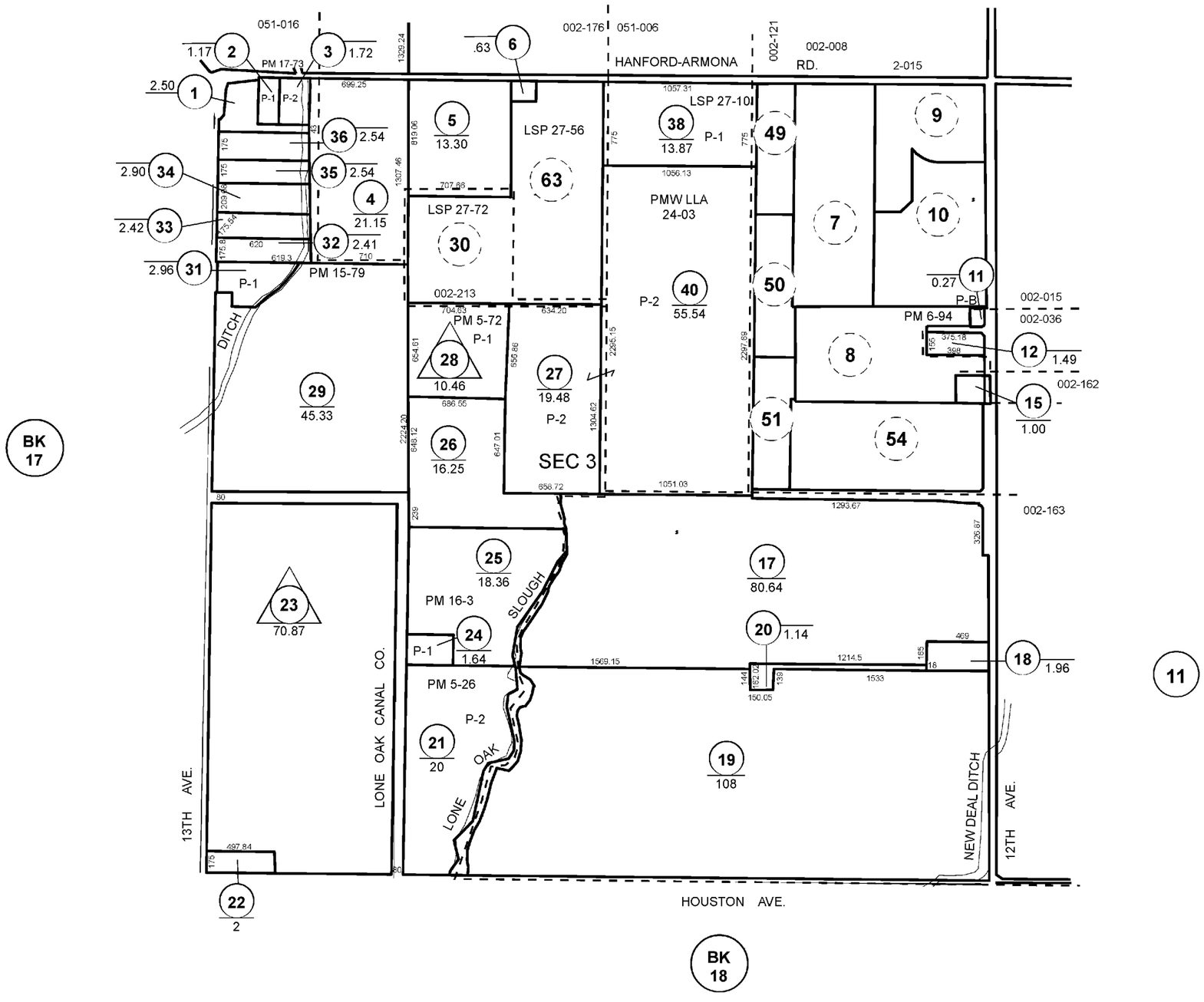
Provided by:
PARCEL QUEST

THIS MAP IS FOR ASSESSMENT PURPOSES ONLY.
IT IS NOT TO BE CONSTRUED AS PORTRAYING
LEGAL OWNERSHIP OF DIVISIONS OF LAND FOR
PURPOSES OF ZONING OR SUBDIVISION LAW.
AUGUST 2025

# KINGS COUNTY ASSESSOR'S MAP

## SEC 3-19-21

11-04




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LAND PRESERVE

NON-RENEWAL

FARMLAND SECURITY

1" = 800'

1"

**CITY OF HANFORD PLANNING COMMISSION**
**STAFF REPORT**
**Tuesday, June 9, 2026**

**PROJECT:** **Modifications to Vesting Tentative Tract 881:** A request, by SJVH, to amend previously approved Tentative Tract Map 881 to reflect changes between the approved tentative map and the submitted final map, including the addition of Acorn Lane off Hume Avenue, reconfiguration of end lots to front Amber Harvest Drive, and a reconfiguration to accommodate a cul-de-sac on Sparrow Drive.

**LOCATION:** The project pertains to Unit III of Tract 881, Live Oak East, which is generally located east of 12th Avenue, south of Hume Avenue (APN 011-110-051-000)

**PLANNER:** Gabrielle Myers, Principal Planner

## STAFF RECOMMENDATION

Staff recommends that the Planning Commission:

1. Adopt Resolution No. 2026-10, approving an amendment to Tentative Tract 881.

## RECOMMENDED MOTION

1. I move to adopt Resolution No. 2026-10, approving an amendment to Tentative Tract 881.

## PROJECT DESCRIPTION

The Live Oak Development project was approved by the City Council in 2009 for the development of a master-planned community. The Live Oak Residential Project proposal covered approximately 390 ± acres within the Hanford City Limits. The applicant (at the time MMV Development, LLC) sought approval of the City of Hanford for a Planned Unit Development proposal, Vesting Tentative Subdivision Maps, a Development Agreement, and construction of infrastructure improvements to support the full development of the Project. The Project proposed to construct 1,560 dwelling units in a range of housing and lot types. The proposed units included single family and multi-family configurations, as well as, park facilities and open space. Single-family lot sizes were planned to range from a minimum of 12,000 square feet (sq. ft.) in the areas designated Very-Low Density Residential to 3,200 sq. ft. in the areas designated Low-Density Residential, and 4,000 sq. ft. for single-family homes in the areas designated Medium-Density Residential.

Subsequent revisions to the project have occurred since the project's inception, including three notable amendments.

The project proposed herein is for an amendment to Vesting Tentative Tract 881. The changes pertain to Unit III and reflect changes between the approved tentative map and the submitted final map, including the addition of Acorn Lane off Hume Avenue, reconfiguration of end lots to front Amber Harvest Drive, and a reconfiguration to accommodate a cul-de-sac on Sparrow Drive.

The formerly-approved Vesting Tentative Tract 881 map is attached as **Attachment 1.**

The amendment proposed to Vesting Tentative Tract 881 is attached as **Attachment 2.**

The Live Oak Master Plan is included for reference as **Attachment 3.**

## BACKGROUND

The Live Oak Master Plan project site is designated by the General Plan as Low-Density Residential, Open Space, and Neighborhood Commercial. The Master Plan designations are consistent with the current General Plan Designations, see Figure 1 and 2.

The overall Live Oak site is zoned R-L-5 Low-Density Residential, CO Conservation, PF Public Facilities, and C-N Neighborhood Commercial. See Figure 3. The Master Plan is consistent with the zoning designations.

The land use within the Master Plan area is currently vacant and characterized by flat, glassy land. See Figure 4.

Figure 1:
General Plan Designation (2017)

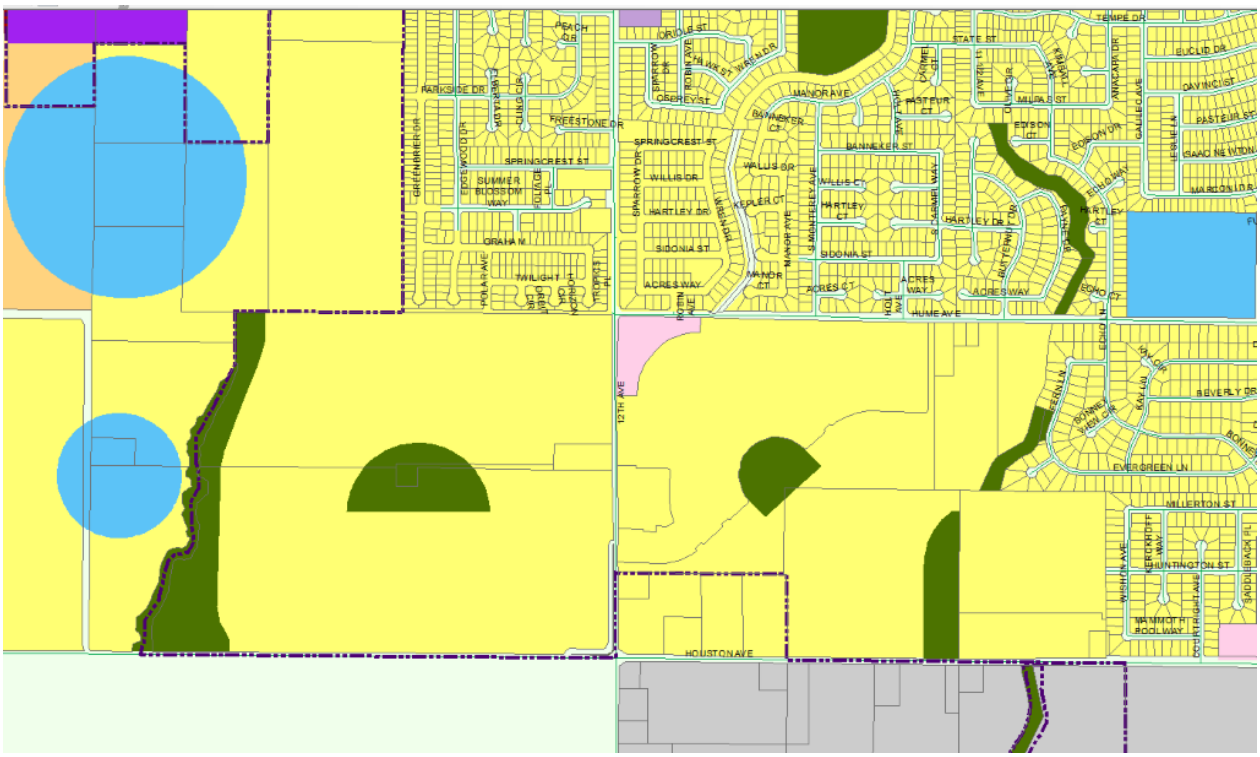


Figure 2:
Master Plan Designation (consistent with current General Plan, 2017)

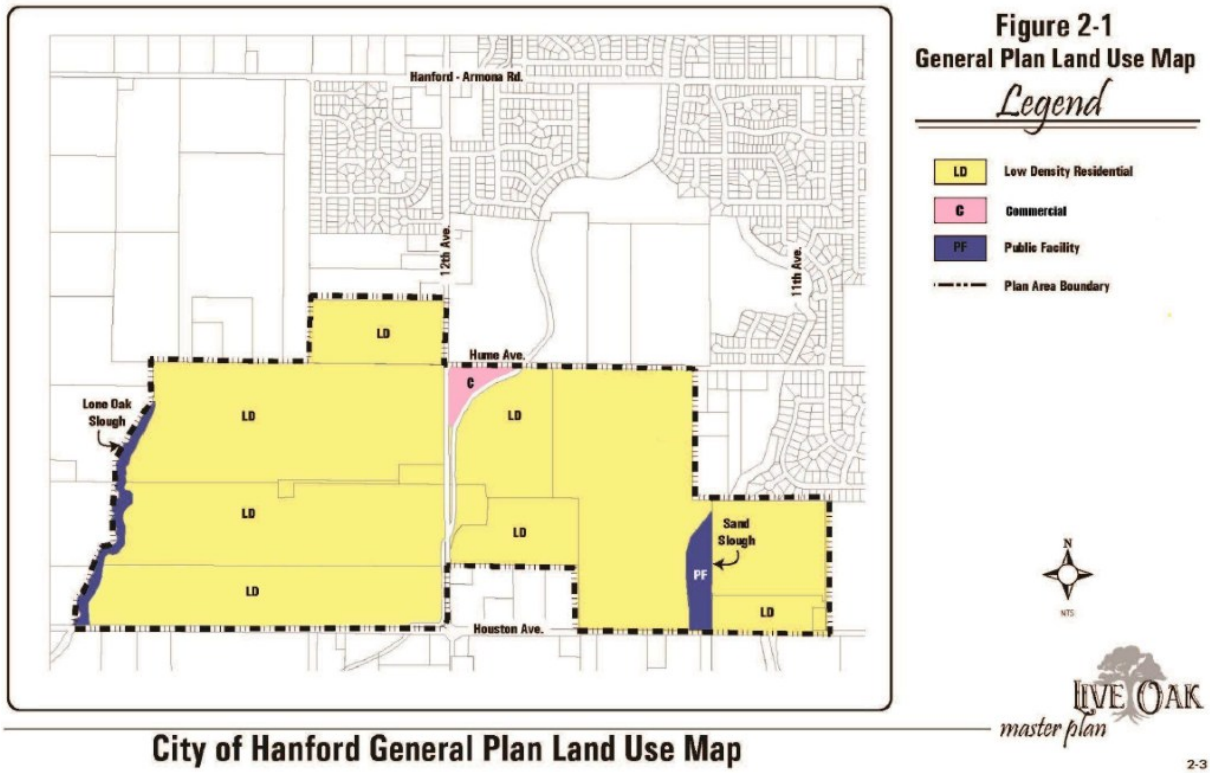



Figure 3:
Zoning Designation R-L-5 Low-Density Residential

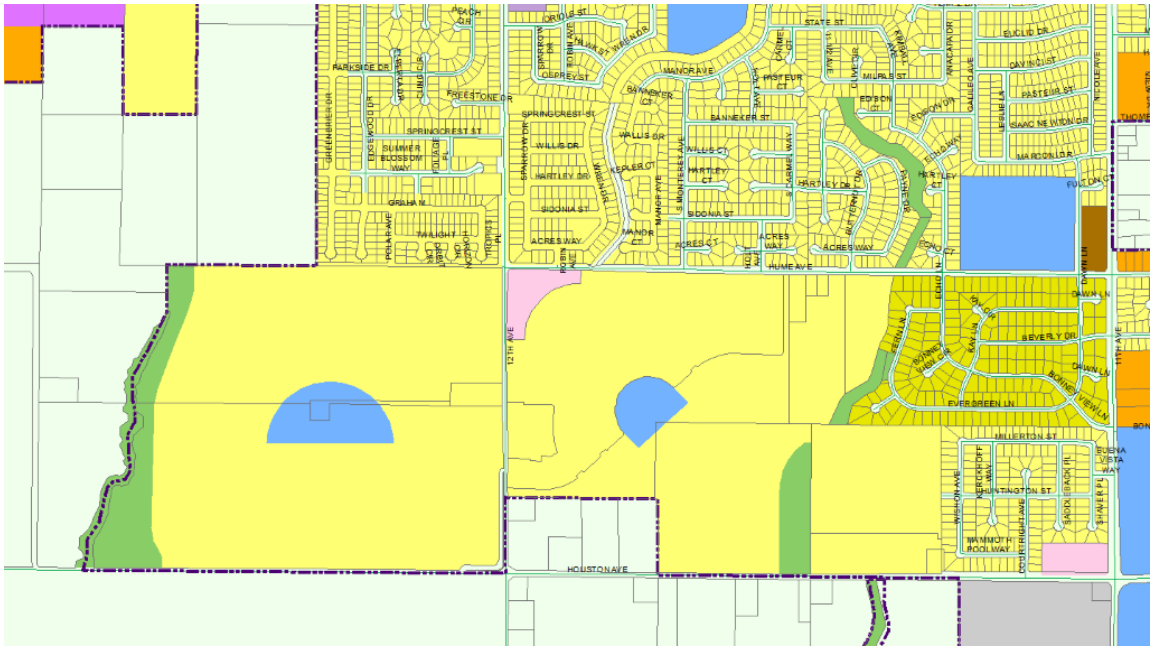


Figure 4:
Land Use (vacant)




## PROJECT EVALUATION

The Live Oak Development Project was approved by the City Council in 2009 and included approval of a Development Agreement, Planned Unit Development No. 2005-04, the Live Oak Master Plan, and Vesting Tentative Tract Maps 881 and 865. Tentative Tract 902, 909, and 912 were later approved.

Tentative Tract 881

Tentative Tract 881 was approved by the City Council on September 15, 2009. The original map proposed to subdivide approximately 57.04 acres into 273 single-family residential lots.

Tentative Tract 881 Map Amendment #1

The first amendment to the tentative tract map was approved by the Planning Commission on October 14, 2014**.** Changes to Tentative Tract 881 (Amendment #1) included:

- Elimination of a paseo and conversion to a through street
- Reduction in the number of lots from 273 single-family lots to 266 single-family lots
- An increase in the minimum lot size from 4,000 square feet to 5,000 square feet
- Elimination of alley-loaded lots
- Reconfiguration of open-space

**Tentative Tract 881 Map Amendment #2**

Units I and II of Tentative Tract 881 have been recorded. This request pertains specifically to Unit III of Tentative Tract 881 and was necessitated with the submittal of the Final Map for 881-Unit III. A comparison of the final map to the original tentative tract map revealed changes between the tentative and final map, therefore, requiring a revision to the tentative tract. This request constitutes the second map revision.

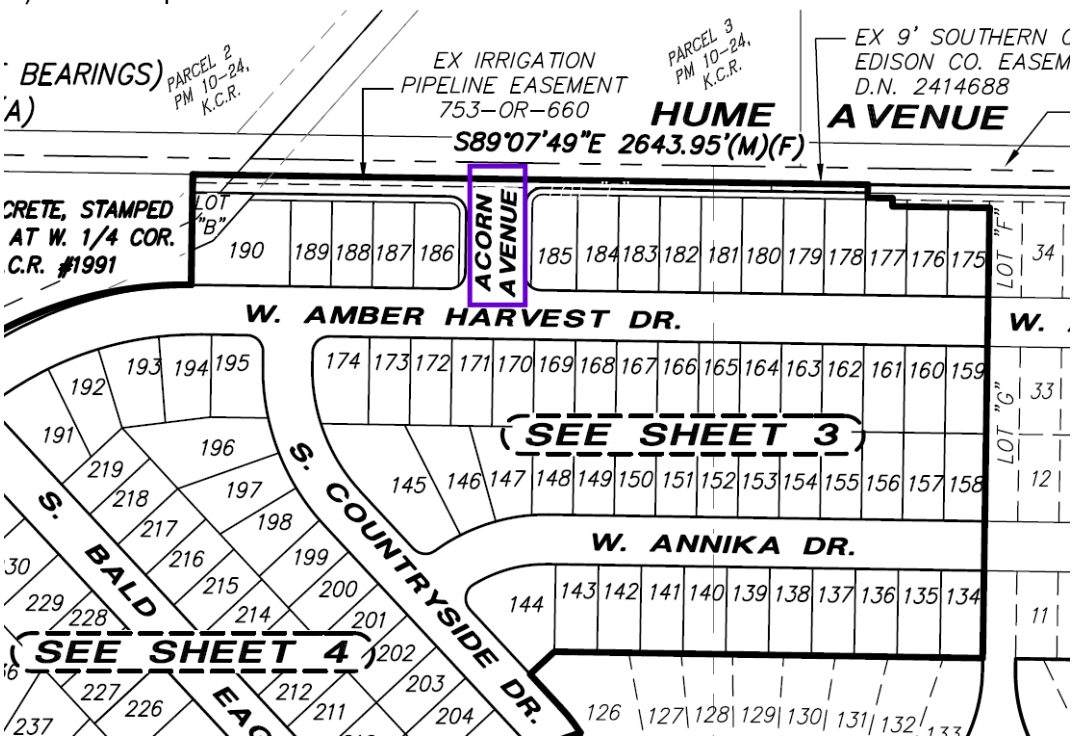
Changes to the Vesting Tentative Tract 881 are as follows:

1. Revise the total number of lots from 266 residential lots to 245 residential lots; The Live Oak Master Plan EIR evaluated 1,560 units. The total lot count remains under the 1,560 threshold, thus additional environmental review is not required.

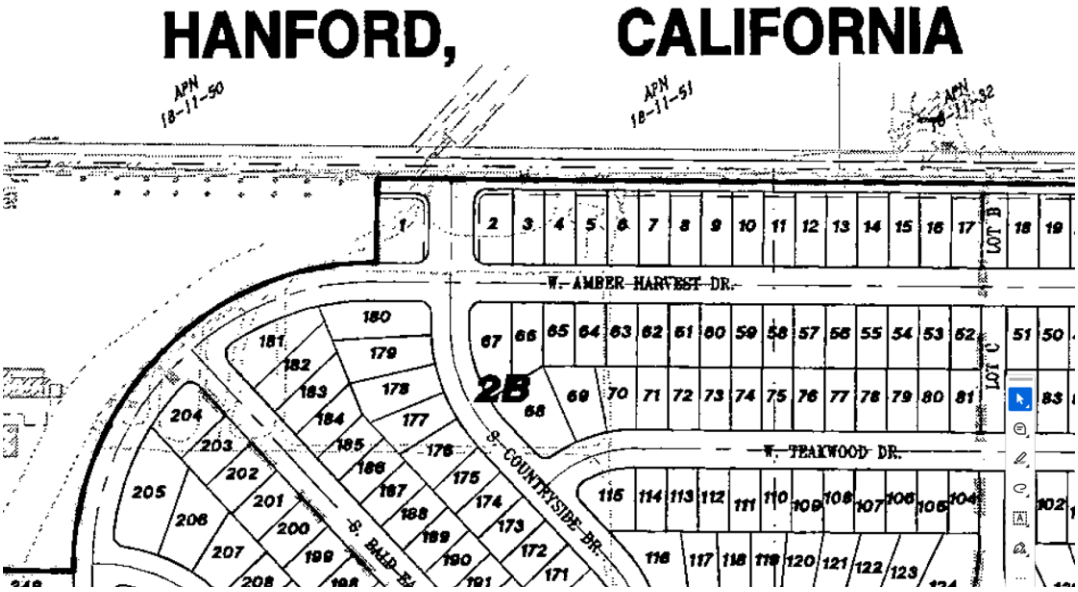
| Tract Number: | Latest Approved Residential Units: | Most Recent Lot Count |
|---|---|---|
| Tentative Tract 865 | 214 | 204 |
| Tentative Tract 881 | 270 | 245 |
| Tentative Tract 902 | 99 | 99 |
| Tentative Tract 909 | 642 | 719 |
| Tentative Tract 912 | 94 | 94 |
| Total Number of Units: | **1,319** | **1,383** |
| Number of Units Allowed under Live Oak Master Plan: | | **1,560** |

2. Acorn Avenue (Lane) was added, where on the tentative tract map (Amendment #1 version), Countryside connects directly to Hume Avenue.

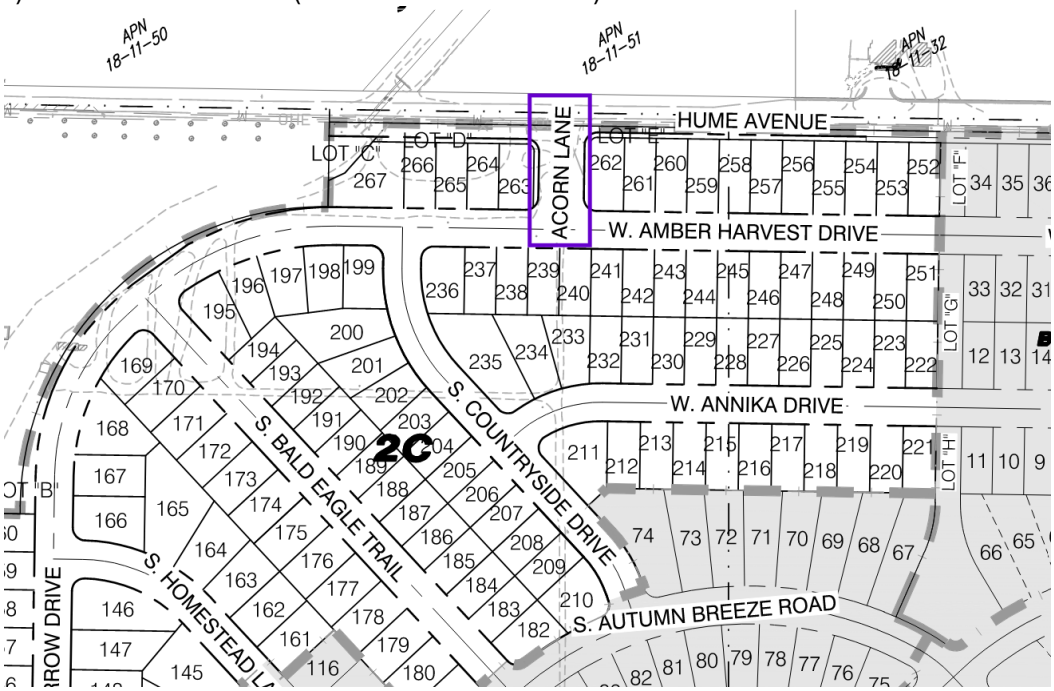
a) Final Map Submittal:




b) Tentative Tract 881 (Amendment #1 version):

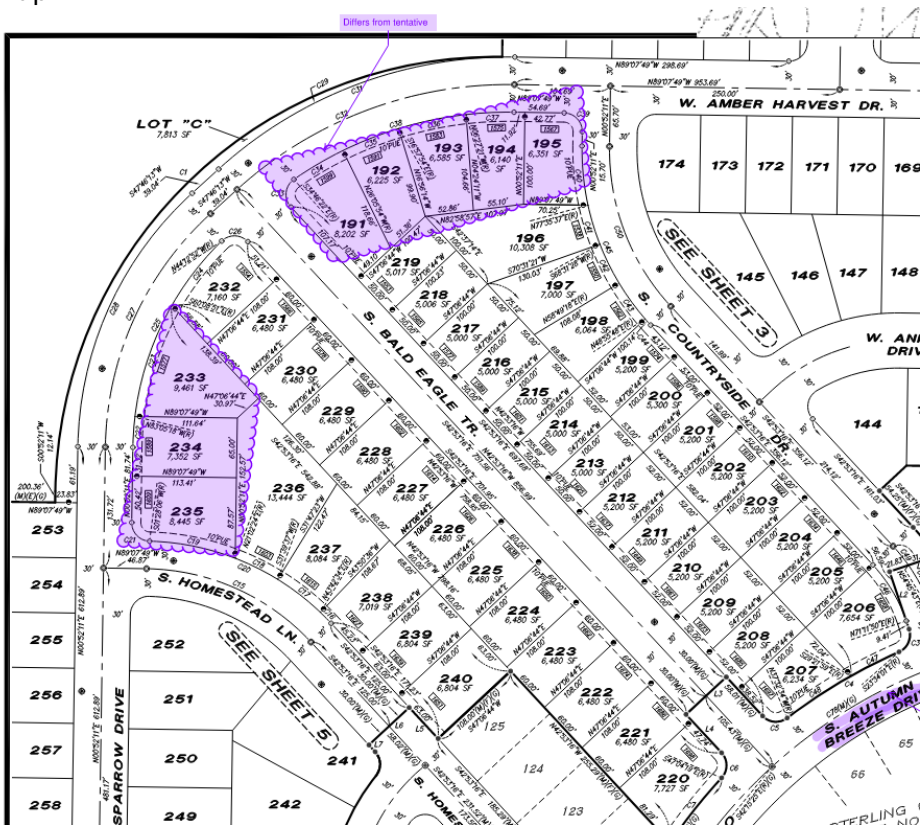


c) Tentative Tract 881 (Amendment #2 version):

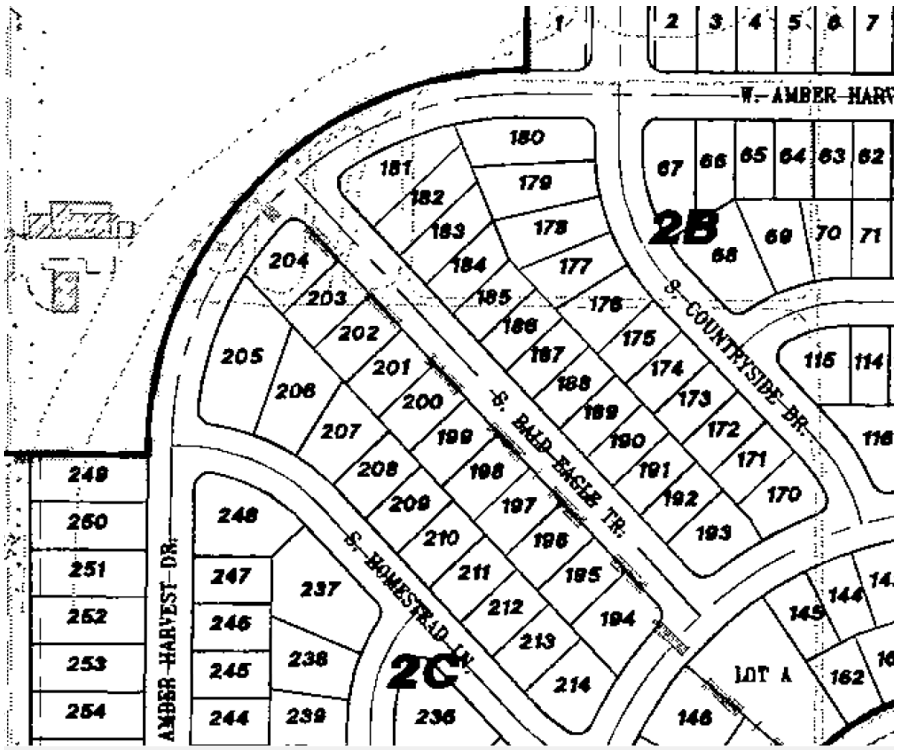



3. Additionally, the end lots were reconfigured to front Amber Harvest, where they originally did not.

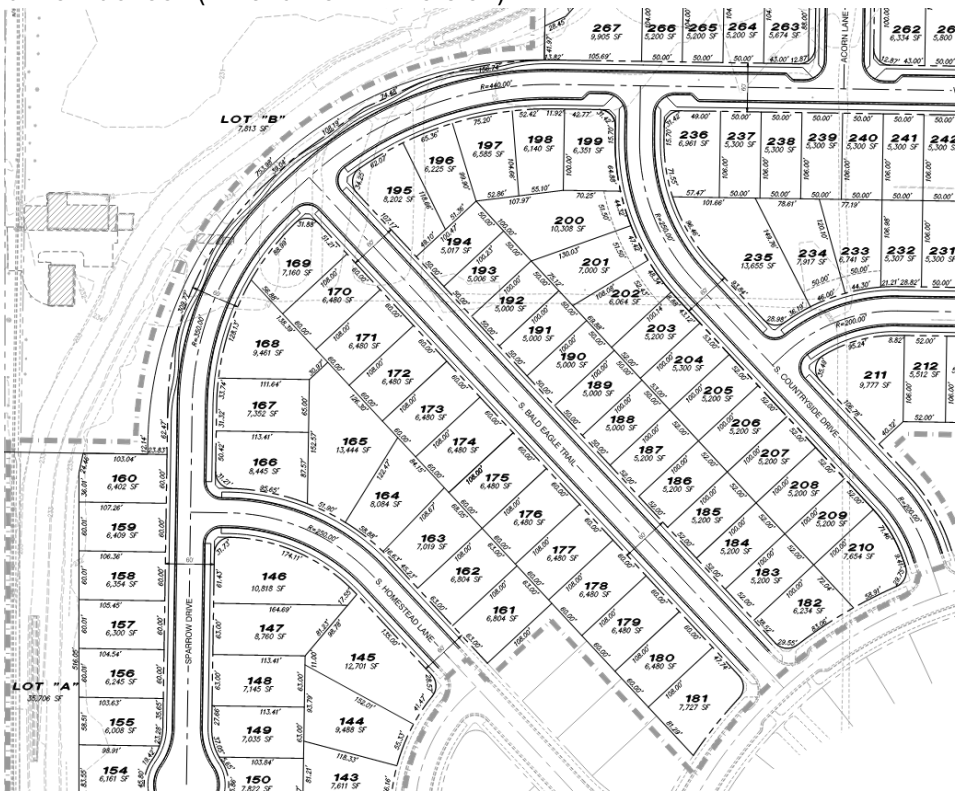
a) Final Map:



b) Tentative Tract 881 (Amendment #1 version)

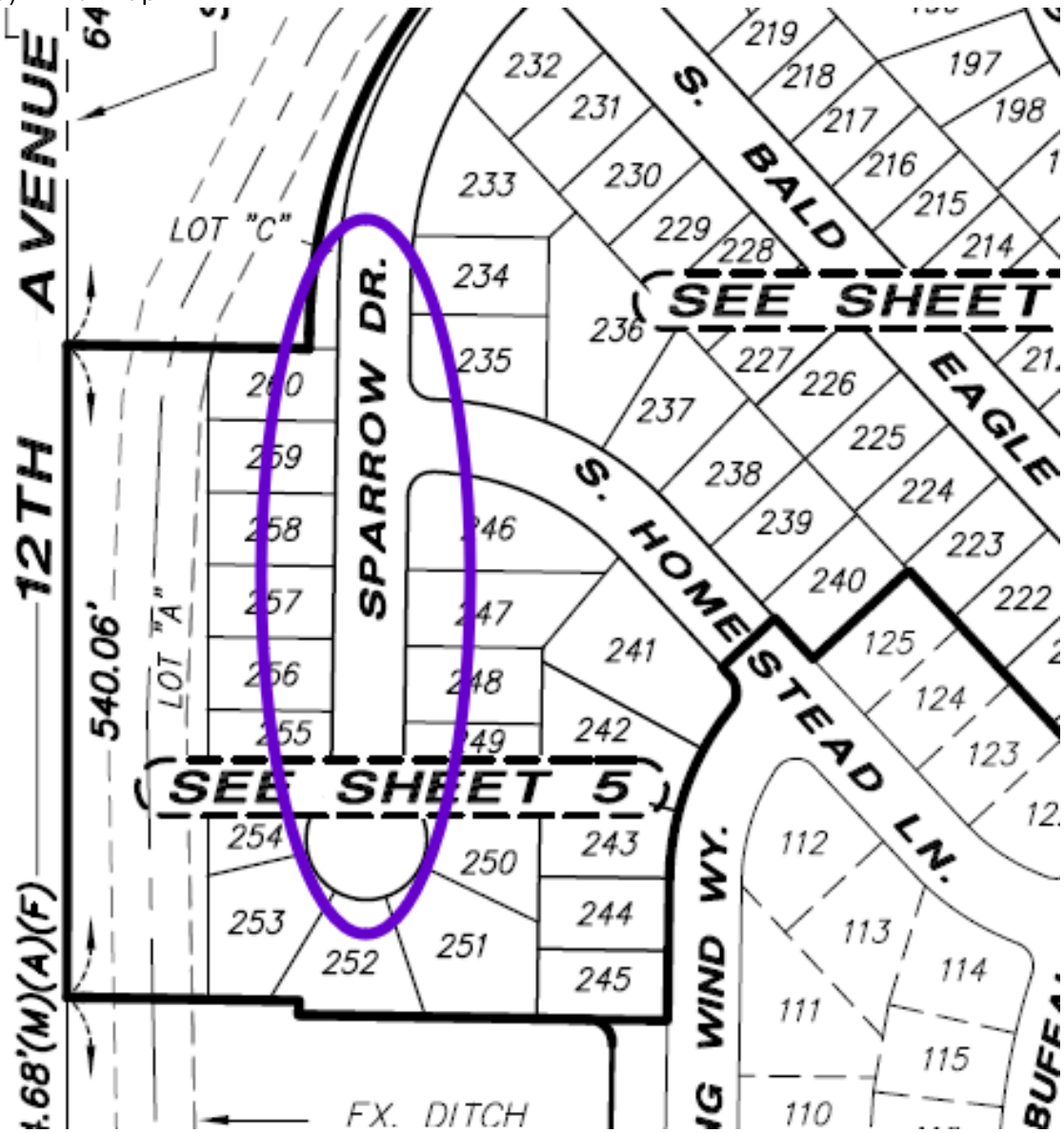



c) Tentative Tract 881 (Amendment #2 version)

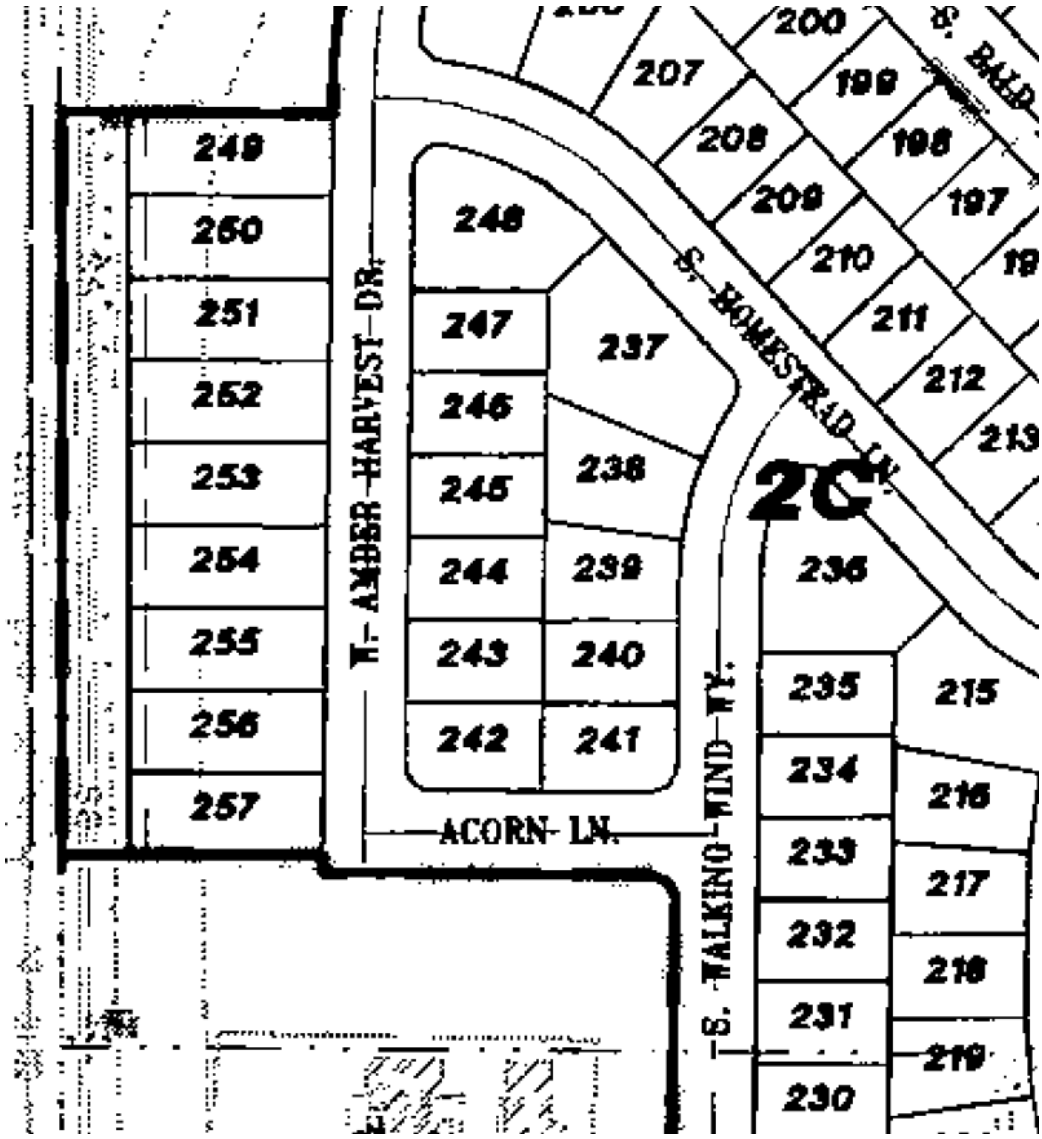


4. Another change occurs where the Sparrow Drive cul-de-sac is proposed– the tentative shows Acorn Lane present south of this block, south of lots 242 and 241 of the Tentative Tract 881 Amendment #1 version.

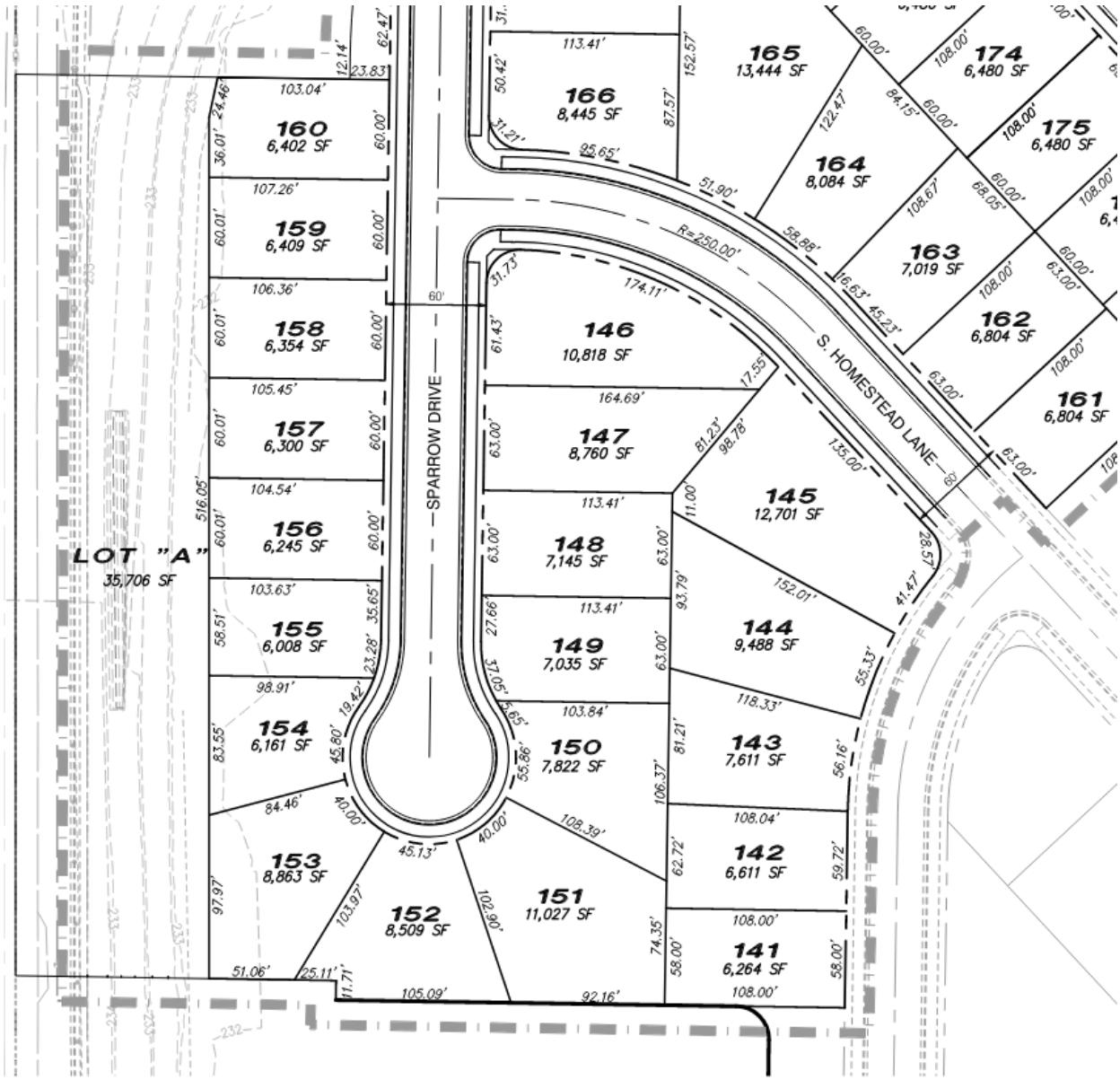
a) Final Map:



b) Tentative Tract 881 (Amendment #1 Version):



c) Tentative Tract 881 Map Amendment #2:




**Modifications to an Approved Vesting Tentative Map**

In accordance with Section 16.32.120 Modifications to an approved vesting tentative map:
Minor modifications to an approved or conditionally approved vesting tentative map or vesting final map may be approved by the planning department and/or city engineer if the modifications do not include the following:

A. Changes in the basic design of the map;

B. Changes in the number of lots or units; except for the reduction in the number of lots for a single family detached housing subdivision.

C. Changes in the orientation of roads; or

D. Other similar changes.

Major modifications which include, but are not limited to, the changes listed in subsections A through D of this section, require a public hearing, and planning commission approval.

Analysis: Since the changes proposed included changes in the basic design of the map and changes in the orientation of roads, it was necessary to require amendments to the vesting tentative tract map through Planning Commission approval, including a public hearing.

The Live Oak Development Agreement grants authority to the Community Development Director to replace exhibits within the DA superseded by Planning Commission action, therefore, a public hearing to modify the DA is not required. Unless a change to the Live Oak Master Plan or Development Agreement becomes warranted through the process, only Planning Commission level approval should be required.

**1.15. AMENDMENT.**

This Agreement may be modified, amended, changed, added to or subtracted from by the mutual consent of the Parties or their successors in interest, after notice and public hearing in conformance with and pursuant to the provisions of Government Code Section 65868. Any duly adopted amendment or change shall be in written form, executed and approved with the same formalities as this Agreement, and attached to the original Agreement to maintain continuity. The Director of Community Development shall have authority to make ministerial changes in any of the exhibits made a part of this Agreement (e.g., replacing an exhibit that has been superceded as a result of action by the Planning Commission or the City Council with the current exhibit); all other changes to the Agreement require approval of the City Council. Unless otherwise provided by law, all other amendments may be approved without a noticed public hearing.

**Tentative Tract 881 Map Amendment #2 Evaluation:**

Vesting Tentative Tract 881 Amendment #2 is a request to amend the previously approved map, in order to subdivide 54.46 acres into 245 single-family residential lots and open space lots (paseos and landscape lots) in the R-L-5 Low-Density Residential zone district. The project area is subject to the Live Oak East Master Plan, which allows various deviations from City standard in exchange for open space and cohesive design. The changes proposed to the tentative map affect Unit III of Tentative Tract 881, as Units I and II have been recorded.

| **Evaluation** | **881 (overall)** | **881 Unit III** |
|---|---|---|
| APN | Various APNs 011-620-001 through -059; | 011-110-051-000 |

| | | |
|---|---|---|
| Total Area | 54.46 acres | 26.7 acres |
| Number of Units | 245 (the number of units shows 267, however 22 of the lots occur within Tract 865) | 128 |
| Units/Gross Acre | 4.5 | 4.8 |
| Population increase (3.08 persons per household) | 754.6 | 394.24 |

**Conformance with the R-L-5 Low-Density Residential Zoning and Live Oak Master Plan**

Lot Area

In the R-L-5 Low-Density Residential zone district, the minimum lot size is 5,000 square feet, except as prescribed in Section 17.10.100, which allows lot area less than 5,000 square feet.

The Live Oak Master Plan permits lot area as low as 3,200 sq. ft., though most lots satisfy the 5,000 sq. ft. minimum lot size of the R-L-5 zone district.

Analysis: The minimum lot size provided in Tentative Tract Map 881 Amendment #2 is 4,561 sq. ft. (lot 48 – Unit I), which is within the allowable range permitted by the Live Oak Master Plan.

Lot Dimensions

*Lot Frontage*

In the R-L-5 Low-Density Residential zone district, the minimum lot frontage shall be 40 feet.

Analysis: There is a minimum of 40 feet of lot frontage provided for all lots within the subdivision.

*Lot Width*

In the R-L-5 Low-Density Residential zone district, there shall be a minimum lot width of 50 feet for interior lots and 60 feet for corner lots.

The Live Oak Master Plan permits lot widths as low as 30 feet for radial lots, 40 feet for interior lots, and 50 feet for corner lots.

Analysis: "Lot width" means the horizontal distance between side lot lines, measured at the front setback line. All interior lots within Unit III of Tentative Tract 881 provide 50 feet of lot width, measured at the front setback line. All lots within the subdivision satisfy the minimum lot width allowed through the Live Oak Master Plan.

*Lot Depth*

In the R-L-5 Low-Density Residential zone district, the lot depth shall be a minimum of 90 feet.

The Live Oak Master Plan permits a minimum lot depth of 80 feet.

Analysis: The majority of the lots within the subdivision satisfy the 90-foot lot depth of the Low-Density Residential zone district, with the exception of Lot 154 which possesses an 81'2" lot depth (measured centerline to centerline). The lot depth is permissible through the Live Oak Master Plan.

Density

In accordance with the General Plan, the expected density range for Low-Density Residential is two to 10 units per cross acre, with an expected average of just under four units per gross acre.

Analysis: The density provided for Vesting Tentative Tract 881 (Amendment #2) overall is 4.5 units per gross acre and 4.8 for Unit III, both of which are within the allowable density range for Low-Density Residential.

Dwelling Units per Lot

In the R-L-5 Low-Density Residential zone district, not more than one dwelling unit shall be allowed on each lot, unless approved as an accessory dwelling unit in accordance with Section 17.60.030 (accessory dwelling unit standards) and as permitted by State law.

Analysis: The lots are planned for single-family residential use. Accessory dwelling units would be permissible, subject to the conditions set forth in 17.60.030 of the Hanford Municipal Code and State law.

## REQUIRED FINDINGS

**Vesting Tentative Tract 909 Amendment #2**

Pursuant to Section 16.04.010 of the Hanford Subdivision Ordinance, Section 66474 of the Subdivision Map Act and Hanford's Zoning Ordinance the following findings can be made by the Planning Commission:

A. Consistency Finding: A consistency finding can be made because the proposed subdivision map is consistent with the State Subdivision Map Act, General Plan and Zoning and Subdivision Ordinances;

   Analysis: That a consistency finding can be made, because the proposed subdivision map is consistent with the State Subdivision Map Act, General Plan, Zoning Ordinance, and Subdivision Ordinance. The subdivision is consistent with the General Plan Designation for the property, Low-Density Residential. All requirements of the R-L-5 Low-Density Residential zone district are met for lot size, frontage, width, and depth. Compliance with the requirement of the R-L-5 Low-Density Residential zone district is required, except where modified by Planned Unit Development No. 2005-04/Live Oak Master Plan.

B. Design Finding: A design finding can be made because the design or improvement of the subdivision map is consistent with general and specific plans.

Analysis: That the design and improvement of the subdivision is consistent with the State Subdivision Map Act, General Plan, Zoning Ordinance, and Subdivision Ordinance. The subdivision is consistent with the General Plan Designation for the property, Low-Density Residential. All requirements of the R-L-5 Low-Density Residential zone district are met for lot size, frontage, width, and depth. Compliance with the requirement of the R-L-5 Low-Density Residential zone district is required, except where modified by Planned Unit Development No. 2005-04/Live Oak Master Plan.

C. Type of Development Finding: A type of development finding can be made because the site is physically suitable for the proposed type of development.

Analysis: That the site is physically suitable for the single-family residential development proposed under Tentative Tract 881. The lots proposed meet the minimum lot size of the R-L-5 Low-Density Residential Zone District. All parcels have adequate street frontage on a public street and meet the minimum depth and width required for the district, except where modified by Planned Unit Development No. 2005-04/Live Oak Master Plan.

D. Density Finding: A density finding can be made because the site is physically suitable for the proposed density of development.

Analysis: That a density finding can be made, because the site is physically suitable for the proposed density of development. The General Plan prescribes a density range between two and 10 units per acre, with an expected average of four units per gross acre. The tentative tract has an overall gross density of 4.5 units per acre, Unit III has a gross density of 4.8 units per acre. Both the subdivision overall and the modified Unit III are within the density range prescribed by the General Plan.

E. Environmental Finding: An environmental finding can be appropriately made because the design of the subdivision map and/or the proposed improvements is not likely to cause serious substantial environmental damage, or substantially and avoidably injure fish or wildlife or their habitat.

Analysis: That on September 15, 2009, the City of Hanford City Council reviewed the Live Oak Development project, for which an Environmental Impact Report (SCH #2006091015) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Agricultural Resources, Air Quality, and Energy Conservation and Climate Change. A Notice of Determination was filed with Kings County on September 18, 2009. Former changes to the proposed to the Live Oak Development were analyzed in Addendum 1 to the EIR to verify that a subsequent EIR is not warranted, as none of the circumstances requiring a subsequent EIR, identified in Section 15162, had been met; therefore, in accordance with Section 15164 of the California Environmental Quality Act (CEQA) Guidelines. The changes proposed to the Live Oak Development project herein do not further affect any of the environmental factors evaluated under the Live Oak EIR (SCH #2006091015) or subsequent addendum. Consequently, a subsequent or supplemental EIR or IS/MND is not required.

F. Public Health Finding: A public health finding can be appropriately made because the design of the subdivision map and/or type of improvement is not likely to cause serious public health problems.

Analysis: That the design of the subdivision and type of improvements are not likely to cause serious health problems. The City of Hanford Building Division is responsible for ensuring that future construction of the site follows adopted building codes, thus reducing exposures to accidents to the general public. Consultation was sent to the interested agencies for review of the Live Oak Development, any improvements or mitigations required for public health and safety were applied to the proposal and required in the conditions of approval or through mitigation measures.

G. Improvements & Access Findings:

Analysis: An improvements and access finding can be appropriately made because the design of the subdivision map and/or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of property within the proposed parcels.

## PUBLIC COMMENT

Noticing of changes proposed to Tentative Tract 881 were published in the newspaper on May 27, 2026 and mailed to property owners within 300 feet of the project site on that same day. No comments have been received as of the date of preparation of this report.

## ENVIRONMENTAL ASSESSMENT

On September 15, 2009, the City of Hanford City Council reviewed the Live Oak Development project, for which an Environmental Impact Report (SCH #2006091015) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Agricultural Resources, Air Quality, and Energy Conservation and Climate Change. A Notice of Determination was filed with Kings County on September 18, 2009. Former changes to the proposed to the Live Oak Development were analyzed in Addendum 1 to the EIR to verify that a subsequent EIR is not warranted, as none of the circumstances requiring a subsequent EIR, identified in Section 15162, had been met; therefore, in accordance with Section 15164 of the California Environmental Quality Act (CEQA) Guidelines. The changes proposed to the Live Oak Development project herein do not further affect any of the environmental factors evaluated under the Live Oak EIR (SCH #2006091015) or subsequent addendums. Consequently, a subsequent or supplemental EIR or IS/MND is not required.

Addendum #1 – attached as **Attachment 4.**

Due to the size of the EIR, attachment of the document is not possible. The Live Oak EIR is available for public viewing at City Hall, 317 N. Douty Street.

## RECOMMENDATION

Staff recommends that the Planning Commission:

1. Adopt Resolution No. 2026-10, approving an amendment to Tentative Tract 881.

**Applicant:**
San Joaquin Valley Homes
Seth Barton
5607 Avenida de las Robles
Visalia, CA 93291

**RESOLUTION NO. 2026-10**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD APPROVING AN AMENDMENT TO VESTING TENTATIVE TRACT 881. VESTING TENTATIVE TRACT 881 (MAP AMENDMENT #2) IS A REQUEST TO AMEND THE PREVIOUSLY APPROVED VESTING TENTATIVE TRACT 881 TO REFLECT CHANGES BETWEEN THE APPROVED TENTATIVE MAP AND THE SUBMITTED FINAL MAP, INCLUDING THE ADDITION OF ACORN LANE OFF HUME AVENUE, RECONFIGURATION OF END LOTS TO FRONT AMBER HARVEST DRIVE, AND A RECONFIGURATION TO ACCOMMODATE A CUL-DE-SAC ON SPARROW DRIVE.**

**THE PROJECT PERTAINS TO UNIT III OF TRACT 881, LIVE OAK EAST, WHICH IS GENERALLY LOCATED EAST OF 12TH AVENUE, SOUTH OF HUME AVENUE (APN 011-110-051-000)**

At a regular meeting of the Planning Commission of the City of Hanford duly called and held on June 9, 2026 by motion of Commissioner _____ , and seconded by Commissioner _____ _____, and duly carried, the following resolution was adopted:

WHEREAS, Vesting Tentative Subdivision Map No. 881 (Map Amendment #2), Exhibit A, filed by San Joaquin Valley Homes, has been reviewed by the Planning Commission of the City of Hanford as a decision-making body in accordance with Title 16 of the Hanford Municipal Code; and

WHEREAS, the Planning Commission has carefully considered recommendations and testimony presented at the public hearing of June 9, 2026, and

WHEREAS, all various governmental department agencies, staff, and the Planning Commission, have given careful consideration to this Planned Unit Development/Master Plan and have made recommendations thereon; and

WHEREAS, Vesting Tentative Subdivision Map No. 881 was approved by the Planning Commission on August 9, 2009 and the City Council on September 15, 2009, pursuant to Section 66474 of the Subdivision Map Act; and,

WHEREAS, on September 15, 2009, the City of Hanford City Council reviewed the Live Oak Development project, for which an Environmental Impact Report (SCH #2006091015) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Agricultural Resources, Air

Quality, and Energy Conservation and Climate Change. A Notice of Determination was filed with Kings County on September 18, 2009.

WHEREAS, the Final Environmental Impact Report identified significant environmental impacts that can be mitigated to substantially lessen the environmental effects relating to Air Quality, Biological Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Facilities and Services, and Transportation and Circulation; and

WHEREAS, the City Council, on September 15, 2009, systematically identified both the significant effects of the proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects in accordance with the provisions of the California Environmental Quality Act as more specifically articulated in "The Mitigation Monitoring and Reporting Plan" in an appendix of the final EIR and incorporated herein by this reference; and

WHEREAS, subsequent changes proposed to the Live Oak Development have been analyzed in an addendum to the EIR (Addendum #1) to verify that a subsequent EIR is not warranted, as none of the circumstances requiring a subsequent EIR, identified in Section 15162, have been met; therefore, in accordance with Section 15164 of the California Environmental Quality Act (CEQA) Guidelines, an addendum to the EIR (SCH #2006091015) would adequately address the amendments proposed under this project. The changes proposed to the Live Oak Development project herein do not further affect any of the environmental factors evaluated under the Live Oak EIR (SCH #2006091015). Consequently, a subsequent or supplemental EIR or IS/MND is not required. Staff has evaluated the changes proposed in the addendum to the initial study and determined that the changes proposed would not result in any new or increased environmental impacts that were not identified in the EIR; and

WHEREAS, pursuant to Section 16.04.010 of the Hanford Subdivision Ordinance, Section 66474 of the Subdivision Map Act and Hanford's Zoning Ordinance the following findings can be made by the Planning Commission:

A. Consistency Finding: A consistency finding can be made because the proposed subdivision map is consistent with the State Subdivision Map Act, General Plan and Zoning and Subdivision Ordinances;

Analysis: That a consistency finding can be made, because the proposed subdivision map is consistent with the State Subdivision Map Act, General Plan, Zoning Ordinance, and Subdivision Ordinance. The

subdivision is consistent with the General Plan Designation for the property, Low-Density Residential. All requirements of the R-L-5 Low-Density Residential zone district are met for lot size, frontage, width, and depth. Compliance with the requirement of the R-L-5 Low-Density Residential zone district is required, except where modified by Planned Unit Development No. 2005-04/Live Oak Master Plan.

B. Design Finding: A design finding can be made because the design or improvement of the subdivision map is consistent with general and specific plans.

Analysis: That the design and improvement of the subdivision is consistent with the State Subdivision Map Act, General Plan, Zoning Ordinance, and Subdivision Ordinance. The subdivision is consistent with the General Plan Designation for the property, Low-Density Residential. All requirements of the R-L-5 Low-Density Residential zone district are met for lot size, frontage, width, and depth. Compliance with the requirement of the R-L-5 Low-Density Residential zone district is required, except where modified by Planned Unit Development No. 2005-04/Live Oak Master Plan.

C. Type of Development Finding: A type of development finding can be made because the site is physically suitable for the proposed type of development.

Analysis: That the site is physically suitable for the single-family residential development proposed under Tentative Tract 881. The lots proposed meet the minimum lot size of the R-L-5 Low-Density Residential Zone District. All parcels have adequate street frontage on a public street and meet the minimum depth and width required for the district, except where modified by Planned Unit Development No. 2005-04/Live Oak Master Plan.

D. Density Finding: A density finding can be made because the site is physically suitable for the proposed density of development.

Analysis: That a density finding can be made, because the site is physically suitable for the proposed density of development. The General Plan prescribes a density range between two and 10 units per acre, with an expected average of four units per gross acre. The tentative tract has an overall gross density of 4.5 units per acre, Unit III has a gross density of 4.8 units per acre. Both the subdivision overall and the modified Unit III are within the density range prescribed by the General Plan.

E. Environmental Finding: An environmental finding can be appropriately made because the design of the subdivision map and/or the proposed improvements is not likely to cause serious substantial environmental damage, or substantially and avoidably injure fish or wildlife or their habitat.

Analysis: That on September 15, 2009, the City of Hanford City Council reviewed the Live Oak Development project, for which an Environmental Impact Report (SCH #2006091015) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Agricultural Resources, Air Quality, and Energy Conservation and Climate Change. A Notice of Determination was filed with Kings County on September 18, 2009. Former changes to the proposed to the Live Oak Development were analyzed in Addendum 1 to the EIR to verify that a subsequent EIR is not warranted, as none of the circumstances requiring a subsequent EIR, identified in Section 15162, had been met; therefore, in accordance with Section 15164 of the California Environmental Quality Act (CEQA) Guidelines. The changes proposed to the Live Oak Development project herein do not further affect any of the environmental factors evaluated under the Live Oak EIR (SCH #2006091015) or subsequent addendum. Consequently, a subsequent or supplemental EIR or IS/MND is not required.

F. Public Health Finding: A public health finding can be appropriately made because the design of the subdivision map and/or type of improvement is not likely to cause serious public health problems.

Analysis: That the design of the subdivision and type of improvements are not likely to cause serious health problems. The City of Hanford Building Division is responsible for ensuring that future construction of the site follows adopted building codes, thus reducing exposures to accidents to the general public. Consultation was sent to the interested agencies for review of the Live Oak Development, any improvements or mitigations required for public health and safety were applied to the proposal and required in the conditions of approval or through mitigation measures.

G. Improvements & Access Findings:

Analysis: An improvements and access finding can be appropriately made because the design of the subdivision map and/or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of property within the proposed parcels.

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Hanford approves an amendment to Vesting Tentative Tract 881 (Map Amendment #2) as shown in Exhibit A, subject to the following conditions of approval:

1. That the subdivision shall be subject to the conditions of approval cited in previous Resolution No. 20-34-R, attached as **Exhibit B.**

2. Defense and Indemnification Provisions: That the applicant shall defend, indemnify, and hold harmless the City of Hanford ("City"), its officials, officers, employees, representatives, agents and attorneys, from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with, the City's act or acts leading up to and including approval of any environmental document and/or granting of any approvals relating to the Project. Applicant's obligation to defend, indemnify and hold the City harmless specifically includes, but is not limited to, any suit or challenge by any third party against the City which challenges or seeks to set aside, void or annul the legality or adequacy of any environmental document approved by the City or any approval related to the Project.(Contact the City Attorneys' Office: (559) 584-6656 concerning questions that you may have on the condition above).

**EXPIRATION:**

That this Vesting Tentative Tract Map shall expire with the expiration of the Live Oak Development Agreement.

**PASSED AND ADOPTED** at a regular meeting of the Planning Commission of the City of Hanford held on the 9th day of June 202 by the following vote:

| | | |
|---|---|---|
| AYES: | Commissioner | _____ |
| | | _____ |
| | | _____ |
| | | _____ |
| | | _____ |
| NOES: | Commissioner | _____ |
| ABSTAIN: | Commissioner | _____ |
| ABSENT: | Commissioner | _____ |

STATE OF CALIFORNIA)
COUNTY OF KINGS )*ss*
CITY OF HANFORD )

I, **Jason Waters,** Secretary of the Planning Commission of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the **9th day** of **June 2026.**

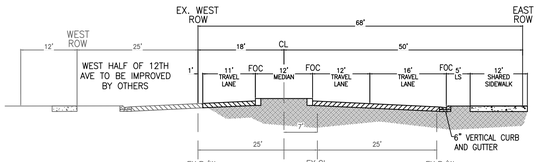
_____
Jason Waters, Deputy City Manager
Secretary of the Planning Commission

**Exhibit A:**
Vesting Tentative Tract 881 (Map Amendment #2)

# LIVE OAK EAST PHASE 2A, 2B, AND 2C

## VESTING TENTATIVE SUBDIVISION MAP 881

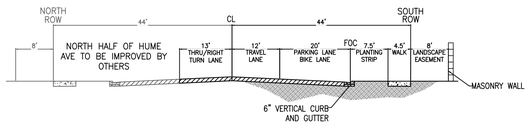
## HANFORD, CALIFORNIA




### 93' ARTERIAL STREET (MODIFIED CROSS SECTION B OF THE LIVE OAK MASTER PLAN)

12TH AVENUE, NORTH OF BUTTERFIELD LANE

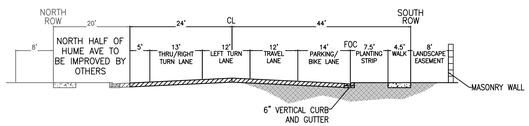
REFERENCE FIGURE 4-2 & 4.4 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 88' MAJOR COLLECTOR STREET (MODIFIED CROSS SECTION C OF THE LIVE OAK MASTER PLAN)

HUME AVENUE WEST OF THE PEOPLES DITCH

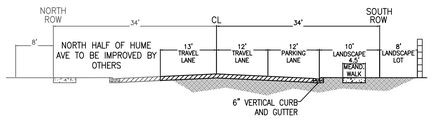
REFERENCE FIGURE 4-2 & 4.5 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 88' MAJOR COLLECTOR STREET (MODIFIED CROSS SECTION C OF THE LIVE OAK MASTER PLAN)

HUME AVENUE WEST OF THE PEOPLES DITCH AT 12TH AVENUE

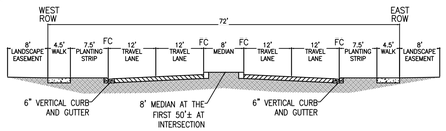
REFERENCE FIGURE 4-2 & 4.5 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 68' COLLECTOR STREET (MODIFIED CROSS SECTION C-1 OF THE LIVE OAK MASTER PLAN)

HUME AVENUE EAST OF THE PEOPLES DITCH

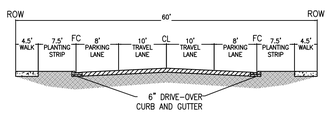
REFERENCE FIGURE 4-2 & 4.6 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 72' ENTRY MINOR COLLECTOR STREET (MODIFIED CROSS SECTION D1 OF THE LIVE OAK MASTER PLAN)

ACORN LANE AT HUME AVENUE

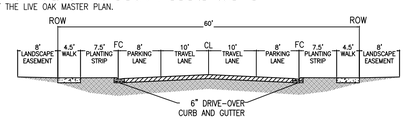
REFERENCE FIGURE 4-2 & 4.13 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 60' LOCAL STREET (CROSS SECTION G OF THE LIVE OAK MASTER PLAN)

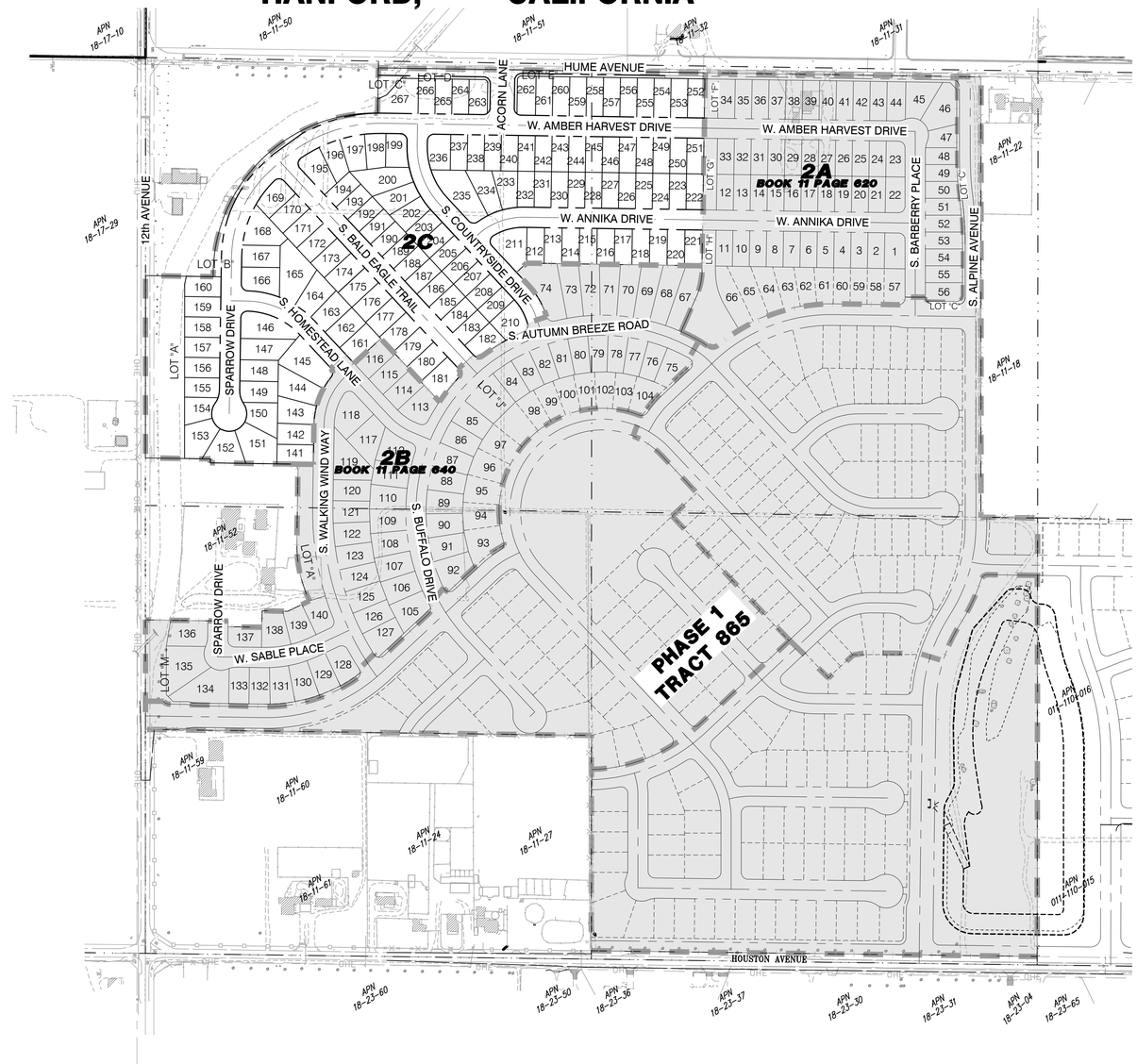
REFERENCE FIGURE 4-2 & 4.10 OF THE LIVE OAK MASTER PLAN
N.T.S.

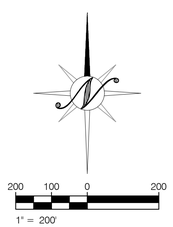
S. ALPINE AVENUE, RED ROCK ROAD, AND BUTTERFIELD LANE ARE TO BE DEDICATED AND IMPROVED AS PART OF LIVE OAK 1. REFERENCE FIGURE 4-2 & 4.7 OF THE LIVE OAK MASTER PLAN.

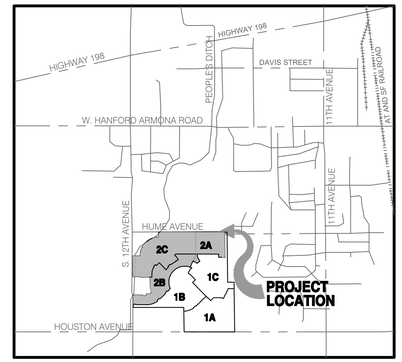



### 60' LOCAL STREET (MODIFIED CROSS SECTION G OF THE LIVE OAK MASTER PLAN)

REFERENCE FIGURE 4-2 & 4.10 OF THE LIVE OAK MASTER PLAN
N.T.S.




## VICINITY MAP

N.T.S

## SHEET INDEX


| | |
|---|---|
| TM1.1 | COVER SHEET |
| TM1.2 | BOUNDARY SHEET |
| TM1.3 | PHASE 2A |
| TM1.4 | PHASE 2B |
| TM1.5 | PHASE 2C |


## PROJECT INFORMATION

OWNER/SUBDIVIDER:
SAN JOAQUIN VALLEY HOMES
5607 AVENIDA DE LOS ROBLES
VISALIA, CA 93291
PHONE (559) 732-2660
ATTN: JIM ROBINSON

ENGINEER:
NORTHSTAR ENGINEERING GROUP, INC.
620 12TH STREET MODESTO, CA 95354 PHONE: (209) 524-3525
FAX: (209) 524-3526
ATTN: CHRIS VANDERVEEN, P.E.

SITE INFORMATION:

* THE PROJECT PHASING SHOWN ON THIS MAP IS BASED ON FUTURE LARGE LOT PARCEL MAP TO BE SUBMITTED WITH FUTURE APPLICATION.

1. LEGAL DESCRIPTION: LEGAL DESCRIPTION OF ALL EXISTING PARCELS WITHIN PROJECT AREA ARE CONTAINED WITHIN THE PRELIMINARY REPORTS SUBMITTED WITH THIS APPLICATION.
2. ASSESSORS PARCEL NUMBERS AND ADDRESSES:
   018-011-104
   018-011-105 (PORTION)
3. APPROXIMATE SITE SIZE: NET 54.46 ± ACRES.
4. PROPOSED USE: 245 SINGLE FAMILY RESIDENCES.
5. EXISTING USE: AGRICULTURE
6. EXISTING GENERAL PLAN DESIGNATION: A PORTION OF APN 018-011-104, AND APN 018-011-105 IS MDR, ALL OTHER PARCELS ARE LDR.
7. EXISTING ZONING DESIGNATION: A PORTION OF APN 018-011-104, AND APN 018-011-105 IS ZONED R-M-3, ALL OTHER PARCELS ZONED R-1-6.
8. PROPOSED MINIMUM LOT SIZE:
   PHASE 2A 50x100' 5000 SF - 56 UNITS
   PHASE 2B 60x100' 6000 SF - 61 UNITS
   PHASE 2C 50x100' 5000 SF - 86 UNITS
   60x100' 6000 SF - 42 UNITS
9. STREET NAMES UTILIZED ARE TO BE APPROVED BY CITY OF HANFORD STAFF.
10. ALL EXISTING STRUCTURES AND TREES WITHIN THE BOUNDARY OF THE PROJECT SITE TO BE REMOVED IN ACCORDANCE WITH CITY OF HANFORD STANDARDS AND SPECIFICATIONS.
11. ALL CONTOURS SHOWN IN 1' INCREMENTS AND LABELED IN 5' INCREMENTS.
12. THE PROPERTY LINE DISTANCES, BEARINGS AND ALL OTHER DIMENSIONS SHOWN ON THIS MAP HAVE BEEN TAKEN FROM DEEDS, ASSESSORS MAPS, OR G.I.S.
13. ALL STREET SECTIONS ON THIS MAP ARE BASED ON THE LIVE OAK MASTER PLAN.

STATEMENT OF SUBDIVIDER:

14. ALL IMPROVEMENTS AND PUBLIC UTILITIES TO BE MADE OR INSTALLED AT THE TIME OF DEVELOPMENT. ALL IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HANFORD STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
15. WATER, SEWER, STORM DRAIN AND STREETS ARE TO BE PUBLIC IMPROVEMENTS.
    UTILITY/SERVICE PROVIDERS:
    WATER: CITY OF HANFORD
    SEWER: CITY OF HANFORD
    STORM DRAIN: CITY OF HANFORD
    GAS: SOUTHERN CALIFORNIA GAS COMPANY
    ELECTRICITY: SOUTHERN CALIFORNIA EDISON
    FIRE PROTECTION: CITY OF HANFORD
    TELEPHONE: SBC
16. PRIOR TO OR CONCURRENTLY WITH THE RECORDATION OF THE FINAL MAP THE DEVELOPER WILL DEDICATE THE NECESSARY AMOUNT OF PROPOSED RIGHT OF WAY ALONG THE SOUTH HALF OF HUME AVE. AND THE EAST HALF OF 12TH AVE. ALONG THE PROJECT FRONTAGE IMPROVEMENTS.
17. IN ACCORDANCE WITH SECTION 66456.1 OF THE "SUBDIVISION MAP ACT", THE OWNER RESERVES THE RIGHT TO FILE FOR MULTIPLE FIMAL MAPS.
18. PURSUANT TO SECTION 66452.6 OF THE "SUBDIVISION MAP ACT", THE TERM OF THIS MAP MAY EXTEND 10 YEARS.

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | -x-x-x- | N/A |
| WOOD FENCE | -o-o-o- | N/A |
| CHAIN LINK FENCE | -o-o-o- | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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CALL BEFORE YOU DIG 811 800-227-2600

REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER M. VANDERVEEN 81313 CIVIL CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

| NO. | REVISIONS DESCRIPTIONS | DATE | APPROVED |
|---|---|---|---|

VESTING TENTATIVE SUBDIVISION MAP 881
COVER SHEET
LIVE OAK EAST
PHASE 2 - AMENDED TRACT 881
HANFORD CALIFORNIA

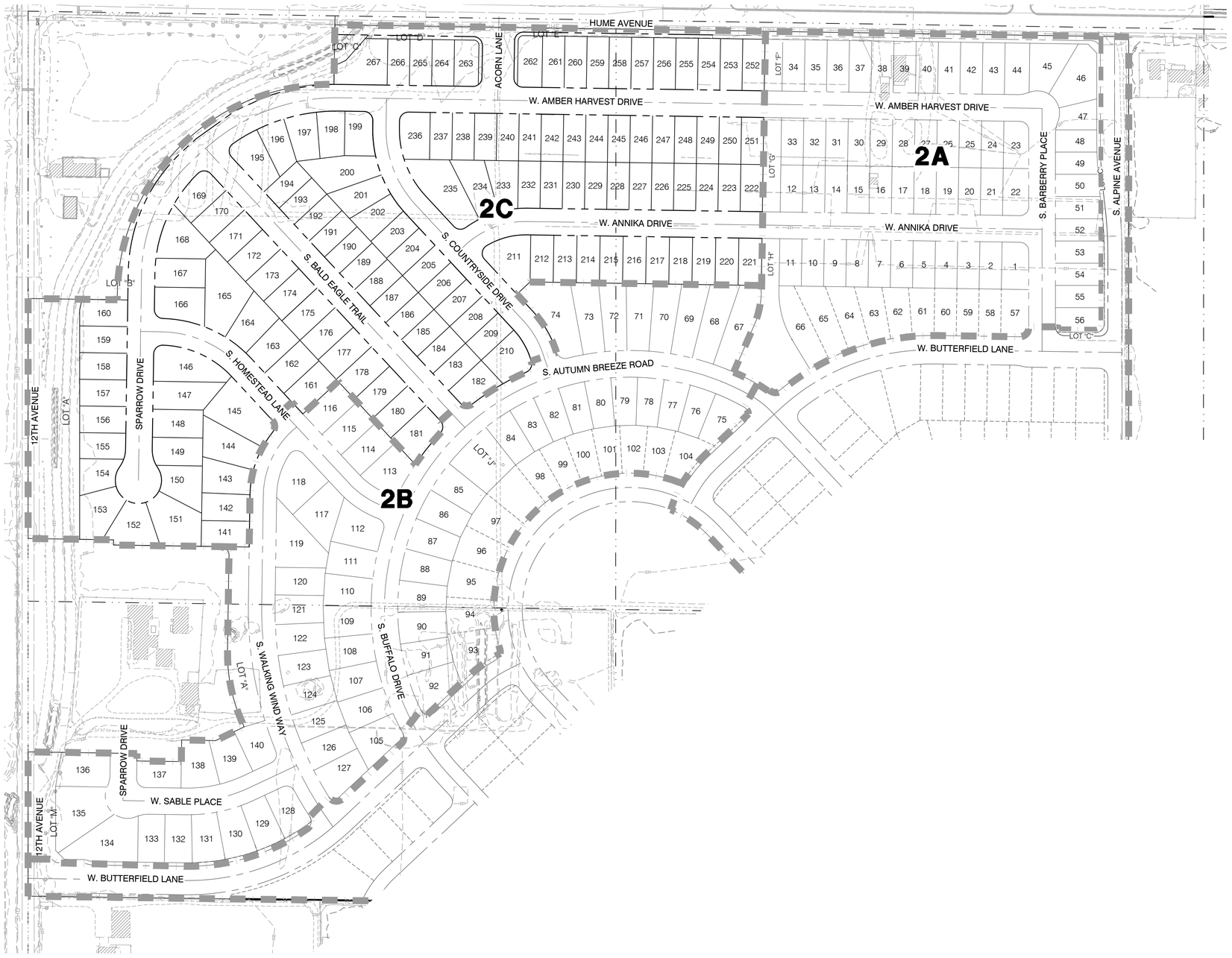
North Star Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
620 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

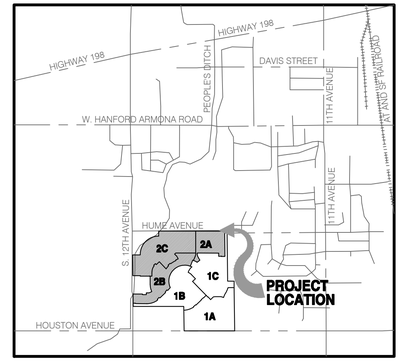
| | |
|---|---|
| JOB #: | 13-1238 |
| DATE: | 05/29/2026 |
| SCALE: | AS SHOWN |
| DRAWN: | KM / TT |
| DESIGN: | KM |
| CHK'D: | CVV |

SHEET NUMBER

TM1.1

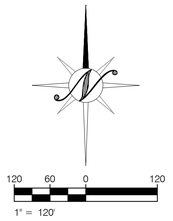
PLOTTED: 06/02/2026 09:14 PLOTTED BY: Tboytsm
DWGNAME: F:\13-1238 Live Oak East\Planning\TM\TM881\TM1.1 CVR.dwg




## VICINITY MAP

N.T.S




## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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CALL BEFORE YOU DIG 811 800-227-2600

REGISTERED PROFESSIONAL ENGINEER KEITH MORGAN STATE OF CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

| NO. | DESCRIPTIONS | DATE | APPROVED |
|---|---|---|---|
| | | | |

# VESTING TENTATIVE SUBDIVISION MAP 881
## BOUNDARY SHEET
### LIVE OAK EAST
### PHASE 2 - AMENDED TRACT 881
### HANFORD CALIFORNIA

North Star Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
620 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

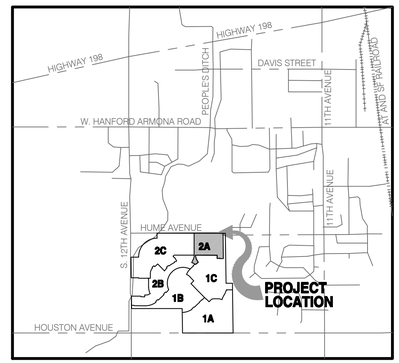
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| JOB #: | 13-1238 |
| DATE: | 05/29/2026 |
| SCALE: | AS SHOWN |
| DRAWN: | KM / TT |
| DESIGN: | KM |
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SHEET NUMBER

**TM1.2**

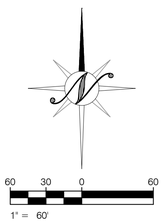
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## VICINITY MAP

N.T.S




## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | N/A | |
| WOOD FENCE | N/A | |
| CHAIN LINK FENCE | N/A | |
| TREES | N/A | |
| TREE CLUSTERS | N/A | |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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CALL BEFORE YOU DIG 811 800-227-2600

REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER M. WILLIAMS 91137 CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

| NO. | DESCRIPTIONS | REVISIONS | DATE | APPROVED |
|---|---|---|---|---|
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# VESTING TENTATIVE SUBDIVISION MAP 881
## PHASE 2A
## LIVE OAK EAST
## PHASE 2 - AMENDED TRACT 881
## HANFORD CALIFORNIA

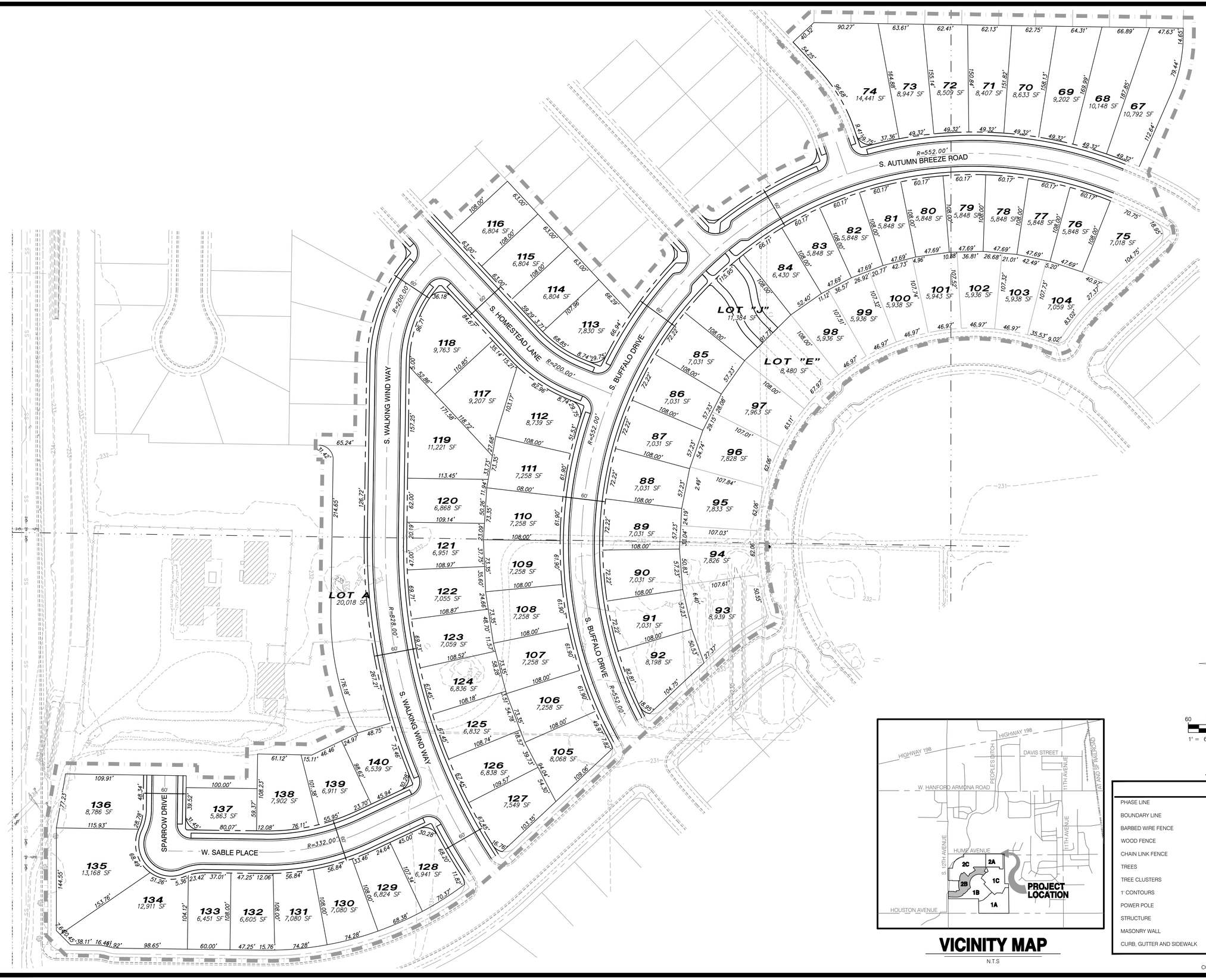
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620 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

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| JOB #: | 13-1238 |
| DATE: | 05/29/2026 |
| SCALE: | AS SHOWN |
| DRAWN: | KM / TT |
| DESIGN: | KM |
| CHK'D: | CW |

SHEET NUMBER

**TM1.3**

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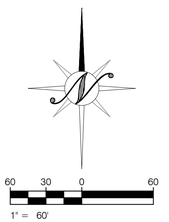






## VICINITY MAP

N.T.S




## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

| REVISIONS | | | |
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| NO. | DESCRIPTIONS | DATE | APPROVED |

# VESTING TENTATIVE SUBDIVISION MAP 881
## PHASE 2B
## LIVE OAK EAST
## PHASE 2 - AMENDED TRACT 881
## HANFORD CALIFORNIA

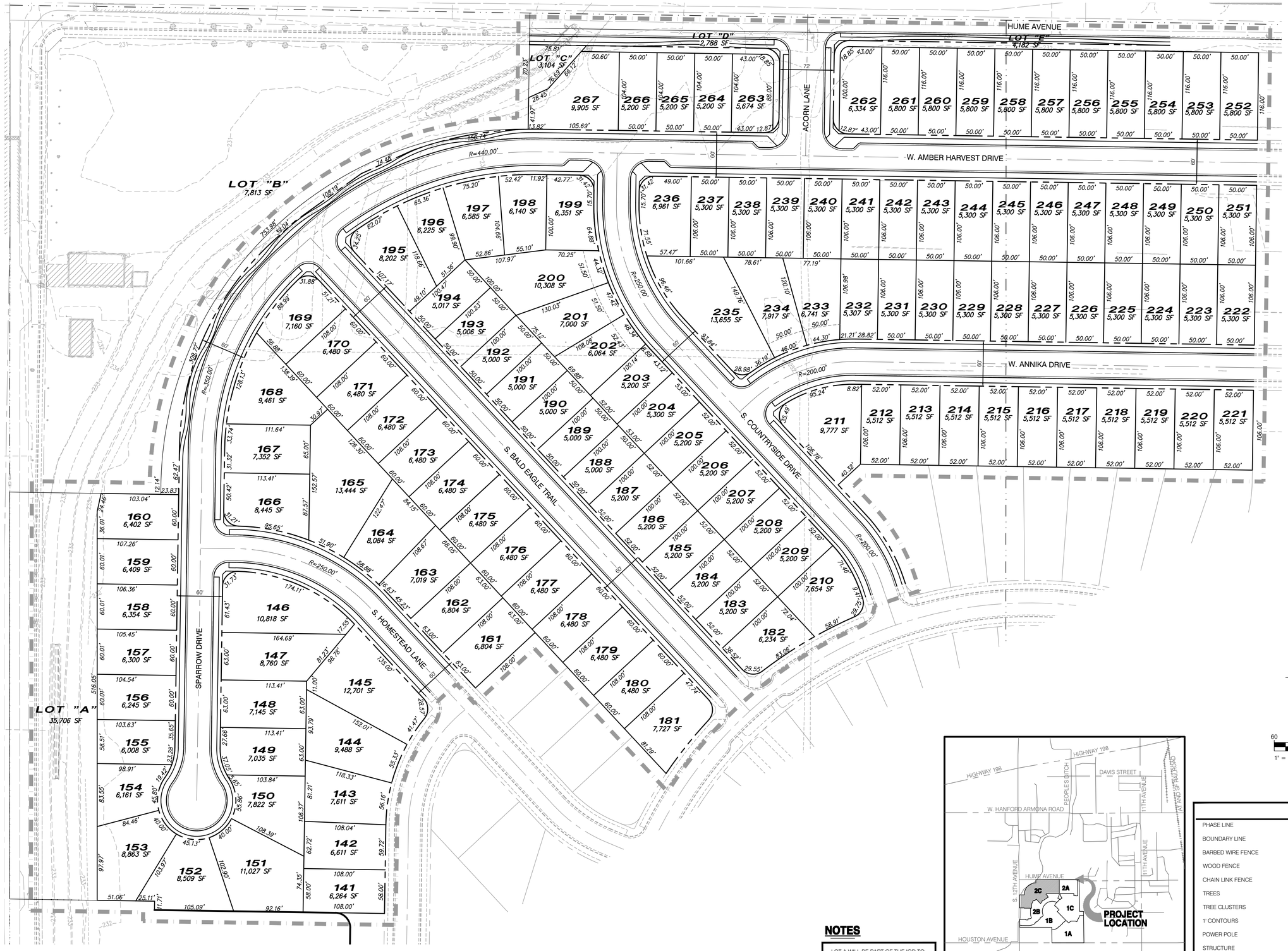
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620 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

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| JOB #: | 13-1238 |
| DATE: | 05/29/2026 |
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SHEET NUMBER

**TM1.4**

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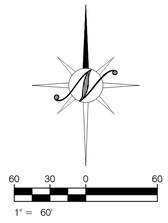
## VICINITY MAP

N.T.S

## NOTES

LOT A WILL BE PART OF THE IOD TO THE CITY OF HANFORD

LOT B WILL BE RETAINED BY DEVELOPER




## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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DWGNAME: F:\13-1238 Live Oak East\Planning\TM\TM881\TM1.5 PH2C.dwg

CALL BEFORE YOU DIG 811 800-227-2600

REGISTERED PROFESSIONAL ENGINEER KRISTOPHER M. MATHISEN STATE OF CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

| NO. | DESCRIPTIONS | DATE | APPROVED |
|---|---|---|---|
| | | | |

REVISIONS

# VESTING TENTATIVE SUBDIVISION MAP 881
## PHASE 2C
## LIVE OAK EAST
## PHASE 2 - AMENDED TRACT 881
## HANFORD CALIFORNIA

NorthStar Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
820 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

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| JOB #: | 13-1238 |
| DATE: | 05/29/2026 |
| SCALE: | AS SHOWN |
| DRAWN: | KM / TT |
| DESIGN: | KM |
| CHKD: | CW |

SHEET NUMBER

**TM1.5**

**Exhibit B:**
Resolution 20-34-R

**RESOLUTION 20-34-R**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD APPROVING AN AMENDMENT TO VESTING TENTATIVE TRACT 881.**

At a regular meeting of the City Council of the City of Hanford duly called and held on December 1, 2020 by motion of Councilmember Sorensen, and seconded by Councilmember Breno, and duly carried, the following resolution was adopted:

**WHEREAS,** the applicant requested an amendment to Tentative Tract 881, requesting to remove certain language from the resolution for Vesting Tentative Tract 881, consistent with changes made to the Live Oak Development Agreement; and

**WHEREAS,** the Planning Commission held a public hearing on November 10, 2020 and received testimony for and against the project; and

**WHEREAS,** the Planning Commission determined that the revisions to Vesting Tentative Subdivision Map No. 881 were not significant and recommended approval of the amendment to the City Council at their regularly scheduled meeting on November 10, 2020; and

**WHEREAS,** the City Council has carefully considered recommendations and testimony presented at the public hearing of December 1, 2020, and

**WHEREAS**, all various governmental department agencies, staff, and the City Council, have given careful consideration to this Planned Unit Development/Master Plan and have made recommendations thereon; and

**WHEREAS,** Vesting Tentative Subdivision Map No. 881 was approved by the Planning Commission on August 9, 2009 and the City Council on September 15, 2009, pursuant to Section 66474 of the Subdivision Map Act; and,

**WHEREAS**, on September 15, 2009, the City of Hanford City Council reviewed the Live Oak Development project, for which an Environmental Impact Report (SCH #2006091015) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Agricultural Resources, Air

Quality, and Energy Conservation and Climate Change. A Notice of Determination was filed with Kings County on September 18, 2009; and

**WHEREAS,** the Final Environmental Impact Report identified significant environmental impacts that can be mitigated to substantially lessen the environmental effects relating to Air Quality, Biological Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Facilities and Services, and Transportation and Circulation; and

**WHEREAS**, the City Council, on September 15, 2009, systematically identified both the significant effects of the proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects in accordance with the provisions of the California Environmental Quality Act as more specifically articulated in "The Mitigation Monitoring and Reporting Plan" in an appendix of the final EIR and incorporated herein by this reference; and

**WHEREAS,** the changes proposed to the Live Oak Development have been analyzed in an addendum to the EIR (Addendum #1) to verify that a subsequent EIR is not warranted, as none of the circumstances requiring a subsequent EIR, identified in Section 15162, have been met; therefore, in accordance with Section 15164 of the California Environmental Quality Act (CEQA) Guidelines, an addendum to the EIR (SCH #2006091015) would adequately address the amendments proposed under this project. The changes proposed to the Live Oak Development project do not further affect any of the environmental factors evaluated under the Live Oak EIR (SCH #2006091015). Consequently, a subsequent or supplemental EIR or IS/MND is not required. Staff has evaluated the changes proposed in the addendum to the initial study and determined that the changes proposed would not result in any new or increased environmental impacts that were not identified in the EIR; and

**WHEREAS**, the City Council has made the following findings pursuant to Section 66474 of the Subdivision Map Act:

1. That the proposed subdivision map is consistent with the State Subdivision Map Act, General Plan, and Zoning Ordinance;

2. That the design or improvement of the subdivision is consistent with general or specific plans;

3. That the site is physically suitable for the type of development;

4. That the site is physically suitable for the proposed density of development;

5. That the design of the subdivision and the proposed improvements are not likely to cause substantial environmental damage, or substantially and unavoidably injure fish or wildlife or their habitat;

6. That the design of the subdivision and type of improvements are not likely to cause serious public health problems; and

7. That the design of the subdivision and the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of the property within the proposed subdivision.

**NOW THEREFORE BE IT RESOLVED** that the City Council of the City of Hanford finds the revisions to Vesting Tentative Subdivision Map No. 881 are substantially consistent with the original approval of the vesting map in 2009; and

**THEREFORE BE IT FURTHER RESOLVED** that the City Council approves this revised resolution for Vesting Tentative Subdivision Map No. 881, subject to the following conditions of approval:

**PLANNING DEPARTMENT**
Contact Senior Planner Gabrielle Myers (559) 585-2578
Concerning questions that you may have on the conditions listed below:

**General:**

1. That the applicant hereby agrees to hold the City of Hanford and all of its departments, officers, agents, and employees free and harmless of and from all claims of any kind or nature arising out of or by reason of the approval of this project.

2. That approval of this project does not exempt compliance with all applicable sections of the Uniform Fire and Building Codes, Zoning Ordinance, Public Works Improvement Standards, and other City Ordinances except as modified by Planned Unit Development No. 2005-04; and except as may be determined by the Development Agreement and development rights of a Vesting Tentative Map per the Subdivision Map Act.

3. That the final map be submitted to the City Engineer and Community Development Department for compliance with the Vesting Tentative Subdivision Map approval prior to recording the final map.

4. That in accordance with Title 16 of the Hanford Municipal Code, all conditions of this subdivision listed herein, and contained in subsequent improvement agreements, excluding the landscape district, must be completed and accepted for maintenance by the City Council prior to the final building inspection and occupancy permits being issued for the first house in the subdivision.

5. That trees be planted, as specified in the Master plan and that all species of trees shall be selected from a list approved by the City Street Tree Commission.

6. That all pertinent conditions of approval for Planned Unit Development No. 2005-04 and the Development Agreement shall be conditions of approval for Vesting Tentative Subdivision Map No. 881.

**Zoning:**

1. That the proposed subdivision is subject to the R-L-5 Low-Density Residential zone district standards, except as modified by Planned Unit Development No. 2005-04, as specified in the Master Plan.

2. That all lots be limited to single-family residential development.

3. That any changes to the proposed phasing be approved by the Community Development Department.

**Special Requirements:**

1. That a right-to-farm provision be recorded with the recording of the final subdivision map to insure that future residents of the homes in the subdivision are aware of the adjacent agricultural uses and their right to continue to operate.

2. That each lot owner within Tract No. 881 shall care for and maintain the trees and lawn area located in the parkway in front of their lot(s). For corner lots, the lot owner shall also care for and maintain the parkway trees and lawn area along the street side of their lot. . All species of trees shall be selected from a list approved by the City Street Tree Commission. The parkway is defined as that land area located between the street curb and the public sidewalk.

3. That the tree(s) and lawn area are to be properly pruned, mowed, sprayed, watered and fertilized on a regular on-going basis in order to preserve the health and life of the tree(s) and lawn area.

4. That should the tree(s) and lawn area become damaged, severely pruned, neglected, removed or die, the lot owner shall replace said tree(s) and lawn area within thirty (30) days after the date of written notice from the City of Hanford. The tree(s) shall be replaced with a 15 gal. size tree of the same species that was originally planted. The lawn area shall be replaced with lawn. Rocks, bark, ground cover, plants or paving are not allowed in the parkway

5. That the "NOTICE, DISCLOSURE, ACKNOWLEDGMENT AND AGREEMENT OF CONTINUED CARE AND MAINTENANCE BY LOT OWNER OF THE TREES AND LAWN AREA PLANTED IN THE PARKWAY" be recorded concurrent with the recording of the subdivision final map to insure that future residents of homes in the subdivision are aware of the obligation to maintain the landscaping within the park strip. Each lot owner is to be provided a copy of said Notice, Disclosure, Acknowledgement, and Agreement, attached as Exhibit "A".

**City Development Impact Fees:**

1. That development is subject to a Police Development Impact Fee as required by City Ordinance No. 98-14, or any revisions thereof, if applicable. Fee shall be payable with each building permit.

2. That development is subject to a Fire Development Impact Fee as required by City Ordinance No. 98-14, or any revisions thereof, if applicable. Fee shall be payable with each building permit.

3. That development is subject to a Park Development Impact Fee as required by City Ordinance No. 90-10, or any revisions thereof, if applicable. Fee shall be payable with each building permit.

4. That development is subject to a Transportation mitigation impact fee as required by City Ordinance No. 90-09, or any revisions thereof, if applicable. Fee shall be payable with each building permit.

5. That development is subject to a Wastewater System Development Impact fee as required by City Ordinance No. 98-14, or any revisions thereof, if applicable. Fee shall be payable with each building permit.

6. That development is subject to a Water System Development Impact Fee as required by City Ordinance No. 98-14, or any revisions thereof, if applicable. Fee shall be payable with each building permit.

7. That development is subject to a Refuse and Recycling Development Impact Fee as required by City Ordinance No. 05-16, or any revisions thereof, if applicable. Fee shall be payable with each building permit.

8. That development is subject to a Storm Water development impact fee as required by City Ordinance No. 98-14, or any revisions thereof, if applicable. Fee shall be payable prior to recording of subdivision final map.

9. That development is subject to a 12th Avenue Sanitary Sewer Area Benefit District assessment fee as required by City Ordinance No. 92-03, or any revisions thereof, if applicable. Fee shall be payable prior to recording of subdivision final map.

**Environmental Requirements:**

1. That if fireplaces are proposed in the residential units, natural gas fireplaces or EPA certified wood-burning fireplaces/stoves are to be installed in every unit that has a fireplace. Conventional open-hearth fireplaces are not allowed.

2. That electric or low nitrogen oxide (NO) emitting gas-fired water heaters be installed in each house.

3. That natural gas lines and electrical outlets be installed in backyards or patios to encourage use of gas and/or electric barbecues for each house.

4. That electrical outlets be installed around the exterior of the residential units to encourage use of electric lawn mower, edgers, etc.

5. That options offered as part of the Live Oak Master Plan be available to buyers within this subdivision. Options to include solar panels, drive strips with front facing garages instead of driveways, and second units to be allowed on lots 5,500 sq. ft. and larger. Options shall be shown on the master building plans so as to be available to all buyers of qualified lots.

6. That the project is subject to the San Joaquin Valley Unified Air Pollution Control District's Indirect Source Review Rule 9510. **An application must be filed with the District immediately upon approval of project**. For more information and instruction, contact the District's ISR staff by telephone at (559) 230-5800 or by email at ISR@valleyair.org.

7. That the project is subject to all rules and regulations of the San Joaquin Valley Unified Air Pollution Control District for residential development.

**Archeological:**

1. That if any archeological resources or endangered species are discovered during the construction, the contractor shall stop excavation and notify the Community Development Department for appropriate mitigation measures.

**Dust Control:**

1. That the following dust control practices be implemented:

**Pre-construction**

That material excavated or graded be sufficiently watered to prevent excessive amounts of dust. Watering should occur at least twice a day with complete coverage, preferably in the late morning and after work is completed for the day.

That clearing, grading, earth moving, or excavation activities cease during periods of high winds greater than 20 mph.

That earth material transported off-site be either sufficiently watered or securely covered to prevent excessive amounts of dust.
That areas disturbed by clearing, earth moving, or excavation activities be minimized at all times.

That where acceptable to the Fire Department, weed control should be accomplished by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering.

**During Construction**

After clearing, grading, earth moving, or excavation operations, during the construction phase, fugitive emissions should be controlled by the following methods:

That nonactive portions of the construction site be restricted from vehicular movement.

That active portions of the site should be sufficiently watered to prevent excessive amounts of dust.

**General Fugitive Dust**

At all times, fugitive dust emissions should be controlled using the following procedures:

That on site vehicle speed should be limited to 15 mph.

That areas with vehicle traffic be watered periodically or have petroleum-based palliatives applied for stabilization of dust emissions.

That during rough grading and construction, streets next to the project site be swept at least once per day, or as required to remove silt, which may have accumulated from construction activities.

That during rough grading and construction, access to the site should require the building of an apron into the project site from adjoining paved roadways. The apron should be paved or have a petroleum-based palliative applied.

**Ozone Precursors**

At all times, ozone precursor emissions should be controlled by the following methods:

That all internal combustion engine drive equipment be properly maintained and well-tuned according to the manufacturer's specifications.

**PRIVATE UTILITY COMPANIES**

Contact the following persons concerning questions that you may have on the conditions listed below:
Southern California Edison Co., David Loftin: (559) 684-3557
AT&T, John Lewis: (559) 739-6455
Southern California Gas Co., Louise Brown: (559) 739-2316
ComCast, Micahel Corral: (559) 217-9003
USA: 811

**Public Utilities:**

1. That all utilities, including cable TV, shall be installed underground within the subdivision. The developer shall be required to notify the utility companies in writing of this requirement.

2. That all utility transformers within the development are recommended to be subsurface type installations. The developer has the option of placing the transformers above or below ground. If above ground transformers are to be installed, the developer is to meet with City Engineering and Edison Company to determine an appropriate location of the transformer away from street view. The developer is responsible for notifying Southern California Edison Company in writing of the type of installation.

3. That all existing utility poles and appurtenances located along the property frontage of 12th Avenue shall be installed underground at the developer's expense.

**PUBLIC WORKS DEPARTMENT**

Contact Public Works Director Lou Camara (559) 585-2567
Concerning questions that you may have on the conditions listed below:

**Maps and Plans:**

1. That the developer shall submit to the City Engineer a set of construction plans on 24" x 36" sheets for all required improvements. Plans shall be prepared by a registered civil engineer and shall include a drainage and utility plan identifying sizes and location of sanitary sewer, storm drainage and water mains, curbs, gutters, sidewalks, masonry walls, street lights, street improvements, park and landscape

improvements and all other infrastructure required to complete development. All plans shall be approved by the City Engineer and all other involved agencies before the release of the building permits.

2. That prior to beginning any construction or within ten (10) calendar days after the approved plans are released by the City, the developer shall submit to the City of Hanford Engineering Division one (1) reproducible and four (4) blue line copies of the approved set of construction plans and four (4) bound sets of the approved construction specifications, if any.

3. That within twenty (20) calendar days after all improvements have been constructed and accepted by the City, the developer shall submit to the City of Hanford Engineering Division one (1) reproducible and one (1) blue line copy of the approved set of construction plans revised to reflect all field revisions and marked "RECORD DRAWING."

**Easements:**

1. That all easements shall be designated on the subdivision final map as required by the utility companies and where needed for providing service to street lights and landscape improvements as designated by the City Public Works Department.

2. That all easements for irrigation ditches and/or irrigation pipelines shall be legally abandoned or relocated to the satisfaction of the City Engineer prior to the recording of a subdivision final map.

**Dedications:**

1. That all proposed streets and street extensions, located as shown on the tentative subdivision map, shall be dedicated to the City as public right-of-way, and any alteration of existing utilities shall be the responsibility of the developer.

2. That all proposed landscape public utility easements, located as shown on the tentative subdivision map shall be dedicated to the City for landscape and public utility purposes concurrent with the recording of a subdivision final map.

3. That proposed neighborhood linear parks, located as shown on the tentative subdivision map (Lots "A", "B", "C" and "D"), shall be dedicated to the City for landscape and public utility purposes concurrent with the recording of a subdivision final map.

**Restricted Access:**

1. That a one-foot reservation strip shall be established at the end or sides of all streets abutting undeveloped property and be indicated on the subdivision final map.

2. That all access shall be restricted from lots at the property lines backing or siding onto 12th Avenue, S. Alpine Avenue, Butterfield Lane and Hume Avenue (except for pedestrian walkways) and shall be indicated on the subdivision final map.

**People's Ditch Improvements:**

1. That People's Ditch shall be relocated and installed underground in a pipeline in accordance with the requirements of both the City of Hanford Public Works department and the People's Ditch Company. The proposed irrigation ditch pipeline alignment shall begin at Hume Avenue/People's ditch intersection and continue west within the Hume Avenue to 12$^{th}$ Avenue, then south within 12$^{th}$ Avenue

to Houston Avenue, then west within Houston Avenue to the intersection of Houston Avenue / People's Ditch. The pipeline will terminate beyond the south limits of the future Houston Avenue right-of-way. All costs to relocate and to underground People's Ditch with a pipeline as stated herein, and to backfill the abandoned open channel ditch as shown on the tentative subdivision map, shall be at developer's own expense.

**Street Improvements:**

1. That all improvements consisting of sanitary sewers, storm sewers, water mains, concrete curbs, gutters, sidewalks, street lights, landscaping, street sub-grading, surfacing and striping and all other improvements shall be installed in accordance with Chapter 16.24, "Improvements", of the Hanford Municipal Code and this resolution pertaining to subdivision improvements in effect at the time of filing the tentative subdivision map.

2. That all streets within the subdivision shall be developed to residential street standard ST-32, modified as indicated on the tentative subdivision map, (Street narrowing adjacent to park for traffic calming), except the following:

    a. Hume Avenue shall be developed as a collector street (East of People's Ditch) along the development frontage of the subdivision and as a major collector street (West of People's Ditch) from 12th avenue to People's Ditch. All improvements shall be constructed in conformance with City Standards ST-17 and ST-23 & ST-26, modified as indicated on the tentative subdivision map and as follows:

        1. Traffic index used for the design of the street structural section shall be a minimum of 8.0

        2. A geotechnical report shall be submitted to the City Engineer identifying the existing structural section thickness of Hume Avenue, from S. Alpine Avenue to 12th Avenue, concurrent with the submittal of development improvement plans. Reconstruction of Hume Avenue, from S. Alpine Avenue to 12th Avenue, will be required if the existing street structural section does not conform to City Standards and Specifications.

        3. Street improvements shall include, but not be limited to, the installation of concrete curb & gutter, sidewalk, landscaping, masonry block wall, street lights, street striping, signing, and pavement reconstruction of existing roadway, if applicable, and pavement widening along the development frontage of the subdivision (Half-width street improvements, plus a minimum 13 foot travel lane north of street centerline). Street improvements located beyond the development frontage of the subdivision ("Not-a-part" area from12th Avenue to the west property line of lot # 1 shall include, but not be limited to, the installation of concrete curb & gutter, street lights, street striping, signing and pavement reconstruction and widening to provide for a protected left-turn travel lane and a separate right turn travel lane at east leg of the 12th Avenue / Hume Avenue intersection. (Half-width street improvements, plus additional pavement widening north of street centerline to facilitate turning movements as identified above). The installation of a raised concrete median is not required.

    b. Twelfth Avenue shall be developed as an arterial street, along the development frontages of the subdivision, and "Not-a-part" areas south of Hume and north of Butterfield Lane in accordance with section 66462.5 of the Subdivision Map Act. All improvements shall be constructed in conformance with City Standards ST-17 and ST-20, modified as indicated on the tentative subdivision map and as follows:

1. Traffic index used for the design of street structural section shall be a minimum of 10.0.

2. A geotechnical report shall be submitted to the City Engineer identifying the existing structural section thickness of 12th Avenue, from Hume Avenue to Houston Avenue, concurrent with the submittal of development improvement plans. Reconstruction of 12th Avenue between Hume Avenue and Butterfield Lane (or another form of mitigation as approved by the City Engineer) will be required if the existing street structural section does not conform to City Standards and Specifications.

3. Street improvements shall include, but not be limited to, the installation of concrete curb & gutter, sidewalk, landscaping, street lights, median island curb, street striping, signing and pavement reconstruction of existing roadway, if applicable, and pavement widening along 12th Avenue, from Hume Avenue to Butterfield Lane, (including "Not-a-part" areas) to facilitate the installation of a median island with a single 16 foot wide paved travel lane on each side of the median. Transitional paving improvements shall also be required for both acceleration/deceleration lane tapers at the Butterfield Lane entrance to subdivision and at Hume Avenue to facilitate a northbound right turn movement to Hume Avenue and to provide for a protected southbound left-turn movement from 12th Avenue southbound to Hume Avenue. The installation of a raised concrete median north of the Hume Avenue / 12th Avenue intersection is not required for the protected left-turn travel lane. Pavement widening along 12th Avenue other than as stated herein shall be deferred until additional travel lane capacity is warranted.

4. That electrical conduit and pull boxes shall be installed at the intersection of 12th Avenue / Hume Avenue to facilitate the installation of a future traffic signal system in accordance with Traffic Impact Study prepared by the firm of Kd Anderson and Associates dated March 20, 2006.

c. S. Alpine Avenue and Butterfield Lane shall be developed as collector streets along the development frontages of the subdivision in conformance with City Standard ST-26, modified as indicated on the tentative subdivision map for Tract # 865 (Live Oak I).

4. That street lights shall be installed throughout the subdivision in conformance with City Standard GE-56 and PUD master plan requirements. Street lights located along 12th Avenue, Hume Avenue and S. Alpine Avenue shall be octagon concrete type poles as indicated on City Standard GE-56. Street lights located along all other streets within the subdivision shall be decorative lights in conformance with PUD master plan and Southern California Edison Company requirements. Street lights shall be located as designated by City Engineer.

5. That development is subject to a transportation mitigation impact fee as required by City Municipal Code section 15.48 and any revisions thereof. Developer shall be entitled to a credit towards their development impact fee for permanent street improvements constructed by developer within 12th Avenue, consisting of curb & gutter, median curb, street striping, signing and street paving from gutter lip to edge of the existing 12th Avenue street section. If applicable, developer may also be entitled to credit towards impact fees for supplemental transportation capacity improvements to the existing Houston Avenue street section. Transitional paving improvements beyond the development limits, as stated in section 2b above, that are not considered to be a permanent improvements and the reconstruction of the existing 12th Avenue street section, if required, will not be subject to a credit. The developer shall submit competitive bid proposals to substantiate the cost of reimbursable items for City Public Works department review and approval prior to beginning construction. All documentation materials submitted for reimbursement consideration shall be well organized and tabulated for

convenient reference by Public Works' staff. Improvement quantities and costs proposed for reimbursement must be clearly identified in the documentation provided, and not combined or aggregated with non-reimbursable subdivision improvement costs. Appropriate graphic exhibits referenced to the subdivision improvement plans shall also be provided as needed to facilitate the reimbursement review process.

6. That the developer is responsible for payment of a proportionate cost share of future improvements to mitigate interim impacts to the 13th Avenue/Highway 198 interchange as identified in the project Environmental Impact Report and the Traffic Impact Study prepared by the firm of KD Anderson Transportation Engineers. Payment of developer's equitable share of improvement costs shall be held in a separate interest bearing account and reserved for the interim improvements referenced above.

**Backup Parkway Improvements:**

1. That the developer shall design and construct the following improvements along the development frontages of 12th Avenue (Including Sanchez "not-a-part" area), Hume Avenue, S. Alpine Avenue, Countryside Drive (Hume Avenue to Amber Harvest Drive) and Butterfield Lane for lots backing or siding onto said streets:

    a. A minimum six foot high decorative masonry block wall with continuous reinforced concrete footings. Masonry walls shall be treated with anti-graffiti repellent. The minimum height of the wall shall be measured from the highest elevation grade of the property located adjacent to either side of the wall. Wall heights shall be maintained at a uniform grade / slope whenever possible. If elevation changes are required, steps shall be introduced at pilaster locations and / or changes in wall direction. Wall improvement plans shall be designed to incorporate architectural, civil and structural components into one set of drawings. Wall plans shall be reviewed and approved by both the City Public Works and Community Development Departments.

    b. Masonry walls shall be constructed along the development frontages of 12th Avenue (Including Sanchez "not-a-part" area), Hume Avenue, S. Alpine Avenue, Countryside Drive (Hume Avenue to Amber Harvest Drive) and Butterfield Lane for all lots backing or siding onto said streets.

    c. A 4 1/2 foot wide detached sidewalk along the development frontages of 12th Avenue (Including Sanchez "not-a-part" area), Hume Avenue, S. Alpine Avenue, Countryside Drive (Hume Avenue to Amber Harvest Drive) and Butterfield Lane.

    d. Landscape and irrigation system improvements along the development frontages of 12th Avenue (Including Sanchez "not-a-part" area), Hume Avenue, S. Alpine Avenue, Countryside Drive (Hume Avenue to Amber Harvest Drive) and Butterfield Lane right of way and landscape easement areas. Landscape plans shall be prepared by a licensed landscape architect. Plans shall be reviewed and approved by both the City Public Works and Community Development Departments.

2. That a minimum of four trees per lot shall be planted in the front yards of homes at the time each lot is landscaped in accordance with City Ordinance 17.18.100 (F). For corner lots, a minimum of two trees per lot are to be planted between the curb and sidewalk along both street frontages located adjacent to the lot. Trees planted in the park strip shall be located in conformance with City Standard GE-13. Developer shall submit a landscape and irrigation system improvement plan for each house plan proposed within the subdivision for City Community Development Department review and approval.

3. That all species of trees and plants shall be selected from a list approved by the City Street Tree Commission.

4. That all new and existing electrical boxes, control boxes and other equipment boxes (excluding traffic control) cabinets along the street frontage shall be painted hunter green or be of a color compatible with the landscaping. Prior to painting, all metal surfaces shall be treated with an etching primer (zinc chromate) or equivalent. All above-ground pedestals and other utility boxes shall be located between back of sidewalk and masonry wall.

**Park Improvements**:

1. That all linear park facility improvements shall conform to PUD master plan requirements and City Standards and Specifications. Developer shall retain the services of a landscape architect to design all linear park facility improvements. Improvements shall include, but not be limited to, installation of covered picnic areas, connective linear parks, decorative security lighting, drinking fountains, park benches and trash receptacles landscaping and irrigation systems. Linear park improvements shall be constructed concurrent with the first phase of the development.

2. That a minimum six foot high decorative masonry block wall shall be constructed along the side yard property lines of proposed connective linear parks (adjacent to lots 17, 18, 51, 52, 81, 82, 103, 104, 124, 125, 145, 146, 161 and 162)

3. That the development is subject to a park development mitigation impact fee as required by City Municipal Code section 15.44 and any revisions thereof. Developer shall be entitled to a 50% credit towards their park development impact fee, as specified in development agreement, for all park and open space improvements provided by developer in accordance with PUD master plan requirements.

**Sewer Improvements:**

1. That the developer's engineer shall provide a sanitary sewer master plan complete with calculations for the entire subdivision for City Public Works Department review and approval prior to recording a subdivision final map for the first phase of development. Provisions shall be made to provide service for future areas of development located adjacent to the subdivision.

2. That developer is entitled to a reimbursement agreement in accordance with City Municipal Code section 13.08 for sanitary sewer main improvements constructed within Amber Harvest Drive which also provides a benefit to others. Developer shall submit competitive bid cost proposals to substantiate costs for sanitary sewer main improvements installed within S. Amber Harvest drive, if applicable, for Public Works department review and approval prior to beginning construction.

**Storm Drainage Improvements:**

1. That the developer's engineer shall provide a storm drainage master plan complete with calculations for the entire subdivision for City Public Works department review and approval prior to recording a subdivision final map for the first phase of development. Provisions shall be made to provide service for future areas of development located adjacent to the subdivision.

2. That all drainage from proposed development shall be directed to the Sand Slough drainage basin located as shown on the tentative subdivision map for Tract #865 (Live Oak I, "Lot A") and in conformance with Live Oak Development Master Plan requirements.

3. That developer shall be required to comply with State of California Water Resources Control Board requirements specifically related to the National Pollution Elimination System Permit process.

4. That development is subject to a storm water development impact fee as required by City Ordinance No. 98-14, or any revisions thereof. Developer shall be entitled to a credit towards their storm water development impact fee for capacity enhancement improvements constructed within Sand Slough (Tract # 865 - Lot "A") that satisfy all (full credit) or a portion (partial credit) of their storm water storage requirements.

**Water System:**

1. That the developer's engineer shall provide a Water System Master Plan complete with calculations for the entire subdivision for City review and approval prior to recording a subdivision final map for the first phase of the development. Provisions shall be made to provide service for future areas of development located adjacent to the subdivision.

2. That a minimum 24 inch diameter offsite water main and appurtenances shall be extended within the future alignment of 12 ½ Avenue, from Hanford-Armona Road to Hume Avenue, located as shown on the Live Oak development master plan. Improvement shall conform to the City's water system master plan.

3. That a minimum 12 inch diameter offsite water main and appurtenances shall be extended within the future extension of Hume Avenue from future 12 ½ Avenue to 12th Avenue, located as shown on the Live Oak development master plan. Improvement shall conform to the City's water system master plan.

4. That developer may be entitled to a refund for water main over-sizing in accordance with City Municipal Code Section 13.04. Developer's engineer shall be required to submit calculations to substantiate request for an over-sizing refund to the City Public Works department for review and approval. If applicable, developer shall submit competitive bid proposals to substantiate costs for water main over-sizing for City Public Works Department review and approval prior to beginning construction.

5. That developer is entitled to a reimbursement agreement in accordance with City Municipal Code section 13.04 for water system improvements constructed within future 12 ½ Avenue, from Hanford-Armona Road to future Hume Avenue and within future Hume Avenue, from 12 ½ Avenue to 12$^{th}$ Avenue, which also provide a benefit to others. Developer shall submit competitive bid proposals to substantiate costs for said water system improvements for Public Works Department review and approval prior to beginning construction.

6. That all existing water wells located within the proposed development shall be abandoned in conformance with State of California Department of Health Standards.

**Assessment District:**

1. That the developer shall enter into an agreement with the City for the formation of a tax assessment district for the maintenance of linear park landscaping (Lots "A", "B", "C" and "D"), subdivision street lighting, decorative fencing and landscaping located along the property frontages of Hume Avenue, S. Alpine Avenue, 12$^{th}$ Avenue common area (including Sanchez "not-a-part" area), Countryside Drive (Hume Avenue to Amber Harvest Drive) and Butterfield Lane located as shown on the tentative subdivision map.

2. That prior to funds from the tax assessment district being obtained, the developer shall be responsible for the maintenance of all landscaping, subdivision street lighting and decorative fencing.

## FIRE DEPARTMENT

Contact Fire Inspector Susan Martinez @ 559-585-4793 or smartinez@cityofhanfordca.com
Concerning questions that you may have on the conditions listed below:

**General:**

1. That water mains and fire hydrants be installed before housing construction (unless otherwise approved by the Fire Department) and be of sufficient capacity for fire protection as well as domestic supply. Fire hydrants are to be located as designated by the Fire Department. All fire hydrants and mains are to meet City standards.

2. That the blue dot fire hydrant location markers be installed six inches from the middle of the street.

3. That an all-weather 20 ft. wide road be provided throughout the subdivision where houses are being constructed, as required by City Ordinance No. 929, prior to the issuance of building permits.

## BUILDING DIVISION

Contact Building Official: Tom Webb (559) 585-2584
Concerning questions that you may have on the conditions listed below:

**Soils**:

1. That a preliminary soils report, prepared by a qualified soil's engineer, be provided to the Engineering and Building Departments prior to approval of Subdivision Improvement Plans.

2. That a final soils report, prepared by a qualified soils engineer, be provided to the Engineering and Building Departments prior to acceptance of the subdivision improvements by the City or issuance of building permits or whichever comes first.

3. That the developer retain the design engineer to inspect and verify that grading within the subdivision was constructed as per the approved design, and a copy of the report be provided to the Building Department prior to building permit issuance.

**Street Names and Addresses:**

1. That street addresses for each lot, as provided by the Building Division, be included on the subdivision final map.

2. That street names, as shown on the tentative subdivision map, be included on the subdivision final maps.

3. That all single family dwellings within the subdivision have illuminated address numbers 2-¼ inches high or be within an illuminated area with 3-½ inch high address numbers installed on the front most part of the building leading to the entrance. In either case the address numbers shall be of contrasting colors with the background.

**Kings County Impact Fees:**

1. That Tentative Tract 881 is subject to the following Kings County Impact fees:

a. Criminal Justice
b. Library
c. Animal Control
d. Compliance

**EXPIRATION:**

That this Vesting Tentative Tract Map shall expire with the expiration of the Live Oak Development Agreement.

**PASSED AND ADOPTED** at a regular meeting of the City Council of the City of Hanford held on the 1st day of December, 2020 by the following vote:

| | | |
|---|---|---|
| **AYES:** | Council Member | Drayer<br>Ramirez<br>Sorensen<br>Breazo<br>Devine |
| **NOES:** | Council Member | |
| **ABSTAIN:** | Council Member | |
| **ABSENT:** | Council Member | |

John Draper
**MAYOR**

*STATE OF CALIFORNIA)*
*COUNTY OF KINGS )*
*CITY OF HANFORD ) SS*

I, **Natalie Ortega,** City Clerk of the City of Hanford, do hereby certify that the foregoing Resolution was duly passed and adopted by the City Council of the City of Hanford at a regular meeting thereof held on the 1st day of December, 2020.

Dated: 12-1-2020

**City Clerk**

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO :

CITY OF HANFORD
COMMUNITY DEVELOPMENT DEPARTMENT
317 N. Douty Street
Hanford, CA 93230

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**NOTICE, DISCLOSURE, ACKNOWLEDGMENT AND AGREEMENT OF CONTINUED CARE AND MAINTENANCE BY LOT OWNER OF THE TREES AND LAWN AREA PLANTED IN THE PARKWAY FOR TRACT NO. 881**

**NOTICE IS HEREBY GIVEN** that City of Hanford Planning Commission Resolution No. 2020-16 approved the development of Tract No. 881 subject to the following conditions pertaining to the continued care and maintenance of the tree(s) and lawn area located in the parkway of said Tract No. 881 by the lot owners in Tract No. 881:

**CONDITIONS:**

1. Each lot owner within Tract No. 881 shall care for and maintain the trees and lawn area located in the parkway in front of their lot(s). For corner lots, the lot owner shall also care for and maintain the parkway trees and lawn area along the street side of the lot. All species of trees shall be selected from a list approved by the City Street Tree Commission. The parkway is defined as that land area located between the street curb and the public sidewalk.

2. The tree(s) and lawn area are to be properly pruned, mowed, sprayed, watered and fertilized on a regular on-going basis in order to preserve the health and life of the tree(s) and lawn area.

3. Should the tree(s) and lawn area become damaged, severely pruned, neglected, removed, or die, the lot owner shall replace said tree(s) and lawn area within a reasonable time frame, but no later than thirty (30) days after the date of written notice from the City of Hanford. The tree(s) shall be replaced with a 15 gal. size tree of the same species that was originally planted. The lawn area shall be replaced with lawn. Rocks, bark, ground cover, plants or paving are not allowed in the parkway.

4. We understand and agree that our failure to comply with the conditions identified above shall constitute a breach of our obligations as identified in this document and shall also constitute a violation of the provisions of Chapter 17.52 of the Hanford Municipal Code.

**WE HEREBY ACKNOWLEDGE AND UNDERSTAND** our obligations for the care and maintenance of the parkway along the street frontage(s) of our lot and agree to be bound by the same.

PROPERTY ADDRESS: _____, Hanford, CA 93230

LEGAL DESCRIPTION OF PROPERTY: Lot No. _____ of Tract No. 881, Unit No. _____

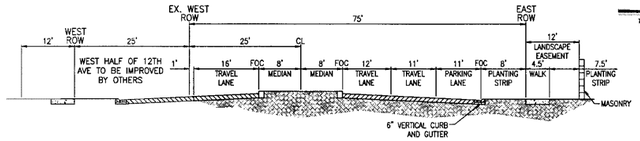
ASSESSOR'S PARCEL NUMBER: _____ - _____ - _____

Owner's Signature _____
Print or Type Owner's Name _____ Date _____

Owner's Signature _____
Print or Type Owner's Name _____ Date _____

(attach Notary acknowledgment)

# LIVE OAK EAST PHASE 2A, 2B, AND 2C
## VESTING TENTATIVE SUBDIVISION MAP 881
## HANFORD, CALIFORNIA

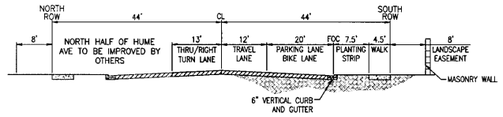



**100' ARTERIAL STREET** (CROSS SECTION B OF THE LIVE OAK MASTER PLAN)

(B) 12TH AVENUE

REFERENCE FIGURE 4-2 & 4.4 OF THE LIVE OAK MASTER PLAN

N.T.S.

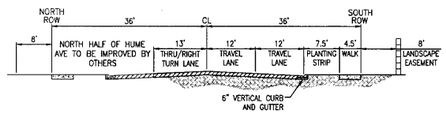



**88' MAJOR COLLECTOR STREET** (MODIFIED CROSS SECTION C OF THE LIVE OAK MASTER PLAN)

(C) HUME AVENUE WEST OF THE PEOPLES DITCH

REFERENCE FIGURE 4-2 & 4.5 OF THE LIVE OAK MASTER PLAN

N.T.S.

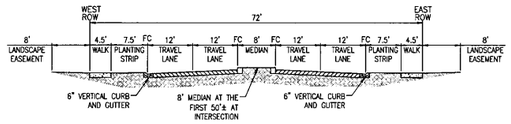



**72' COLLECTOR STREET** (MODIFIED CROSS SECTION C-1 OF THE LIVE OAK MASTER PLAN)

(C) HUME AVENUE EAST OF THE PEOPLES DITCH

REFERENCE FIGURE 4-2 & 4.6 OF THE LIVE OAK MASTER PLAN

N.T.S.

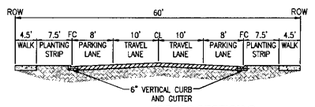



**72' ENTRY MINOR COLLECTOR STREET** (MODIFIED CROSS SECTION D1 OF THE LIVE OAK MASTER PLAN)

(D1) COUNTRYSIDE DRIVE AT HUME AVENUE

REFERENCE FIGURE 4-2 & 4.13 OF THE LIVE OAK MASTER PLAN

N.T.S.

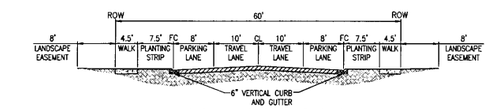



**60' LOCAL STREET** (CROSS SECTION G OF THE LIVE OAK MASTER PLAN)

(G) REFERENCE FIGURE 4-2 & 4.10 OF THE LIVE OAK MASTER PLAN

N.T.S.

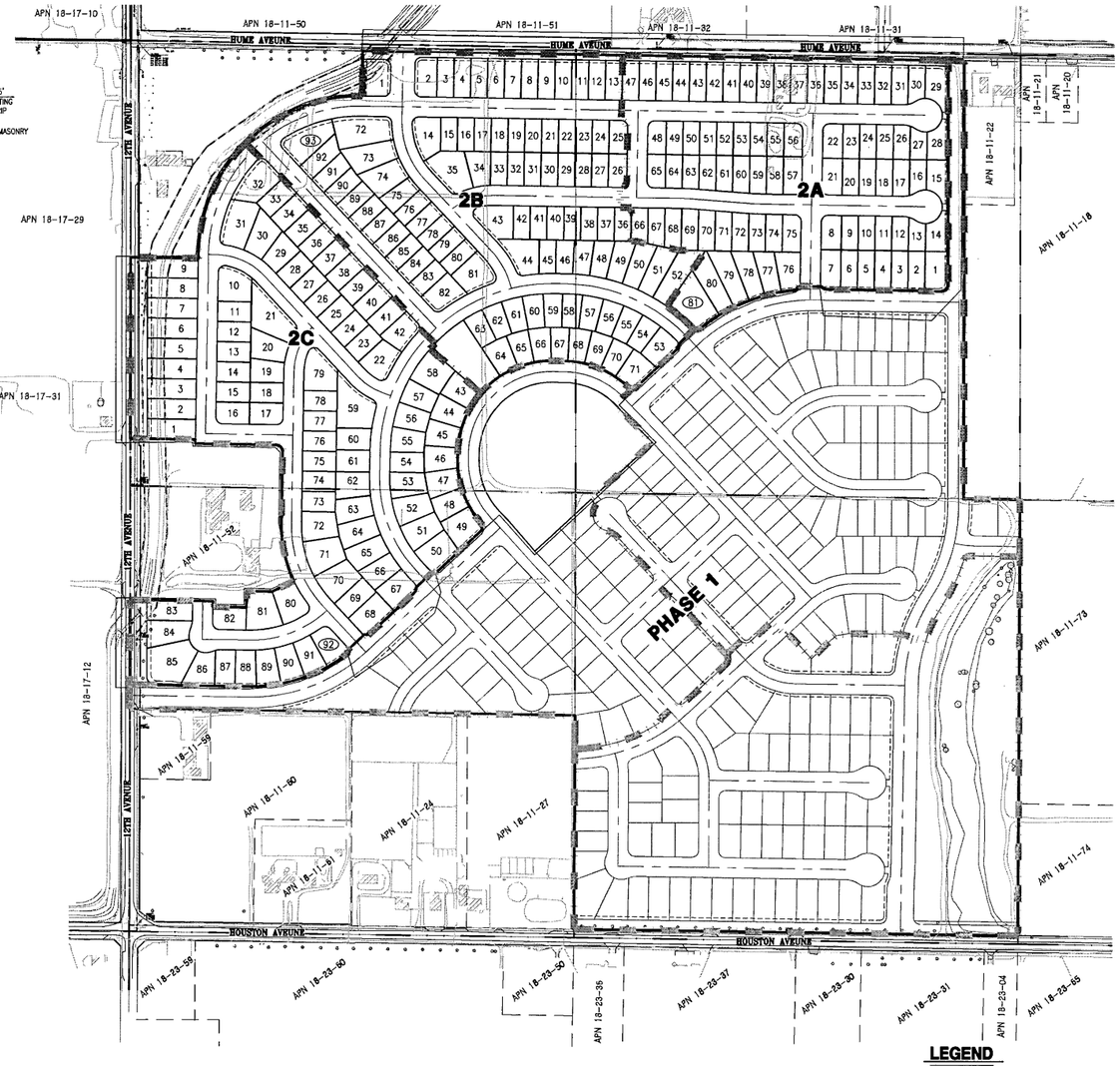
S. ALPINE AVENUE, RED ROCK ROAD, AND BUTTERFIELD LANE ARE TO BE DEDICATED AND IMPROVED AS PART OF LIVE OAK 1. REFERENCE FIGURE 4-2 & 4.7 OF THE LIVE OAK MASTER PLAN.

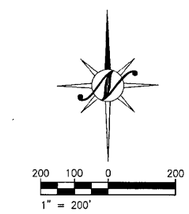


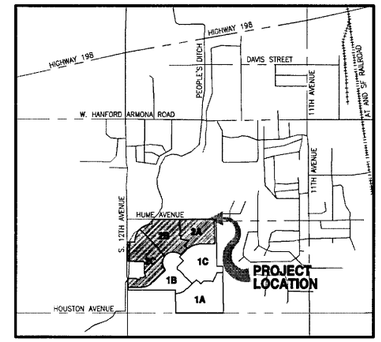

**60' LOCAL STREET** (MODIFIED CROSS SECTION G OF THE LIVE OAK MASTER PLAN)

(G1) REFERENCE FIGURE 4-2 & 4.10 OF THE LIVE OAK MASTER PLAN

N.T.S.




## VICINITY MAP

N.T.S

## SHEET INDEX


| | |
|---|---|
| C1.1 | COVER SHEET |
| C1.2 | BOUNDARY SHEET |
| C1.3 | PHASE 2A |
| C1.4 | PHASE 2B |
| C1.5 | PHASE 2C |


## PROJECT INFORMATION

**OWNER/SUBDIVIDER:**
BMH, INC.
707 ALDRIDGE ROAD, SUITE
VACAVILLE, CA 95688
PHONE (707) 451-8111
ATTN: TOM WHALEN

**ENGINEER:**
NORTHSTAR ENGINEERING GROUP, INC.
620 12TH STREET MODESTO, CA 95354
PHONE: (209) 524-3525
FAX: (209) 524-3526
ATTN: ANTHONY DE MELO, P.E.

**SITE INFORMATION:**

- THE PROJECT PHASING SHOWN ON THIS MAP IS BASED ON FUTURE LARGE LOT PARCEL MAP TO BE SUBMITTED WITH FUTURE APPLICATION.

1. LEGAL DESCRIPTION: LEGAL DESCRIPTION OF ALL EXISTING PARCELS WITHIN PROJECT AREA ARE CONTAINED WITHIN THE PRELIMINARY REPORTS SUBMITTED WITH THIS APPLICATION.
2. ASSESSOR'S PARCEL NUMBERS AND ADDRESSES:
   018-011-104
   018-011-105 (PORTION)
3. APPROXIMATE SITE SIZE: NET 57.34 ± ACRES.
4. PROPOSED USE: 266 SINGLE FAMILY RESIDENCES.
5. EXISTING USE: AGRICULTURE
6. EXISTING GENERAL PLAN DESIGNATION: A PORTION OF APN 018-011-104, AND APN 018-011-105 IS MDR, ALL OTHER PARCELS ARE LDR.
7. EXISTING ZONING DESIGNATION: A PORTION OF APN 018-011-104, AND APN 018-011-105 IS ZONED R-M-3, ALL OTHER PARCELS ZONED R-1-6.
8. PROPOSED MINIMUM LOT SIZE:
   PHASE 2A 50'x100' 5000 SF
   PHASE 2B 50'x100' 5000 SF
   PHASE 2C 60'x100' 6000 SF
9. STREET NAMES UTILIZED ARE TO BE APPROVED BY CITY OF HANFORD STAFF.
10. ALL EXISTING STRUCTURES AND TREES WITHIN THE BOUNDARY OF THE PROJECT SITE TO BE REMOVED IN ACCORDANCE WITH CITY OF HANFORD STANDARDS AND SPECIFICATIONS.
11. ALL CONTOURS SHOWN IN 1' INCREMENTS AND LABELED IN 5' INCREMENTS.
12. THE PROPERTY LINE DISTANCES, BEARINGS AND ALL OTHER DIMENSIONS SHOWN ON THIS MAP HAVE BEEN TAKEN FROM DEEDS, ASSESSOR'S MAPS, OR C.I.S.
13. ALL STREET SECTIONS ON THIS MAP ARE BASED FROM THE LIVE OAK MASTER PLAN.

**STATEMENT OF SUBDIVIDER:**

14. ALL IMPROVEMENTS AND PUBLIC UTILITIES TO BE MADE OR INSTALLED AT THE TIME OF DEVELOPMENT. ALL IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HANFORD STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
15. WATER, SEWER, STORM DRAIN AND STREETS ARE TO BE PUBLIC IMPROVEMENTS.
    **UTILITY/SERVICE PROVIDERS:**
    WATER: CITY OF HANFORD
    SEWER: CITY OF HANFORD
    STORM DRAIN: CITY OF HANFORD
    GAS: SOUTHERN CALIFORNIA GAS COMPANY
    ELECTRICITY: SOUTHERN CALIFORNIA EDISON
    IRE PROTECTION: CITY OF HANFORD
    TELEPHONE: SBC
16. THE PROJECT PROPOSES TO REMOVE AND RELOCATE THE PEOPLES DITCH. THE PROPOSED IMPROVEMENTS WILL BE UNDERGROUND WITHIN THE ULTIMATE RIGHTS OF WAY OF HUME AND 12TH AVENUE.
17. PRIOR TO OR CONCURRENTLY WITH THE RECORDATION OF THE FINAL MAP THE DEVELOPER WILL DEDICATE THE NECESSARY AMOUNT OF PROPOSED RIGHT OF WAY ALONG THE SOUTH HALF OF HUME AVE. AND THE EAST HALF OF 12TH AVE. ALONG THE PROJECT FRONTAGE IMPROVEMENTS.
18. IN ACCORDANCE WITH SECTION 66456.1 OF THE "SUBDIVISION MAP ACT", THE OWNER RESERVES THE RIGHT TO FILE FOR MULTIPLE FIMAL MAPS.
19. PURSUANT TO SECTION 66452.6 OF THE "SUBDIVISION MAP ACT", THE TERM OF THIS MAP MAY EXTEND 10 YEARS.

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| ASPHALT | | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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CALL BEFORE YOU DIG 800-227-2600

REGISTERED PROFESSIONAL ENGINEER ANTHONY DE MELO No. 53535 CIVIL STATE OF CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

| NO. | DESCRIPTIONS | REVISIONS | DATE | APPROVED |
|---|---|---|---|---|

VESTING TENTATIVE SUBDIVISION MAP 881
COVER SHEET

LIVE OAK EAST

HANFORD CALIFORNIA

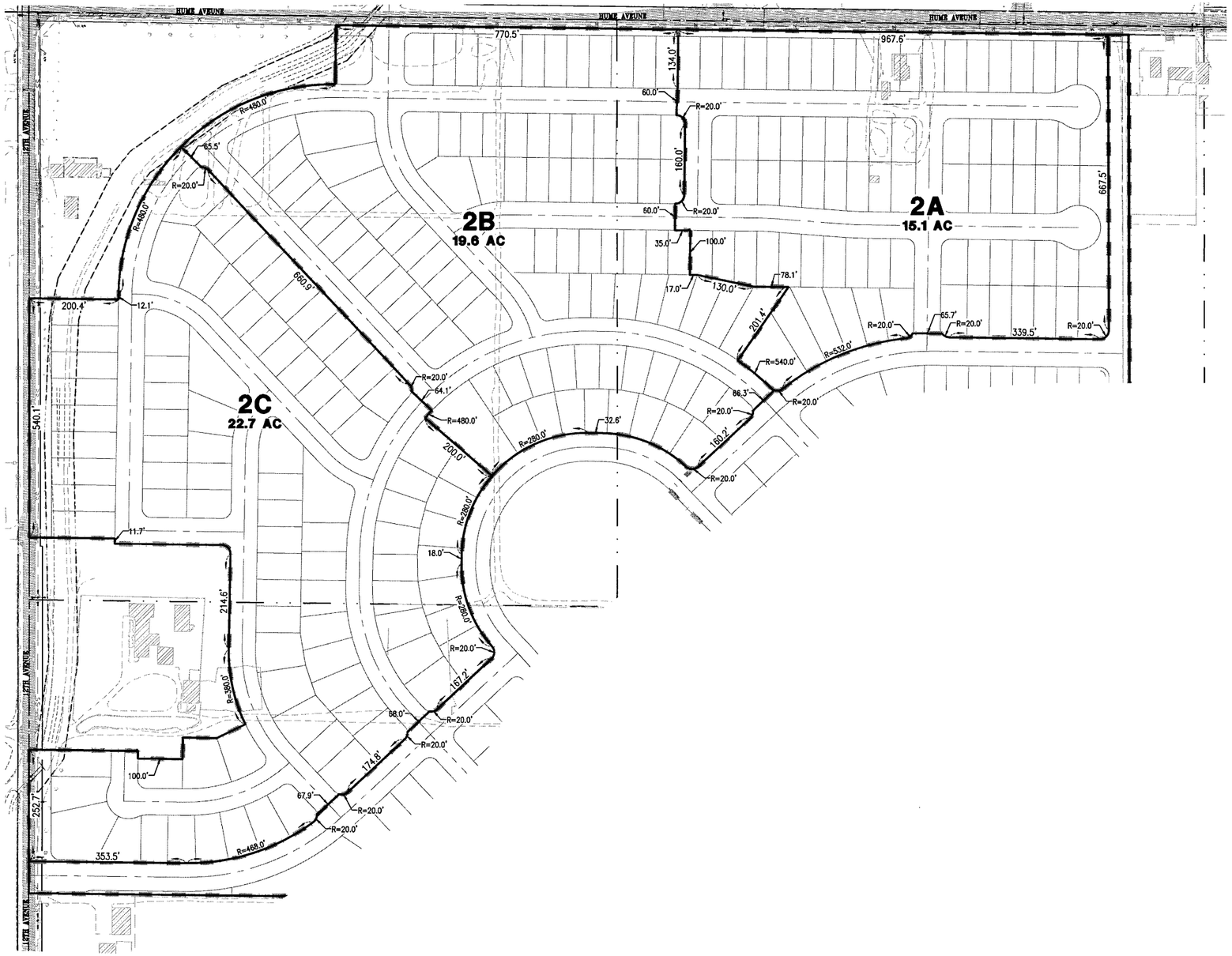
NorthStar Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
620 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

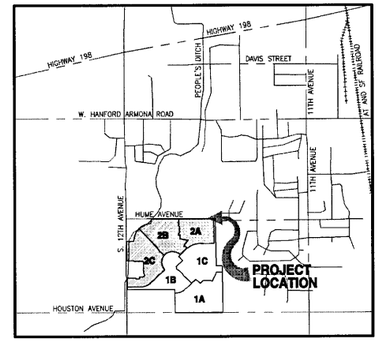
| | |
|---|---|
| JOB #: | 13-1238 |
| DATE: | 01/01/2004 |
| SCALE: | AS SHOWN |
| DRAWN: | KCW |
| DESIGN: | KCW |
| CHK'D: | APD |

SHEET NUMBER

**C1.1**

PLOTTED: 04/09/2014 14:05 PLOTTED BY: kwilliams
DWGNAME: P:\13-1238 Live Oak East\CAD\LOE Perms\TM\Map-PHZ\C1-1 CVR.dwg




## VICINITY MAP

N.T.S

60 30 0 60

1" = 60'

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| ASPHALT | | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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| NO. | DESCRIPTIONS | REVISIONS | DATE | APPROVED |
|---|---|---|---|---|
| | | | | |

# VESTING TENTATIVE SUBDIVISION MAP 881
# BOUNDARY SHEET

LIVE OAK EAST

HANFORD CALIFORNIA

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(209) 524-3325 Phone (209) 524-3326 Fax

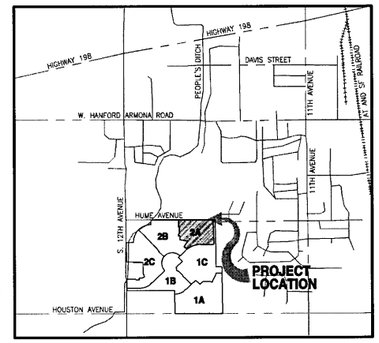
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| DATE: | 01/01/2004 |
| SCALE: | AS SHOWN |
| DRAWN: | KCW |
| DESIGN: | KCW |
| CHK'D: | APD |

SHEET NUMBER

**C1.2**

PLOTTED: 04/09/2014 08:58 PLOTTED BY: Kathleen
Drawing: I:\13-1238 Live Oak East (phase 1)\2 Final VM\1Main-PHQ\C1.2 BNDY.dwg




## VICINITY MAP

N.T.S

60 30 0 60

1" = 60'

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| ASPHALT | | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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|---|---|---|---|---|

**VESTING TENTATIVE SUBDIVISION MAP 881**
**PHASE 2A**

**LIVE OAK EAST**

**HANFORD** **CALIFORNIA**

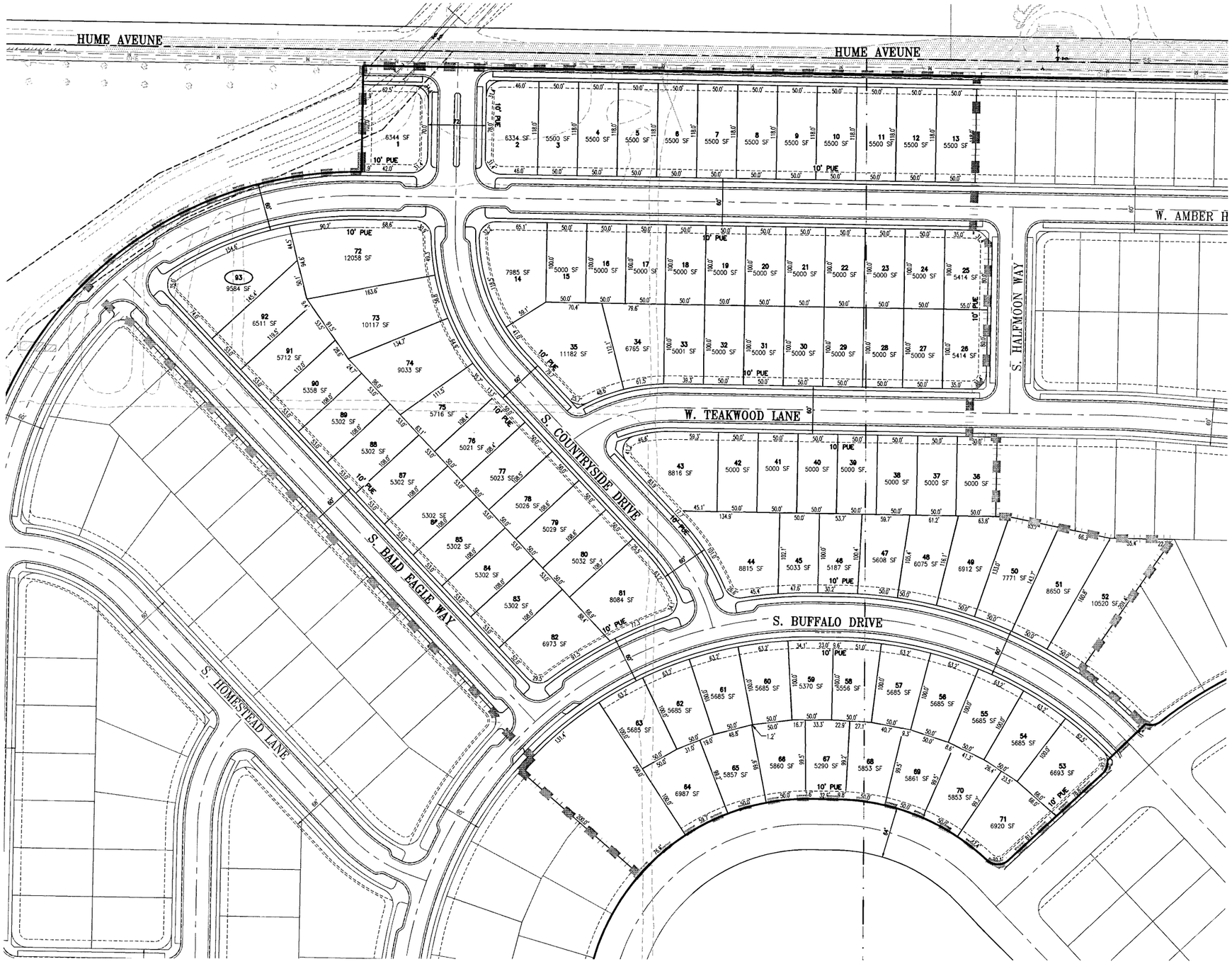
Northstar Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
620 12th Street Modesto, CA 95354
(209) 524-5325 Phone (209) 524-5326 Fax

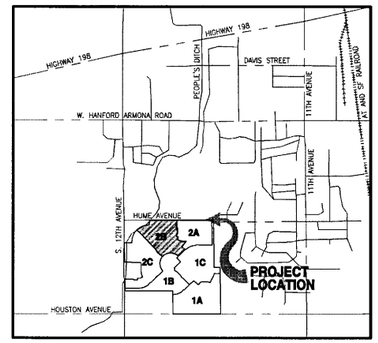
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| JOB #: | 13-1238 |
| DATE: | 01/01/2004 |
| SCALE: | AS SHOWN |
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| DESIGN: | KCW |
| CHK'D: | APD |

SHEET NUMBER

**C1.3**

PLOTTED: 04/08/2014 11:28
PLOTTED BY: KellGray
DRAWING: F:\13-1238 Live Oak East\2000 Plans\EM\Map-PHZ2C1.3 PHZ2A.dwg




## VICINITY MAP

N.T.S

60 30 0 60

1" = 60'

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | N/A | |
| WOOD FENCE | N/A | |
| CHAIN LINK FENCE | N/A | |
| TREES | N/A | |
| TREE CLUSTERS | N/A | |
| 1' CONTOURS | 230' | N/A |
| ASPHALT | N/A | |
| POWER POLE | PP | N/A |
| STRUCTURE | N/A | |
| MASONRY WALL | N/A | |
| CURB, GUTTER AND SIDEWALK | N/A | |

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REGISTERED PROFESSIONAL ENGINEER ANTHONY P. DELLAMONICA No. 61344 CIVIL STATE OF CALIFORNIA

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|---|---|---|---|
| | REVISIONS | | |

# VESTING TENTATIVE SUBDIVISION MAP 881
## PHASE 2B
## LIVE OAK EAST
HANFORD CALIFORNIA

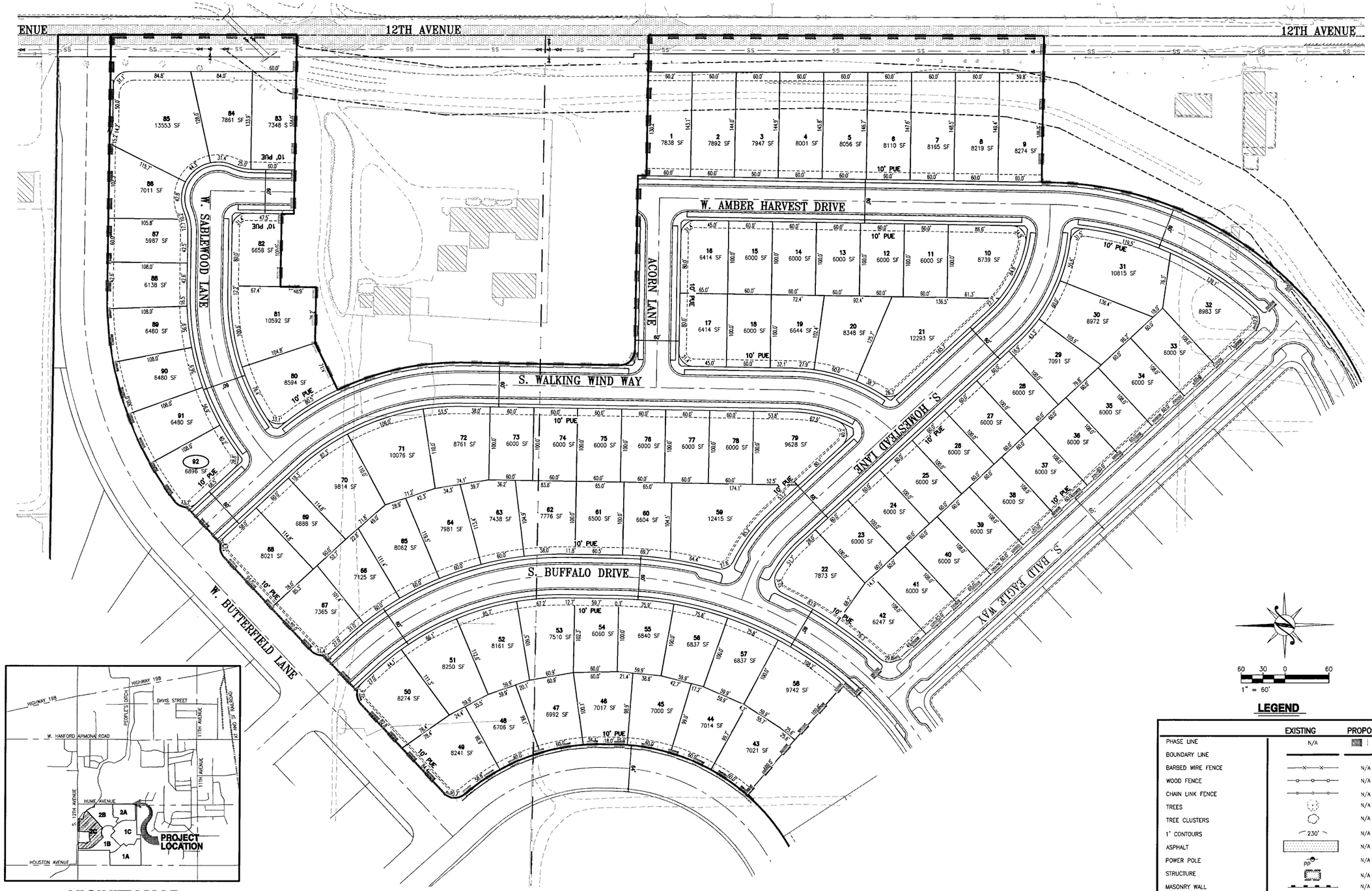
NorthStar Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
637 Pollasky Avenue, Clovis, CA 93612
(209) 324-3525 Phone (209) 324-3526 Fax

| | |
|---|---|
| JOB #: | 13-1238 |
| DATE: | 01/01/2004 |
| SCALE: | AS SHOWN |
| DRAWN: | KCW |
| DESIGN: | KCW |
| CHK'D: | APD |

SHEET NUMBER

**C1.4**

PLOTTED: 05/07/2014 16:35 PLOTTED BY: rhellema
DRGNAME: F:\13-1238 Live Oak East\Civil\C3D Files\TM\Misc-Plot\C1.4 PH2B.dwg







## VICINITY MAP

N.T.S

60 30 0 60

1" = 60'

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| ASPHALT | | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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PLOTTED: 05/07/2014 16:52 PLOTTED BY: KeriBarra
DWGNAME: P:\13-1238 Live Oak East\Civil\C3D Plans\TM\Map-PhIV\C1.5 PHOC.dwg

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REGISTERED PROFESSIONAL ENGINEER KEVIN C. WATSON No. 61834 CIVIL STATE OF CALIFORNIA

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| NO. | DESCRIPTIONS | REVISIONS DATE | APPROVED |
|---|---|---|---|
| | | | |

VESTING TENTATIVE SUBDIVISION MAP 865
PHASE 2C

LIVE OAK EAST

HANFORD CALIFORNIA

NorthStar Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
577 N. Fine Street, Suite 101, Fresno, CA 93727
(559) 524-3525 Phone (559) 524-3526 Fax

| | |
|---|---|
| JOB #: | 13-1238 |
| DATE: | 01/07/2014 |
| SCALE: | AS SHOWN |
| DRAWN: | KCW |
| DESIGN: | KCW |
| CHK'D: | APD |

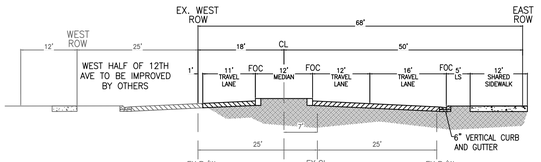
SHEET NUMBER

C1.5

# LIVE OAK EAST PHASE 2A, 2B, AND 2C

## VESTING TENTATIVE SUBDIVISION MAP 881

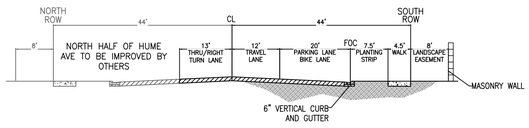
## HANFORD, CALIFORNIA




### 93' ARTERIAL STREET (MODIFIED CROSS SECTION B OF THE LIVE OAK MASTER PLAN)

12TH AVENUE, NORTH OF BUTTERFIELD LANE

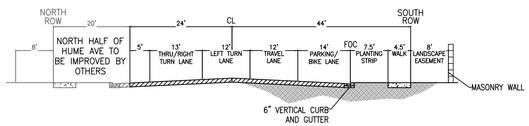
REFERENCE FIGURE 4-2 & 4.4 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 88' MAJOR COLLECTOR STREET (MODIFIED CROSS SECTION C OF THE LIVE OAK MASTER PLAN)

HUME AVENUE WEST OF THE PEOPLES DITCH

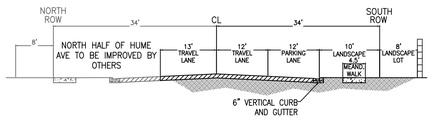
REFERENCE FIGURE 4-2 & 4.5 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 88' MAJOR COLLECTOR STREET (MODIFIED CROSS SECTION C OF THE LIVE OAK MASTER PLAN)

HUME AVENUE WEST OF THE PEOPLES DITCH AT 12TH AVENUE

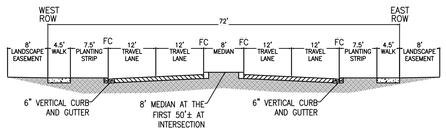
REFERENCE FIGURE 4-2 & 4.5 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 68' COLLECTOR STREET (MODIFIED CROSS SECTION C-1 OF THE LIVE OAK MASTER PLAN)

HUME AVENUE EAST OF THE PEOPLES DITCH

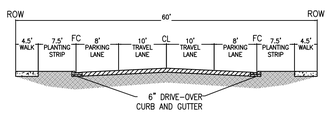
REFERENCE FIGURE 4-2 & 4.6 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 72' ENTRY MINOR COLLECTOR STREET (MODIFIED CROSS SECTION D1 OF THE LIVE OAK MASTER PLAN)

ACORN LANE AT HUME AVENUE

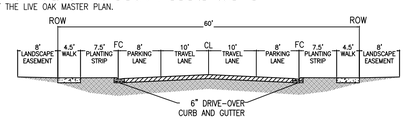
REFERENCE FIGURE 4-2 & 4.13 OF THE LIVE OAK MASTER PLAN
N.T.S.




### 60' LOCAL STREET (CROSS SECTION G OF THE LIVE OAK MASTER PLAN)

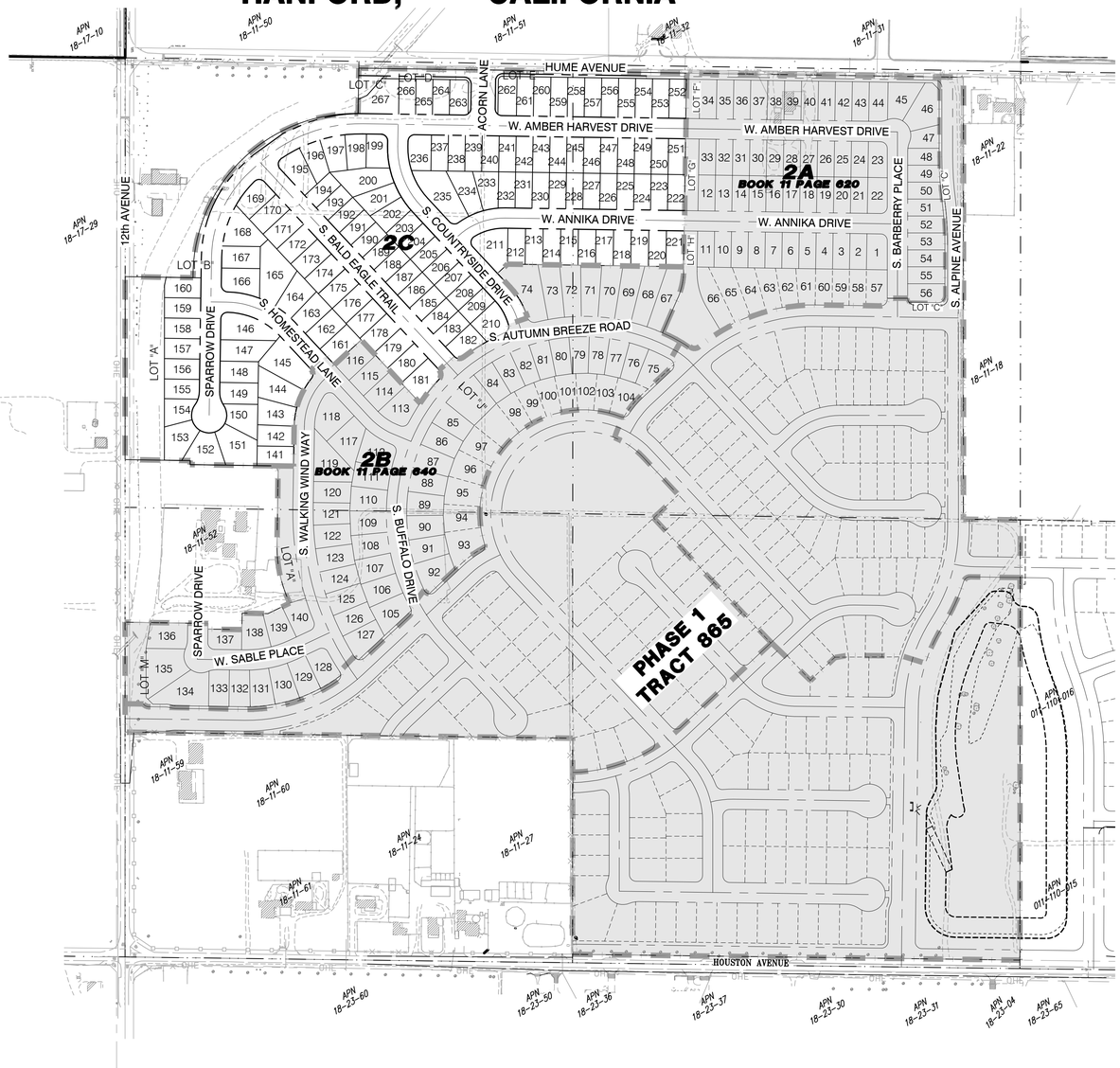
REFERENCE FIGURE 4-2 & 4.10 OF THE LIVE OAK MASTER PLAN
N.T.S.

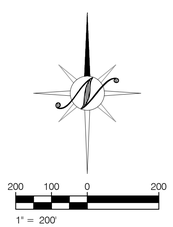
S. ALPINE AVENUE, RED ROCK ROAD, AND BUTTERFIELD LANE ARE TO BE DEDICATED AND IMPROVED AS PART OF LIVE OAK 1. REFERENCE FIGURE 4-2 & 4.7 OF THE LIVE OAK MASTER PLAN.

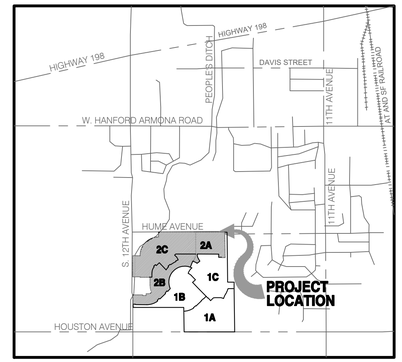



### 60' LOCAL STREET (MODIFIED CROSS SECTION G OF THE LIVE OAK MASTER PLAN)

REFERENCE FIGURE 4-2 & 4.10 OF THE LIVE OAK MASTER PLAN
N.T.S.




## VICINITY MAP

N.T.S

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

## SHEET INDEX


| | |
|---|---|
| TM1.1 | COVER SHEET |
| TM1.2 | BOUNDARY SHEET |
| TM1.3 | PHASE 2A |
| TM1.4 | PHASE 2B |
| TM1.5 | PHASE 2C |


## PROJECT INFORMATION

OWNER/SUBDIVIDER:
SAN JOAQUIN VALLEY HOMES
5607 AVENIDA DE LOS ROBLES
VISALIA, CA 93291
PHONE (559) 732-2660
ATTN: JIM ROBINSON

ENGINEER:
NORTHSTAR ENGINEERING GROUP, INC.
620 12TH STREET MODESTO, CA 95354 PHONE: (209) 524-3525
FAX: (209) 524-3526
ATTN: CHRIS VANDERVEEN, P.E.

SITE INFORMATION:

* THE PROJECT PHASING SHOWN ON THIS MAP IS BASED ON FUTURE LARGE LOT PARCEL MAP TO BE SUBMITTED WITH FUTURE APPLICATION.

1. LEGAL DESCRIPTION: LEGAL DESCRIPTION OF ALL EXISTING PARCELS WITHIN PROJECT AREA ARE CONTAINED WITHIN THE PRELIMINARY REPORTS SUBMITTED WITH THIS APPLICATION.
2. ASSESSORS PARCEL NUMBERS AND ADDRESSES:
   018-011-104
   018-011-105 (PORTION)
3. APPROXIMATE SITE SIZE: NET 54.46 ± ACRES.
4. PROPOSED USE: 245 SINGLE FAMILY RESIDENCES.
5. EXISTING USE: AGRICULTURE
6. EXISTING GENERAL PLAN DESIGNATION: A PORTION OF APN 018-011-104, AND APN 018-011-105 IS MDR, ALL OTHER PARCELS ARE LDR.
7. EXISTING ZONING DESIGNATION: A PORTION OF APN 018-011-104, AND APN 018-011-105 IS ZONED R-M-3, ALL OTHER PARCELS ZONED R-1-6.
8. PROPOSED MINIMUM LOT SIZE:
   PHASE 2A 50x100' 5000 SF - 56 UNITS
   PHASE 2B 60x100' 6000 SF - 61 UNITS
   PHASE 2C 50x100' 5000 SF - 86 UNITS
   60x100' 6000 SF - 42 UNITS
9. STREET NAMES UTILIZED ARE TO BE APPROVED BY CITY OF HANFORD STAFF.
10. ALL EXISTING STRUCTURES AND TREES WITHIN THE BOUNDARY OF THE PROJECT SITE TO BE REMOVED IN ACCORDANCE WITH CITY OF HANFORD STANDARDS AND SPECIFICATIONS.
11. ALL CONTOURS SHOWN IN 1' INCREMENTS AND LABELED IN 5' INCREMENTS.
12. THE PROPERTY LINE DISTANCES, BEARINGS AND ALL OTHER DIMENSIONS SHOWN ON THIS MAP HAVE BEEN TAKEN FROM DEEDS, ASSESSORS MAPS, OR G.I.S.
13. ALL STREET SECTIONS ON THIS MAP ARE BASED ON THE LIVE OAK MASTER PLAN.

STATEMENT OF SUBDIVIDER:

14. ALL IMPROVEMENTS AND PUBLIC UTILITIES TO BE MADE OR INSTALLED AT THE TIME OF DEVELOPMENT. ALL IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HANFORD STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
15. WATER, SEWER, STORM DRAIN AND STREETS ARE TO BE PUBLIC IMPROVEMENTS.
    UTILITY/SERVICE PROVIDERS:
    WATER: CITY OF HANFORD
    SEWER: CITY OF HANFORD
    STORM DRAIN: CITY OF HANFORD
    GAS: SOUTHERN CALIFORNIA GAS COMPANY
    ELECTRICITY: SOUTHERN CALIFORNIA EDISON
    FIRE PROTECTION: CITY OF HANFORD
    TELEPHONE: SBC
16. PRIOR TO OR CONCURRENTLY WITH THE RECORDATION OF THE FINAL MAP THE DEVELOPER WILL DEDICATE THE NECESSARY AMOUNT OF PROPOSED RIGHT OF WAY ALONG THE SOUTH HALF OF HUME AVE. AND THE EAST HALF OF 12TH AVE. ALONG THE PROJECT FRONTAGE IMPROVEMENTS.
17. IN ACCORDANCE WITH SECTION 66456.1 OF THE "SUBDIVISION MAP ACT", THE OWNER RESERVES THE RIGHT TO FILE FOR MULTIPLE FIMAL MAPS.
18. PURSUANT TO SECTION 66452.6 OF THE "SUBDIVISION MAP ACT", THE TERM OF THIS MAP MAY EXTEND 10 YEARS.


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REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER K. VANDERVEEN No. 73124 CIVIL STATE OF CALIFORNIA

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| NO. | REVISIONS DESCRIPTIONS | DATE | APPROVED |
|---|---|---|---|
| | | | |

VESTING TENTATIVE SUBDIVISION MAP 881
COVER SHEET
LIVE OAK EAST
PHASE 2 - AMENDED TRACT 881
HANFORD CALIFORNIA

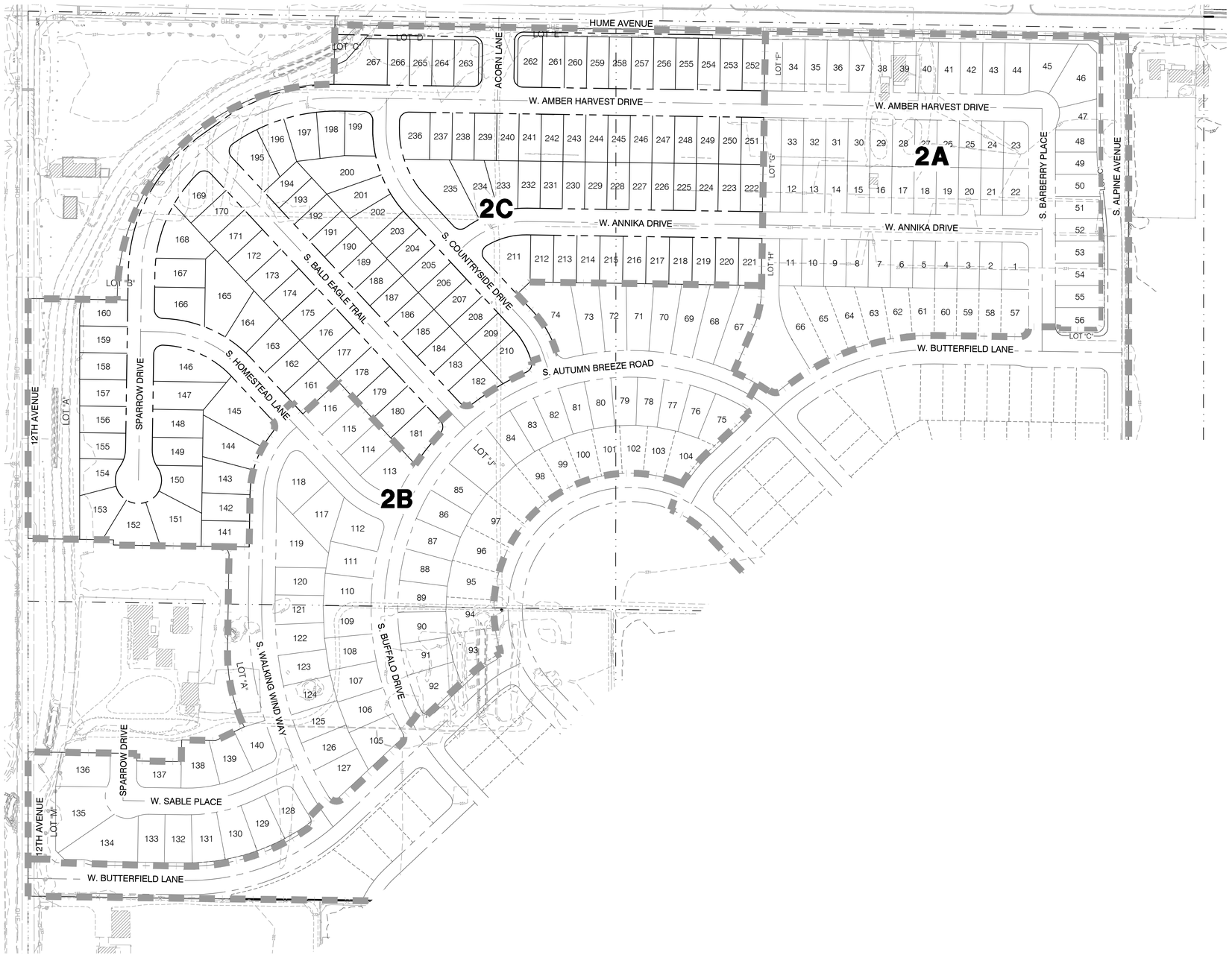

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• CIVIL ENGINEERING • SURVEYING • PLANNING •
620 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

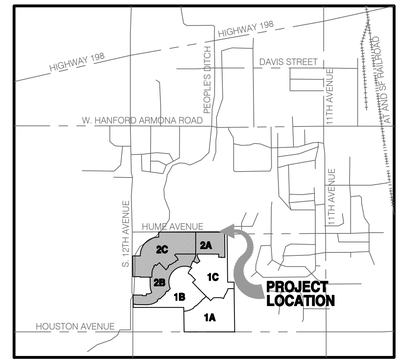

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| JOB #: | 13-1238 |
| DATE: | 05/29/2026 |
| SCALE: | AS SHOWN |
| DRAWN: | KM / TT |
| DESIGN: | KM |
| CHK'D: | CVV |

SHEET NUMBER

TM1.1

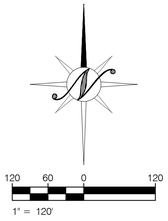

PLOTTED: 06/02/2026 09:14 PLOTTED BY: Tiophom
DWGNAME: F:\13-1238 Live Oak East\Planning\TM\TM881\TM1.1 CVR.dwg




## VICINITY MAP

N.T.S




## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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REVISIONS

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|---|---|---|---|
| | | | |

# VESTING TENTATIVE SUBDIVISION MAP 881
## BOUNDARY SHEET
### LIVE OAK EAST
### PHASE 2 - AMENDED TRACT 881
### HANFORD CALIFORNIA

NorthStar Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
620 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

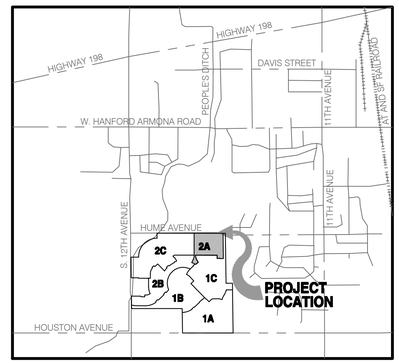
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| DESIGN: | KM |
| CHK'D: | CVV |

SHEET NUMBER

**TM1.2**

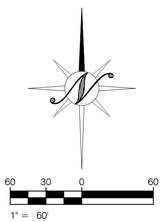
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## VICINITY MAP

N.T.S




## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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| | REVISIONS | | |

# VESTING TENTATIVE SUBDIVISION MAP 881
## PHASE 2A
## LIVE OAK EAST
## PHASE 2 - AMENDED TRACT 881
## HANFORD CALIFORNIA

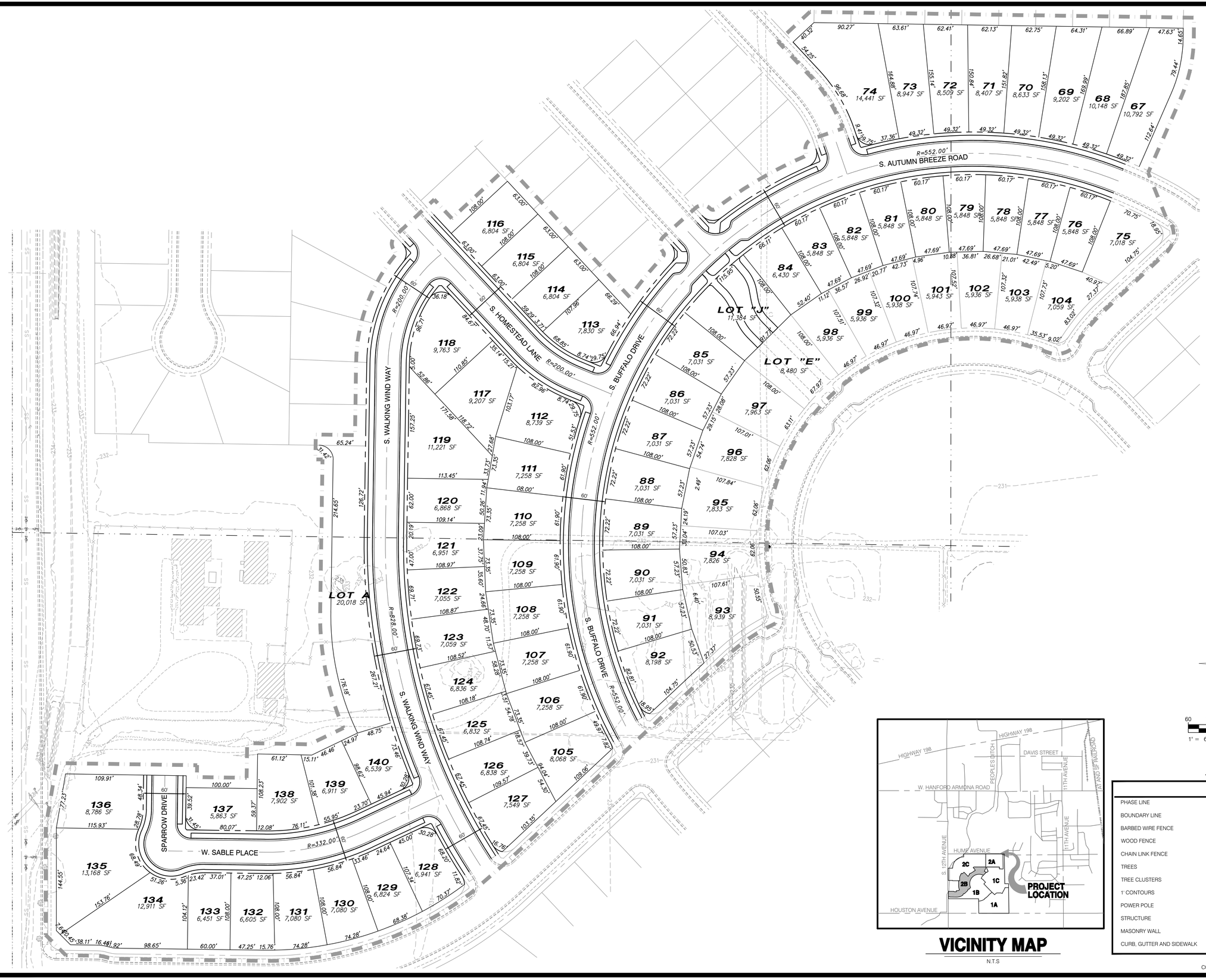
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|---|---|
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| DATE: | 05/29/2026 |
| SCALE: | AS SHOWN |
| DRAWN: | KM / TT |
| DESIGN: | KM |
| CHK'D: | CW |

SHEET NUMBER

# TM1.3

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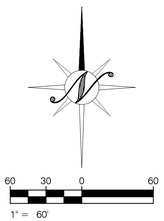






## VICINITY MAP

N.T.S




## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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## PHASE 2B
### LIVE OAK EAST
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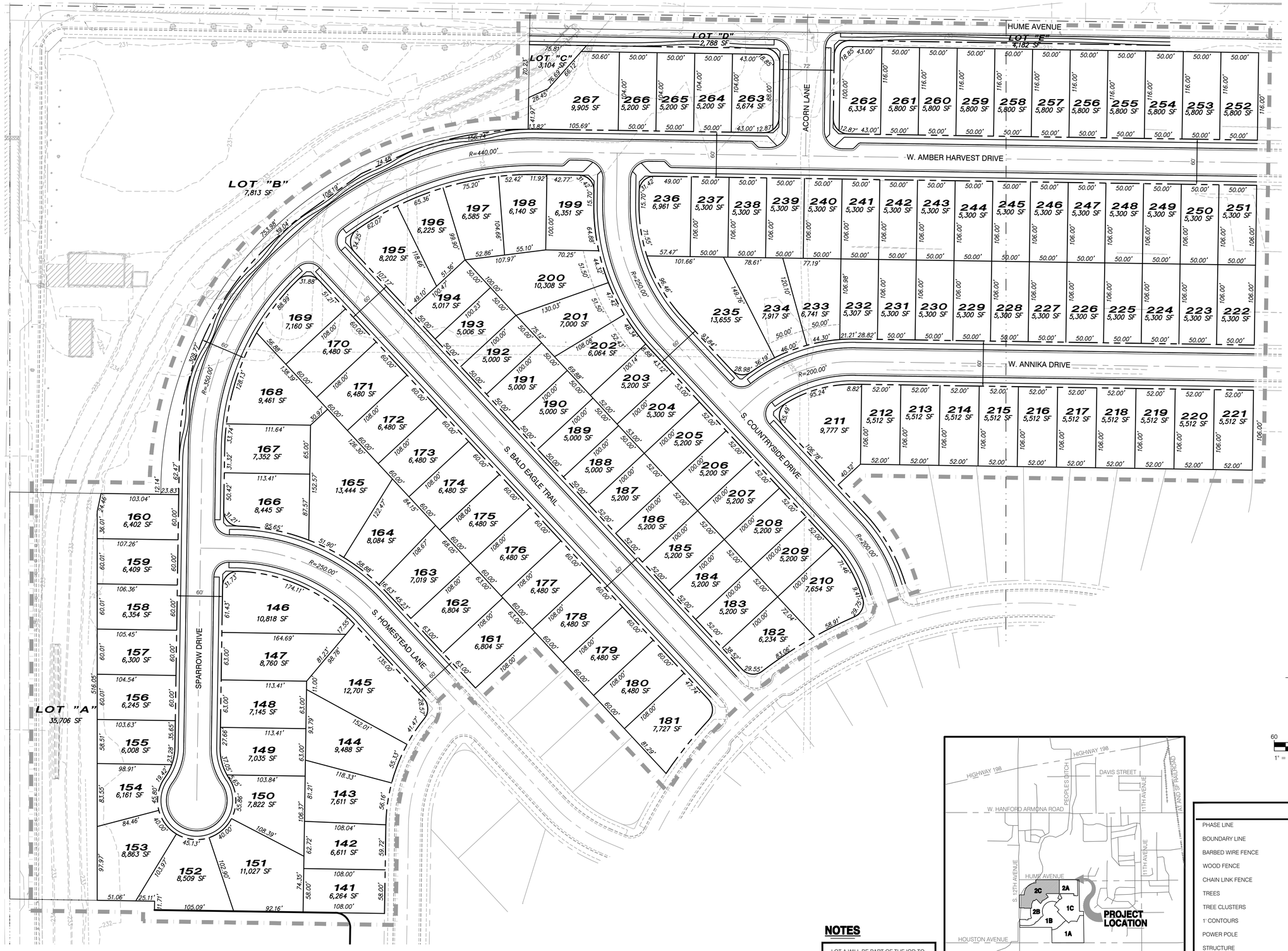
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**TM1.4**

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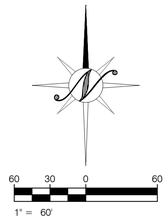
## VICINITY MAP

N.T.S

## NOTES

LOT A WILL BE PART OF THE IOD TO THE CITY OF HANFORD

LOT B WILL BE RETAINED BY DEVELOPER




## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| PHASE LINE | N/A | |
| BOUNDARY LINE | | |
| BARBED WIRE FENCE | | N/A |
| WOOD FENCE | | N/A |
| CHAIN LINK FENCE | | N/A |
| TREES | | N/A |
| TREE CLUSTERS | | N/A |
| 1' CONTOURS | 230' | N/A |
| POWER POLE | PP | N/A |
| STRUCTURE | | N/A |
| MASONRY WALL | | N/A |
| CURB, GUTTER AND SIDEWALK | | |

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| DESIGN: | KM |
| CHKD: | CW |

SHEET NUMBER

**TM1.5**

# LIVE OAK
## master plan




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Engineering Group, Inc

MMV Development
550 Harvest Park Suite A
Brentwood, CA 94513

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# Live Oak Master Plan



***Prepared For:***

The City of Hanford
Community Development
Department
Planning Division
317 North Douty Street
Hanford, CA 93230
(559) 583-1633

***Prepared By:***

RRM Design Group
210 East F Street
Oakdale, CA 95361
(209) 847-1794

North Star Engineering Group, Inc

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# 1.0 Introduction

## 1.1 Purpose

Located in California's rapidly growing Central Valley, the City of Hanford experiences a population growth rate of approximately 4.5% per year. According to the Hanford Economic Development Department, a 40,000 person increase over the next 20 years is expected, nearly doubling Hanford's population. The Live Oak Master Plan prepares for the projected growth with the creation of attractive, energy efficient, and pedestrian friendly neighborhoods. Consistent with Hanford's General Plan, the Live Oak Master Plan places high importance upon the City's agricultural presence, taking a balanced growth approach towards development and keeping quality of life in mind. ~~The Plan ensures a gradual transition from farmland south of the Plan Area's boundary to Hanford's impending urban development.~~ To provide a framework for quality development that assures consistency, the Live Oak Master Plan includes development standards and design guidelines whose execution delivers an interconnected, pedestrian-friendly community. Ample open space and parks have been integrated into the Plan, along with innovative, cost-saving features, such as photovoltaic solar panels.

Hanford's City Council unanimously voted to annex the Live Oak Master Plan Area, in 2005. ~~The General Plan designates the Plan Area as predominantly residential with a special density transition area in the southwest portion of the Plan Area. Very Low Density Residential (VLD) will be used to transition from abutting agricultural lands.~~

The Master Plan will serve as a tool in the review and approval process of subsequent development proposals such as subdivision maps, site plans, and improvement plans as they are proposed for the Plan Area. Responsibility for interpretation of these development standards and guidelines lies with the City of Hanford and the Community Development Department.

## 1.2 Plan Area Setting

Hanford, the seat of Kings County, is located in the southern San Joaquin Valley with Fresno approximately 33 miles northeast, and Bakersfield 86 miles southeast. The Live Oak Master Plan Area is located in southwest Hanford.

The 390± acre Plan Area is bisected by 12th Avenue, a north-south arterial. As shown in Figure 1.1, Hume Avenue serves as the northern boundary, and Houston Avenue the southern boundary. Sand Slough and Lone Oak Slough, form the eastern and western project boundaries, respectively.

## 1.3 The Master Plan Process

The creation of the Live Oak Master Plan was a collaborative process involving the Project Team, City of Hanford, Kings County, and various other government agencies. The process was completed in the following phases: (1) Research; (2) Opportunities and Constraints Analysis; (3) Preliminary Land Use and Circulation Concepts; (4) Refinement of the Land Use and Circulation Concept; (5) Preparation of the Draft Master Plan; and (6) Completion of the Live Oak Master Plan. The Project Team coordinated regularly with City staff throughout this process.

## 1.4 Consistency with the Hanford General Plan

The Master Plan provides a more specific and detailed interpretation of the land use designations established in the City of Hanford's General Plan at the neighborhood level. The Live Oak Master Plan serves as the implementation tool for development of 390± acres in the setting described above. The policies provided in the City's General Plan served as a guiding framework for the site's design guidelines, and development standards found in the Live Oak Master Plan. Particularly, this plan responds to the City of Hanford's General Plan objectives, policies, and programs to provide a compact, pedestrian-friendly community.

Upon approval, the Master Plan will serve as the regulating document for the entire Plan Area as permitted by the Planned Unit Development (PUD) provision contained in Chapter 17.62 of the Hanford Municipal Code (HMC). Pursuant to this provision, the Planning Commission is empowered to zone lands for PUD's to achieve a more "functional, aesthetically pleasing, and harmonious living environment".

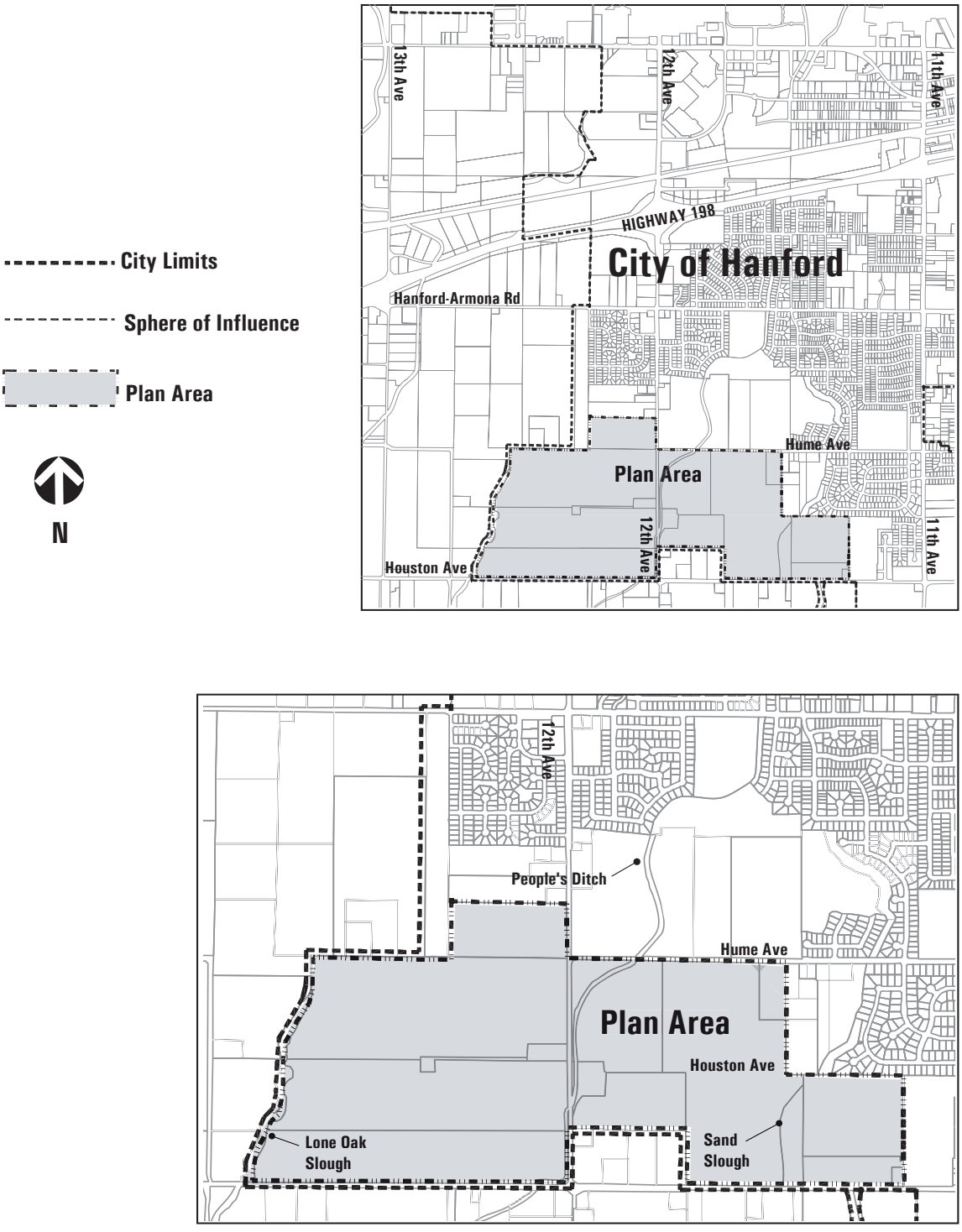



**Figure 1.1 Location Map**

## 1.5 Contents of the Master Plan

The Live Oak Master Plan guides the form and timing of growth within the Plan Area. Detailed concepts, development standards, and design guidelines are provided to ensure that all projects within the Plan Area are consistent with the goals of the Live Oak Master Plan.

The Master Plan is divided into the following sections:

**Chapter 1 – Introduction** – In addition to outlining the basic purpose and organization of the Live Oak Master Plan, the introduction describes the Plan Area, the planning process, as well as the Plan's consistency with other City documents.

**Chapter 2 – Existing Conditions** – This chapter identifies the existing landforms, land uses, and circulation within the Plan Area. Land use and circulation expectations for the area as proposed by the City's General Plan are also outlined in this chapter.

**Chapter 3 – Land Use and Neighborhood Design** – Chapter 3 addresses the issue of ~~affordable housing,~~ land uses, development standards, and design guidelines for future residences. Neighborhood character and features are discussed in this chapter as well.

**Chapter 4 – Circulation** – The circulation chapter includes the circulation concept and guidelines required to support the proposed neighborhood design. Each street type is individually described and illustrated within the chapter.

**Chapter 5 – Parks and Recreation** – Parks and recreation opportunities within the Plan Area are identified and described in this chapter. Corresponding design elements to guide development of these passive / active recreation areas can also be found in this section.

**Chapter 6 – Conservation** – This chapter describes the conservation considerations such as riparian woodland areas that have been set aside for open space preservation, air quality improvement, passive solar design guidelines and use of photovoltaic panels.

**Chapter 7 – Public Facilities and Services** – This chapter describes the types of facilities and services that will be needed to serve the Plan Area residents including water, wastewater, storm drainage, sewer, fire, police, and school service.

**Chapter 8 – Implementation** – Chapter 8 addresses the implementation challenges, development process, and phasing provisions of the Master Plan. Public facilities, financing, and the maintenance of future development are also addressed in this chapter.

## 1.6 Master Plan Goals

### 1.6.1 Land Use and Neighborhood Design Goals

1. ~~Ensure the development of affordable housing units to accommodate moderate income residents.~~

2. Establish central focal points for neighborhoods with prominent placement of neighborhood parks, pocket parks, and open space.

3. Encourage mixed-income neighborhoods within the Low Density (LD) designated area through variation in lot size and housing type.

4. Reduce visual monotony by limiting the repetition of the same building design, and by requiring garages to be subordinate to the overall architecture of residences.

5. ~~Transition from urban land uses to agriculture by creating a rural character along the southwest edge of the Plan Area.~~

6. Ensure compatibility between phases and / or builders.

### 1.6.2 Circulation Goals

1. Create a pedestrian friendly community through connectivity of internal, tree-lined streets and the use of linked sidewalks, pedestrian paths and daylighted cul-de-sacs.

2. Maintain a system of external Arterials and Collectors established by the Hanford General Plan, and the Hanford Public Works Department.

3. Integrate with existing development by connecting to existing neighborhood stub streets and provide stub connections for future development.

4. Enhance neighborhood safety by providing a street pattern that encourages lot frontage onto public parks, and discourage the use of dead end cul-de-sacs.

5. Provide pedestrian and bicycle access along sloughs with paths that connect to neighborhood parks.

### 1.6.3 Parks and Recreation Goals

1. Neighborhood Parks shall be located and designed as neighborhood focal points.

2. Establish pedestrian connections within the Plan Area, providing non-motorized access to neighborhood parks.

3. Provide pocket parks within neighborhoods that are not within a 1/4 mile walking distance to neighborhood parks.

4. Preserve and enhance the riparian woodland that exists along the remnant sloughs within the Plan Area.

### 1.6.4 Conservation Goals

1. Preserve and enhance the riparian woodland that exists along the remnant sloughs within the Plan Area.

2. Utilize Best Management Practices (BMP's) for reduction in air and water pollution.

3. Allow agriculture operations to continue during implementation of the Master Plan.

4. Reduce energy consumption within the Plan Area by encouraging use of photovoltaic solar panels, passive solar design, and energy star appliances.

### 1.6.5 Public Facilities and Services Goals

1. Provide efficient and environmentally compatible water, wastewater, and storm water systems to adequately service the Live Oak Plan Area.

2. Provide the necessary infrastructure to adequately service the Plan Area.

3. Ensure the sufficient supply of schools and public facility services.

### 1.6.6 Implementation Goals

1. Ensure consistency with the City of Hanford's General Plan.

2. Ensure feasibility of phases and/or developments within the Plan Area.

3. Ensure each of the six development phases are consistent with the environmental analysis and each of the mitigation measures required.

# 2.0 Existing Conditions

## 2.1 Existing Physical Conditions

The Plan Area is predominately characterized by active agriculture operations, with a mix of irrigated row crops in the northern and western areas of the site and grazing land located east of the Hume Avenue and 12th Avenue intersection.



Site view from Lone Oak Slough

There is one Williamson Act Contract within the Plan Area. A notice of non-renewal has been filed against the contract, which consists of 3 parcels east of Sand Slough. (See Figure 2.2) These parcels shall not be developed until the contract is terminated.

The Plan Area has a few existing residential and agricultural support structures. While some residents plan to remain throughout project development, the majority of structures will be removed with build-out of the Plan Area. These existing situations have been accounted for in Chapter 3, Land Use and Neighborhood Design.

Two remnant sloughs exist within the Plan Area: Lone Oak and Sand Sloughs, located on the western and eastern boundaries of the Plan Area, respectively.

The People's Ditch runs parallel to 12th Avenue on the east side of the street and is piped along the intersection of Houston Avenue.

The terrain is relatively flat, with few inclines aside from the sloughs and man-made irrigation ditches.

Four easements can be found within the Plan Area. Southern California Edison maintains two easements for public utility use on the west end of the project boundary, while People's Ditch Irrigation Company maintains a canal along 12th Avenue. A storm drainage easement is the fourth easement, located near Sand Slough on the northeast corner of the Plan Area.

The Hanford General Plan designates ~~Very Low Density Residential (VLD)~~, Low Density Residential (LD), Medium Density Residential (MD) and Public Facilities (PF) as land uses for the Plan Area. Table 2-1, "General Plan Land Use Summary", outlines the General Plan's land use designations for the Plan Area and Population Projection.

Single family residences are located to the north end of the site west of 12th Avenue at the intersection of Parkland and 12th Avenue and to the east of Sand Slough. A multi-family residential complex is located adjacent to the northern entrance of the site along Hanford-Armona Road. Several existing rural residences are located on the southeast end of the site along Houston Avenue. These residences are not included in the Plan

**Table 2.1 General Plan Land Use Summary**

## Table 2.1 Plan Area General Plan Land Uses

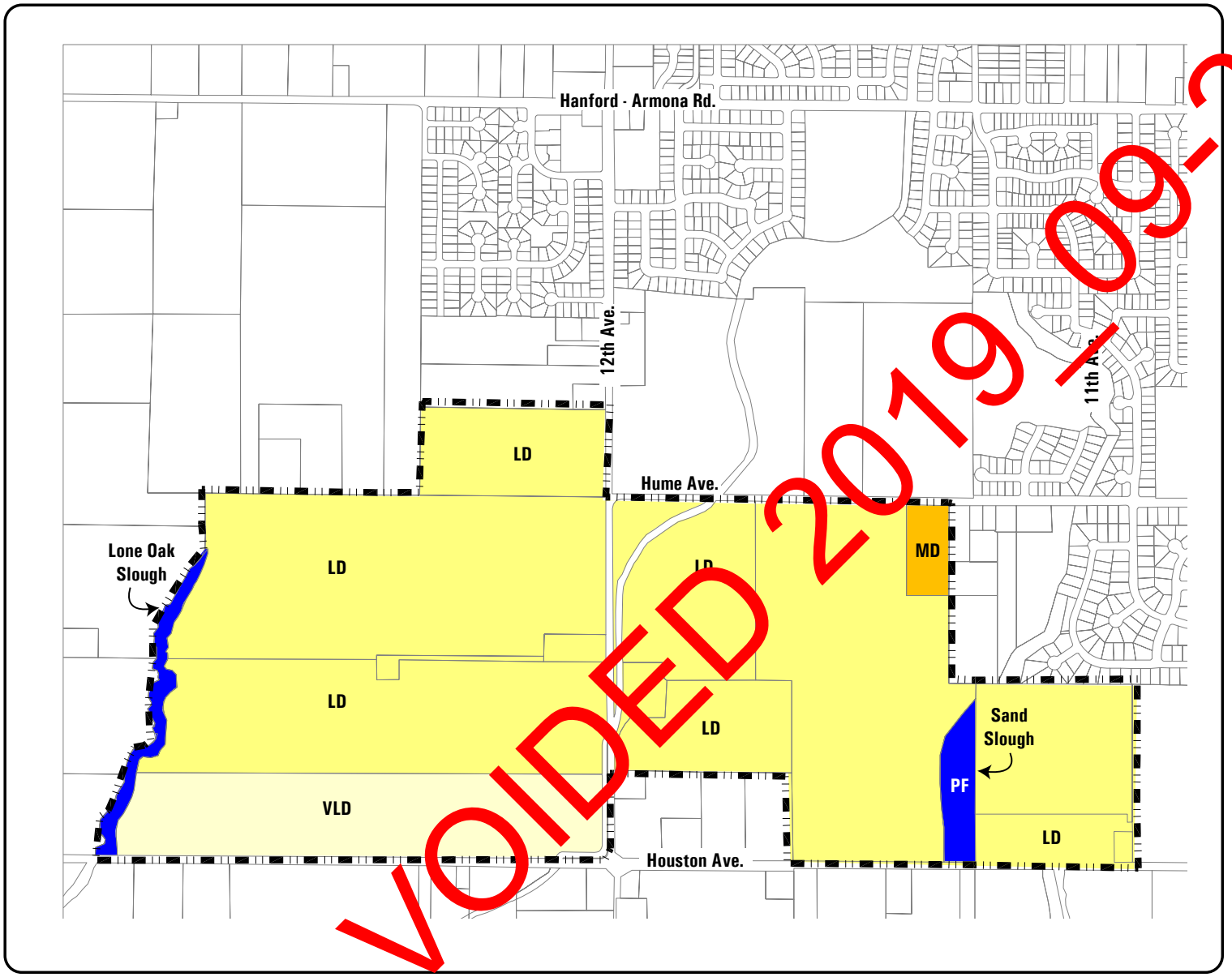
| Land Use Designation | Acreage | Land Use Distribution | Units[1] Per Acre | Total Units | Population[2] | Population Per Acre |
|---|---|---|---|---|---|---|
| **Residential[3]** | | | | | | |
| *Very Low Density Residential (VLD)* | | | | | | |
| *Low Density Residential (LD)* | 377.0 | 96.7% | 5 | 1,560 | 4,368 | 11.6 |
| *Medium Density Residential (MD)* | 5.0 | 1.3% | 12 | 60 | 150 | 30.0 |
| **Public Facilities** | | | | | | |
| *Public Facilities (PF)* | 8.0 | 2.1% | | | | |
| ***Total*** | **390.0** | **100%** | **4.2** | **1,620** | **4,515** | |

Assumptions:

1 Units per acre is representative the average residential density allowed

2 Population is based on the Hanford General Plan indicating 2.8 persons per household, except for Medium Density Residental, which is 2.5 persons per household

3 Residential acreage is exclusive of neighborhood park dedication




# Figure 2-1
## General Plan Land Use Map

*Legend*

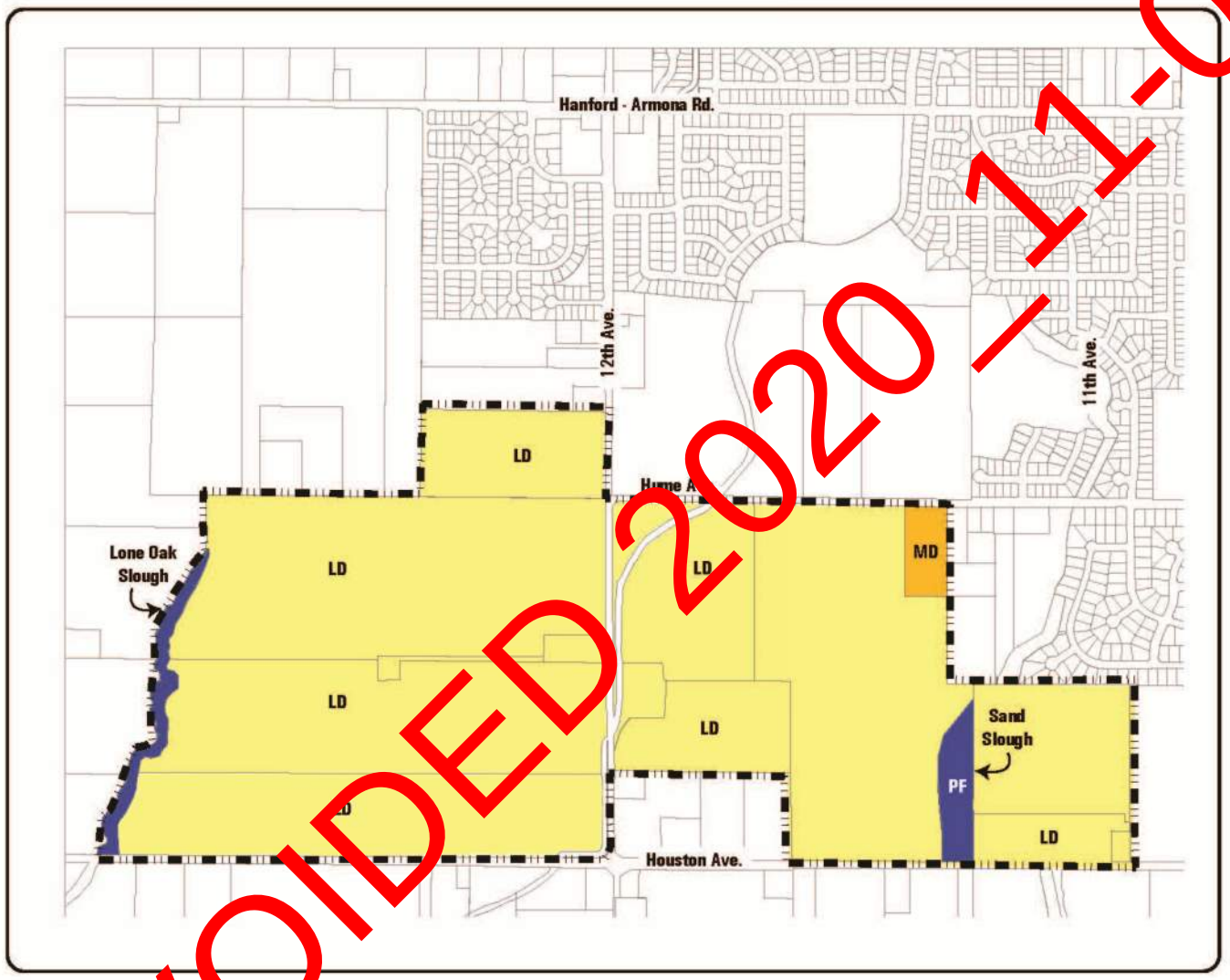
- VLD — Very Low Density Residential
- LD — Low Density Residential
- MD — Medium Density Residential
- PF — Public Facility
- Plan Area Boundary

N

NTS

## City of Hanford General Plan Land Use Map

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## Figure 2-1
## General Plan Land Use Map

*Legend*

- LD — Low Density Residential
- MD — Medium Density Residential
- PF — Public Facility
- Plan Area Boundary

N

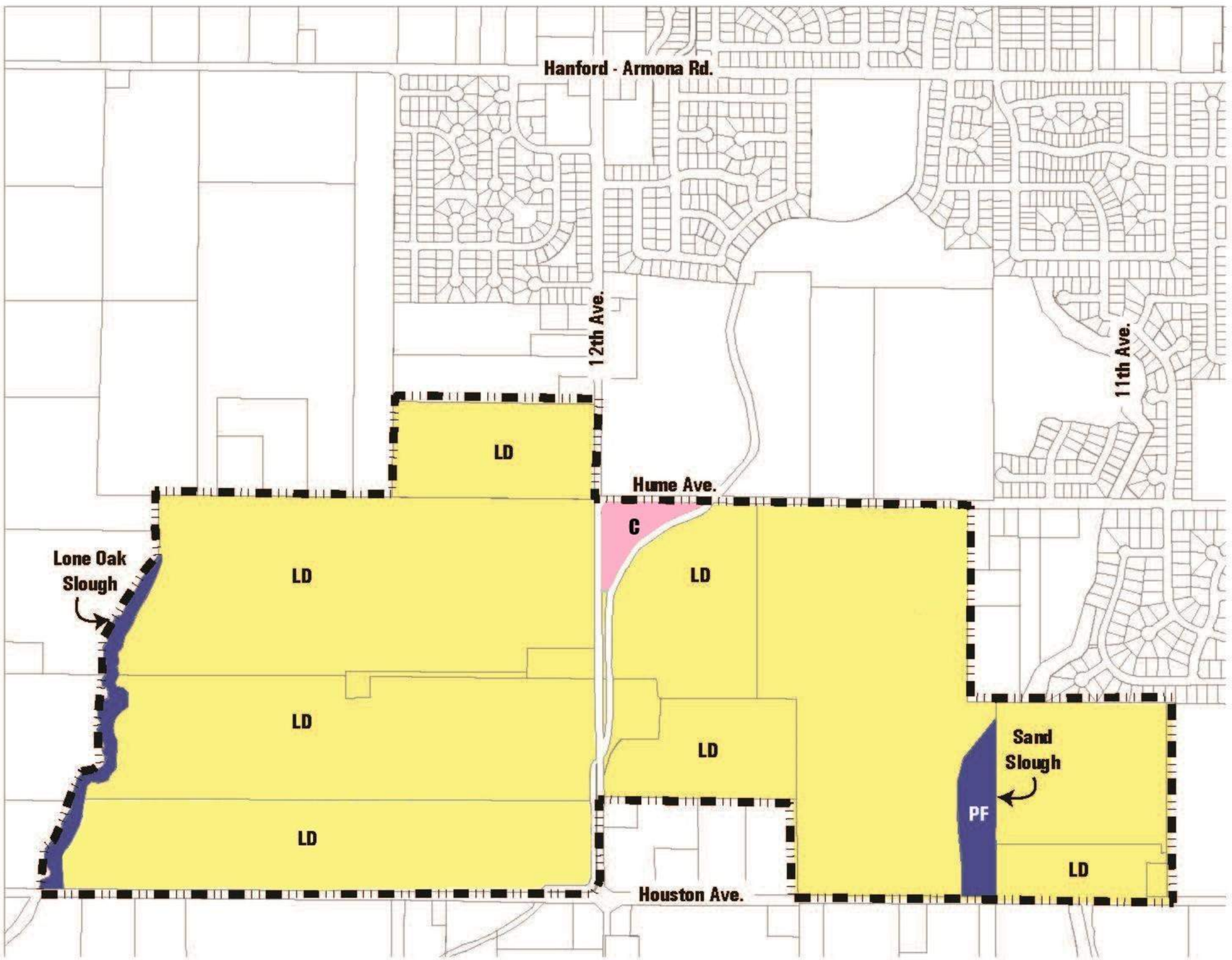
NTS

City of Hanford General Plan Land Use Map

Live Oak master plan

2-3

# Figure 2-1
# General Plan Land Use Map




## Legend

- LD — Low Density Residential
- C — Commercial
- PF — Public Facility
- Plan Area Boundary

N

NTS

# City of Hanford General Plan Land Use Map




## Figure 2-2
### Opportunities & Constraints Map

*Legend*

- Major Gateway
- Minor Gateway
- Existing / Planned Parksite
- Existing / Planned Commercial
- Potential Trailhead
- Views
- Arterial Street
- Collector Street
- Potential Trail
- Parcel Subject to Williamson Act

N

0 300 600 900

# Opportunities & Constraints Map

Area. South of Houston Avenue, large lot residential and active agriculture operations are located along the street. West of 12th Avenue, the southern boundary of the City's Sphere of Influence runs parallel with Houston Avenue.



Parkside Drive would be extended to connect with future development within the Plan Area

## 2.2 Existing Circulation

The General Plan's circulation system for the Plan Area consists of Arterials, Major and Minor Collectors, and Local Streets. Arterials and Major Collectors are located alternately every mile with a Minor Collector located approximately every half-mile. The Arterials within the Plan Area include the north-south oriented 12th Avenue, and east-west Houston Avenue. The Major Collector within the Plan Area is Hume Avenue. This east - west collector currently terminates at 12th Avenue, however the General Plan has designated a future extension of Hume Avenue from 12th Avenue east to 13th Avenue. Minor collectors will be established within the Plan Area to meet the transportation needs of future residents. Class II Bikeways exist within the Plan Area along Hanford-Armona Road and 12th Avenue.

Connectivity to the surrounding neighborhoods presents a challenge to the Plan Area. Parkside Drive, and an Edgewood Drive extension are the only through connections to the existing Parkside Estates neighborhood on the northwest end of the Plan Area. To the southeast, Huntington Street will connect the Mountain View Estates and other neighborhoods to the east.

# 3.0 Land Use and Neighborhood Design

## 3.1 Introduction

The Live Oak Master Plan strives for connectivity and unity within the Plan Area as well as with Hanford's more established neighborhoods. Using Hanford's historic downtown neighborhoods as a precedent, the Live Oak Master Plan follows traditional patterns of development, and smoothly transitions from existing neighborhoods to new ones. The regulations and guidelines contained in this chapter lay the foundation to craft a series of compact neighborhoods occurring over six phases. In addition to standards and guidelines defining land uses for the Plan Area, design direction for the orientation and articulation of buildings, neighborhood lighting, landscaping, and gateways are also found in this chapter.

The Live Oak Master Plan applies the City of Hanford's General Plan land use designations for the Plan Area in a traditional pattern of development. The Plan Area includes ~~Very Low Density Residential (VLD),~~ Low Density Residential (LD), Medium Density Residential (MD), Parks (P), and Open Space (OS). The design guidelines are intended to create neighborhoods reflecting a pedestrian-oriented design ~~and provide a transition from urban to rural uses located to the south and west of the Plan Area.~~ Development within the Plan provides for scenic entry features, centralized pedestrian-accessible parks and open space, tree-lined streets, and connections to existing neighborhoods. This approach to neighborhood design will create a distinct identity apart from conventional subdivision development surrounding the Live Oak Plan Area.

**Table 3.1 - Land Use Table**

**Table 3.1 Live Oak Master Plan Land Use Summary**

| Land Use Designation | Gross Acres | Land Use Distribution | Units[1] Per Acre | Total[2] Units | Population[3] | Population Per Acre |
|---|---|---|---|---|---|---|
| **Residential[3]** | | | | | | |
| *Very Low Density Residential (VLD)* | | | | | | |
| *Low Density Residential (LD)* | 333.2 | 85.4% | 4.9 | 1,530 | 4,284 | 12.9 |
| *Medium Density Residential (MD)* | 4.2 | 1.1% | 7.1 | 30 | 75 | 17.8 |
| **Public Facilities** | | | | | | |
| *Parks (P)* | 21.0 | 5.4% | | | | |
| *Open Space (OS)* | 31.6 | 8.1% | | | | |
| ***Total*** | **390.0** | **100%** | **4.2** | **1,560** | **4,359** | |

Assumptions:

[1] Units per acre is representative the average residential density within the project area

[2] Total units based on lotting concept

[3] Population is based on the Hanford General Plan indicating 2.8 persons per household except for medium density, which is 2.5 persons per household

Table 3.1 summarizes land use analyses for the entire plan area, while Table 3.2 provides analysis according to each phase of development. All six phases include Low Density Residential (LDR) development. Phases ~~3 and 4 incorporate Very Low Density (VLD) development, and phase~~ 2 integrates Medium Density Residential (MDR) in the Plan Area.

## 3.2 Housing

The Live Oak Master Plan strives to create a comprehensive, people-focused community for the City of Hanford, and providing housing for individuals of varied income levels has become a priority. ~~Accordingly, ten percent of each development phase in the Live Oak Plan Area will be dedicated to persons of moderate income. To assist this effort, the City of Hanford has implemented a housing program to assist home buyers.~~ Please refer to the City's website for the most updated information on offered housing programs.

## 3.3 Land Use and Neighborhood Design Goals

The Live Oak Master Plan has been established using the following goals:

1. ~~Ensure the development of affordable housing units to accommodate moderate income residents.~~

2. Establish central focal points for neighborhoods with prominent placement of neighborhood parks, pocket parks, and open space.

3. Encourage mixed-income neighborhoods within the Low Density (LD) designated area through variation in lot size and housing type.

4. Reduce visual monotony by limiting the repetition of the same building design, and by requiring garages to be subordinate to the overall architecture of residences.

5. ~~Transition from urban land uses to agriculture by creating a rural character along the southwest edge of the Plan Area.~~

6. Ensure compatibility between phases and/or builders.




*Illustrative prepared by RRM Design Group

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# Figure 3-1
## Land Use Illustrative

*Legend*

| Land Use | | Acres | Units |
|---|---|---|---|
| | Very Low Density Residential (VLD) | 50.0 | 130 |
| | Low Density Residential (LD) | 283.2 | 1,400 |
| | Medium Density Residential (MD) | 4.2 | 30 |
| | Parks (P) | 21.0 | 0 |
| | Open Space / Conservation (OS) | 31.6 | 0 |
| Total | | 390.0 | 1,560 |

N

0 200 400 600 800

Live Oak master plan

# Land Use and Lotting Illustrative

VOIDED 2020_11-04




## Figure 3-1
### Land Use Illustrative
*Legend*

| Land Use | Acres | Units |
|---|---|---|
| Low Density Residential (LD) | 340.5 | 1,560 |
| Parks (P) | 17.9 | 0 |
| Open Space / Conservation (OS) | 31.6 | 0 |
| **Total** | 390.0 | 1,560 |

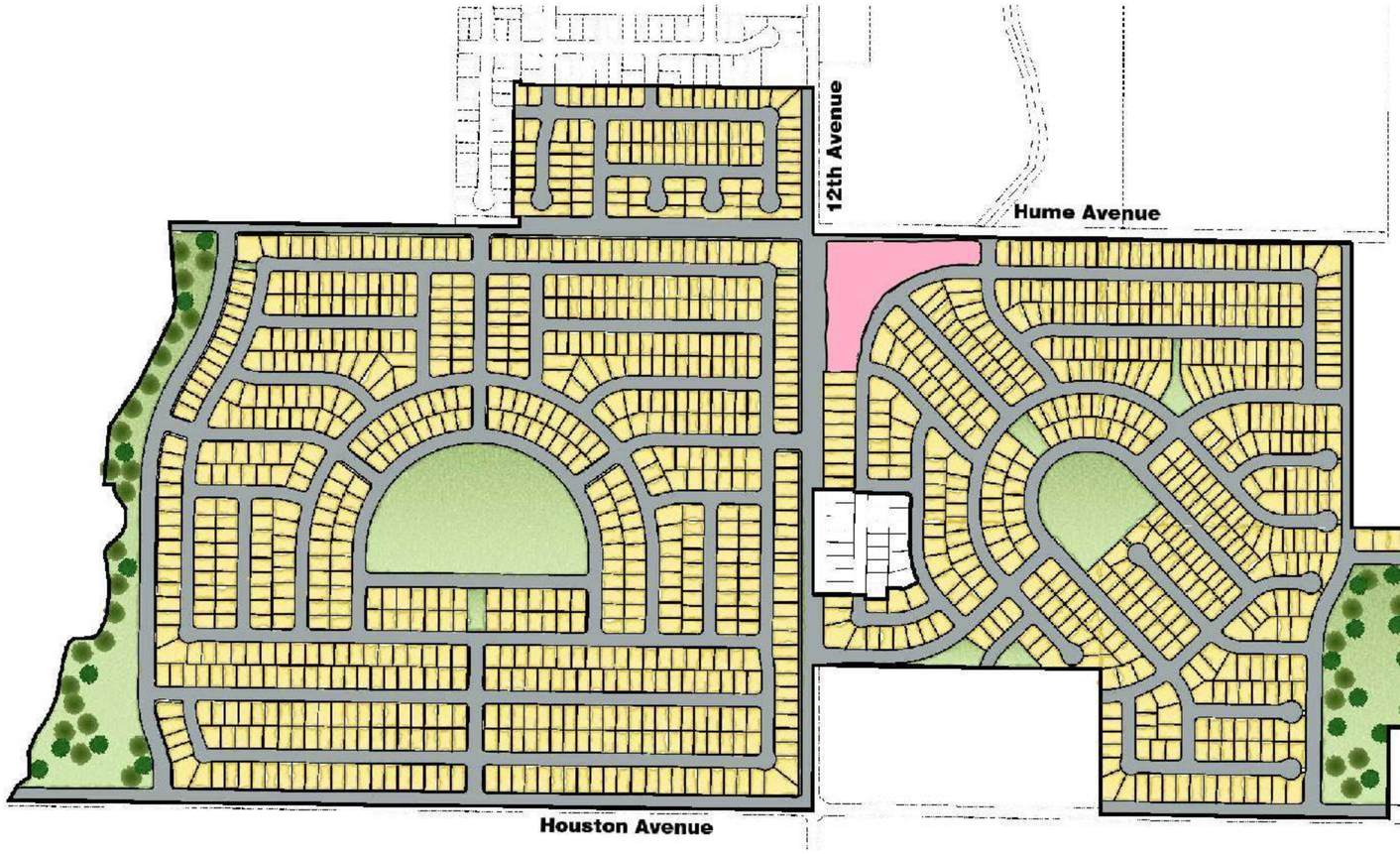
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0 200 400 600 800

Live Oak master plan

# Land Use and Lotting Illustrative

# Figure 3-1
## Land Use Illustrative
*Legend*




| Land Use | Acres | Units |
|---|---|---|
| Low Density Residential (LD) | 336.1 | 1,542 |
| Parks (P) | 17.9 | 0 |
| Commercial (C) | 4.4 | 0 |
| Open Space/ Conservative (OS) | 31.6 | 0 |
| Total | 390.0 | 1,542 |

N

0 200 400 600 800

*Illustrative prepared by RRM Design Group

Live Oak
*master plan*

# Land Use and Lotting Illustrative

## 3.4 Land Use and Neighborhood Design Policies

The land uses designated for the Plan Area are primarily residential, with Low Density Residential (LD) as the predominant use. Development of a variety of residential units planned in ~~Very Low Density,~~ Low Density, Medium Density land use designations will be provided throughout 337.4 acres. ~~The Very Low Density Residential land use along Houston Avenue creates a transition between urban and rural development.~~

### 3.4.1 Residential Policies:

a. Neighborhood densities and lot sizes are controlled by the Master Plan's residential standards in accordance to the Planned Unit Development (PUD) Agreement with the City of Hanford.

b. ~~There shall be a density transition from Low Density Residential (LD) to Very Low Density Residential (VLD) along Houston Avenue from Lone Oak Slough to 12th Avenue.~~

c. Units backing on to major streets shall be provided a minimum of 10 feet additional lot depth as the interfacing lots. Units that side on to any collector street shall be provided a minimum of 5 additional feet above the minimum corner lot width.

d. All residential lots and housing types should respect the existing, adjacent residential lot layouts and housing types. Where possible, front yards should not face side or rear yards.

e. Transitions in lot size or product type should occur at the rear property line.

f. Garages shall be alley-loaded when alley is available.

g. Residential subdivisions shall be designed to provide variety in building placement and residential architectural style through the use of varied side and front setbacks, garage placement, building heights and exterior building facades.

h. Duplex (duet) units shall be permitted by right on corner lots.

i. Second dwelling units shall be a land use allowed by right within all phases of the Live Oak Master Plan.

j. ~~Ensure 10% of all development phases within the Plan Area are affordable to individuals and/or families of moderate income.~~

of homes will be made affordable with the assistance of funds from the City and the builder. This shall be achieved by dedicating 5% of the lots to the City or constructed and sold. Administration, verification, and oversight shall be the responsibility of the City of Hanford.

k. Residential units that interface existing residences within the Plan Area shall not be more than one story in height and shall install a six foot wall along the interfacing property line.

### 3.4.2 Very Low Density Residential (VLD)

The Very Low Density Residential (VLD) designation provides areas for large lot development. The allowable density ranges from 0.0 to 3.0 units per ace. The VLD designation and character responds to a General Plan Policy requiring Very Low Density residential development for Hanford's southern and western residential edges. The VLD land use spans 50.0 acres within the Plan Area along the southern edge, west of 12th Avenue and serves as a transition between urban and agricultural uses of unincorporated Kings County. Residences within this designation should be of a rural character, complimentary to the surrounding agrarian area. The following site planning and building design guidelines shall be applied to properties designated as VLD.

**Site Planning Guidelines:**

a. Open street patterns that create a network of circulation connections with multiple points of access are encouraged.

b. Walled and isolated residential enclaves are strongly discouraged.

c. Use of cul-de-sacs shall be minimized. Where feasible, access from cul-de-sacs shall be daylighted and connected to a larger circulation system, allowing for pedestrian access.

d. Greater setbacks shall be utilized to ensure a transition between higher densities to lower densities by providing ample space between structures and the street.

e. All yard areas and setbacks shall be landscaped in accordance with the Hanford Municipal Code section 17.18.100-D and -E. Street trees shall be planted 30 feet on center within planting strips. An additional 3 trees shall be planted within the front and side yard setbacks to improve passive solar design.

f. Lots shall vary in width, depth, and articulation to allow variety and flexibility in building placement and massing.

g. Provisions for storage of 3 refuse containers are required for all VLD homes.

**Building Design Guidelines:**

a. A variety of building types and styles shall be provided within a residential neighborhood. This is accomplished through variation in building heights, massing, setbacks, and architectural elevations and floorplans. No more than 20% of homes within the VLD designated areas shall have the same architectural design.

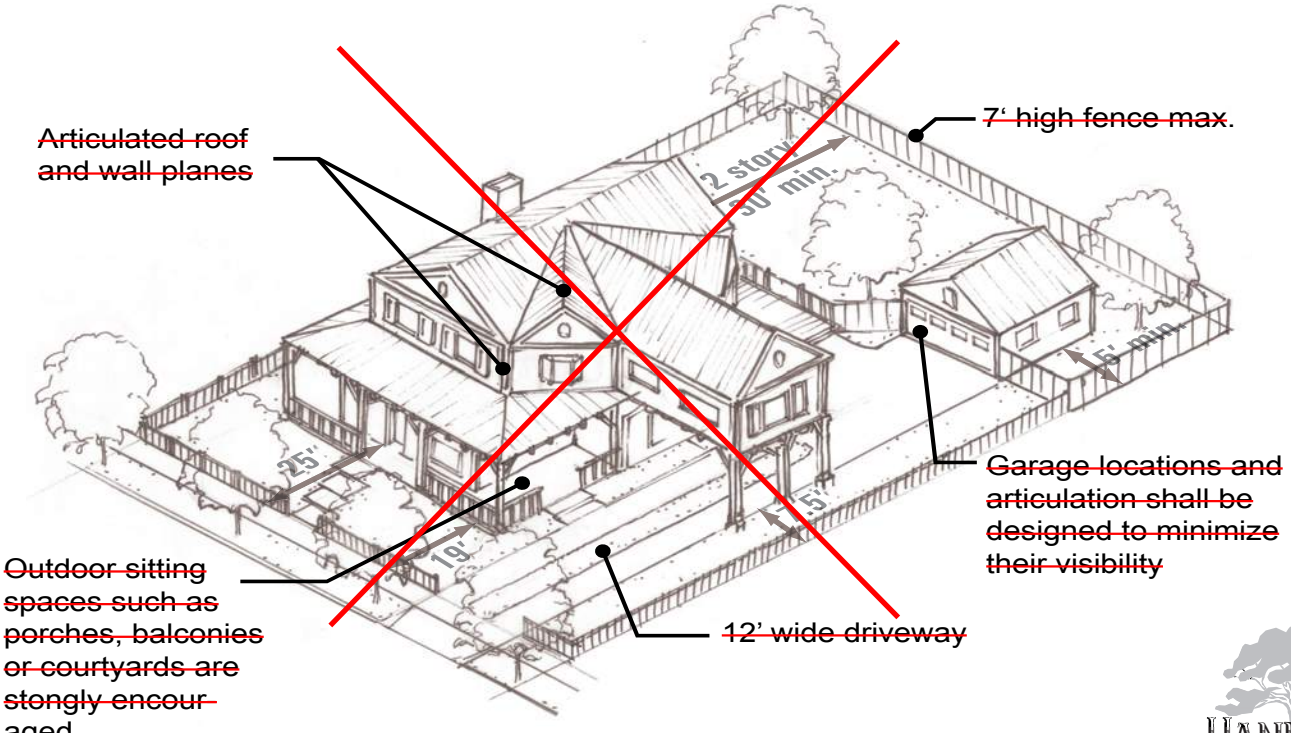
b. Houses shall be oriented toward the street or park. Outdoor sitting spaces such as porches, balconies or courtyards are strongly encouraged.

c. Architectural features such as porches, chimneys, door placement, window proportions, dormers, wood detailing, siding and color scheme shall be coordinated and complement the overall building design. Architectural features must also be compatible with the neighborhood context.

d. Building wall and roof planes shall be varied and articulated into smaller modules and features to reduce the bulk and size of the structure.

e. All utility and mechanical equipment shall be screened from view (except photovoltaic panels). Roof mounted air conditioners, coolers or antennas are discouraged.

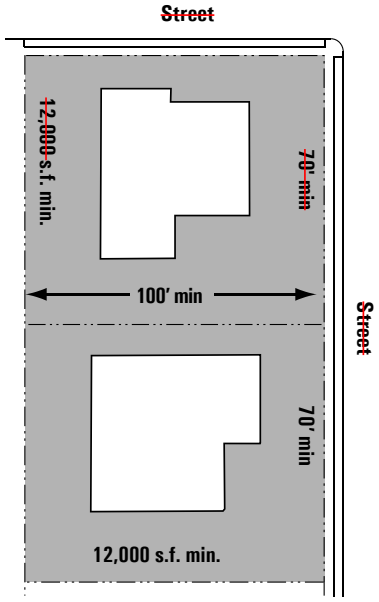
f. Garage locations and articulation shall be designed to minimize their visibility. Alternate garage loading configurations are encouraged (see Residential Garage Design Guidelines).



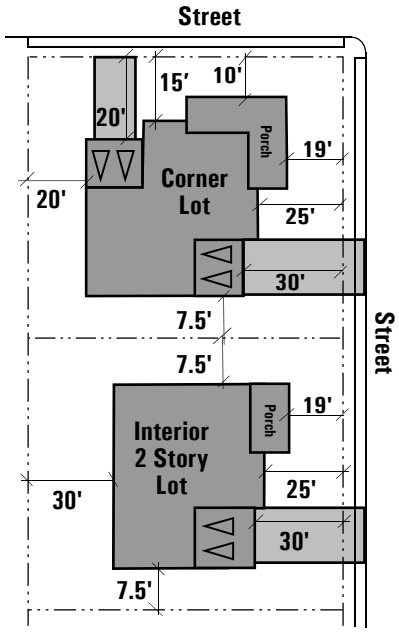
# Table 3.2 Very Low Density Residential (VLD) Standards

| Land Use | Very Low Density Residential |
|---|---|
| Base Zone District | R-1-12 |
| Density Range | 0-3.0 Dwelling units/gross acre |
| Permitted Use | HMC Section 17.18.020 |
| Administrative Approval | HMC Section 17.18.030 |
| Conditional Uses | HMC Section 17.18.040 |

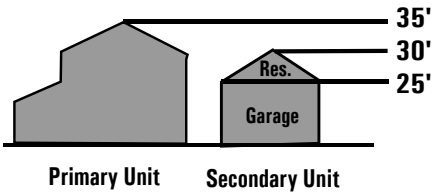
| Lot Configuration | |
|---|---|
| Lot Area | 12,000 square feet minimum |
| Width | 70 feet minimum |
| Interior/Corner Lot | (Measure at the front yard setback) |
| Radial | 50 feet minimum (Measure at the front yard setback) |
| Frontage | 40 feet minimum (Measure at edge of Right-of-Way) |
| Depth | 100 feet minimum |
| Lot Coverage | 40% maximum |
| Landscaping | 30% of lot minimum |




| Setbacks | |
|---|---|
| Front Yard | |
| Covered Porch | 19 feet minimum |
| Living Space | 25 feet minimum |
| Garage | 30 feet minimum |
| Side Yard | |
| Interior Lot | 7.5 feet minimum |
| Corner Lot (Street Side) | 15 feet minimum |
| Garage (Street Side) | 20 feet minimum |
| Covered Porch | 10 feet minimum |
| Rear Yard | 20 feet minimum for one story<br>10 feet minimum per additional story |
| Accessory Structures | 5 feet from rear or side property line<br>(When located in the rear yard) |
| Distance Between Buildings | 15 feet minimum |



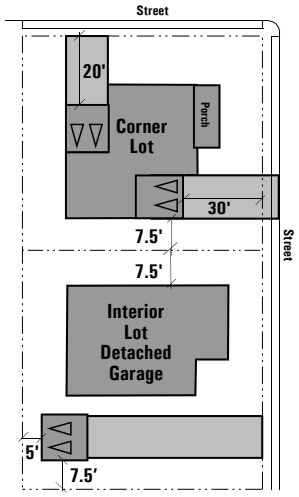
| | |
|---|---|
| **Building Heights** | Measured from finished floor elevation |
| Primary Structure | 35 feet maximum |
| Accessory Structure | 25 feet maximum |
| With Residential Unit | 30 feet maximum |




**Off Street Parking**

| | |
|---|---|
| Parking Requirement | 2 spaces/ unit minimum (4 spaces/unit if no street driveway access) (Minimum two covered spaces within a garage or carport) |

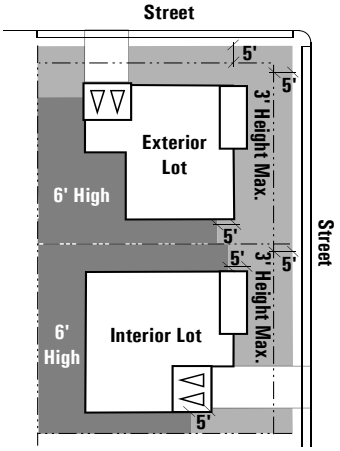
| | |
|---|---|
| **Garage** | Refer also to Chapter 3.3.6 |
| Coverage | 50% maximum of first floor front elevation |
| Front Loaded Garage | |
| Front Yard Setback | 30 feet minimum |
| Corner Side Yard Setback | 20 feet minimum |
| Detached Garage | |
| Side Yard (Interior) | 7.5 feet minimum |
| Side Yard (Street Side) | 20 feet minimum |
| Rear Yard | 5 feet minimum (setback a min. of 15' from alley center line) |



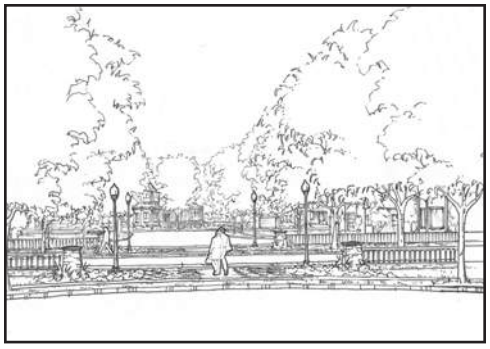

Note: When alley is available, no street loaded garage is allowed. (Refer to Residential Policy F. and Garage Design Guidelines E.)

| | |
|---|---|
| **Porches** | Refer also to Section 3.3.7 |
| Requirement | 60% of all units |

| | |
|---|---|
| **Fencing and Walls** | Refer also to Section 3.3.8 |
| Within Setbacks | |
| Front Yard and Side Yard | 3 feet maximum height (Must be 5' minimum behind property line.) (50% minimum transparency) |
| Rear and Side Yard | 7* feet maximum (Along rear and side property line when setback a minimum of 5' behind leading edge of house) |




*As per city standards.



Daylighted cul-de-sacs allow for pedestrian circulation, while maintaining the desired aspects of traditional cul-de-sacs.



Large wrap-around porches are not only visually pleasing, but function to create an inviting entrance as well.



A residential streetscape can be enhanced with recessed garages and pergolas.

### 3.4.3 Low Density Residential (LD)

The Low Density Residential (LD) designation provides areas for detached single-family development with typical densities that range from 3-9 dwelling units per gross acre. This designation is intended to provide a different range of lot sizes and designs ~~(approximately 6,000 sf to 11,999 sf),~~ and is the predominant land use ~~comprising approximately 73% of the Plan Area~~. Neighborhood densities are determined in this Master Plan and are consistent with the Hanford General Plan. Lot sizes that are smaller than those prescribed in the Zoning Ordinance are utilized within the Plan Area pursuant to the Planned Unit Development Zoning, which allows smaller lots in exchange for open space amenities such as pocket parks and neighborhood parks (Refer to Small Lot LD Development 3.4.4). The following are site planning and building design guidelines for LD designated areas.

**Site Planning Guidelines:**

a. Open street patterns that create a network of circulation connections with multiple points of access are encouraged.

b. Walled and isolated residential enclaves are strongly discouraged.

c. Use of cul-de-sacs shall be minimized. Where feasible, access from cul-de-sacs shall be daylighted and connected to a larger circulation system to allow for pedestrian access.

d. All yard areas and setbacks shall be landscaped in accordance with the Hanford Municipal Code section 17.18.100-D and -E. Street trees shall be planted 30 feet on center within planting strips. An additional 2 trees shall be planted within lots to improve passive solar design.

e. Lots shall vary in width, depth, and articulation to allow variety and flexibility in building placement and massing.

f. Provisions for storage of 3 refuse containers are required for all LD homes.

**Building Design Guidelines:**

a. A variety of building types and styles shall be provided within a residential neighborhood. This is accomplished through variation in building heights, massing, setbacks, and architectural elevations and floorplans. No more than 33% of homes within LD designation shall have the same architectural design.

b. Houses shall be oriented toward the street or park. Outdoor sitting spaces such as porches, balconies, or courtyards are strongly encouraged.

c. Architectural features such as porches, chimneys, door placement, window proportions, dormers, wood detailing, siding and color scheme shall be coordinated, compatible with the neighborhood context, and complement the overall building design.

d. Building wall and roof planes shall be varied and articulated into smaller modules and features to reduce the bulk and size of the structure.

e. All utility and mechanical equipment shall be screened from view (except photovoltaic panels). Roof mounted air conditioners, coolers, and antennas are discouraged.

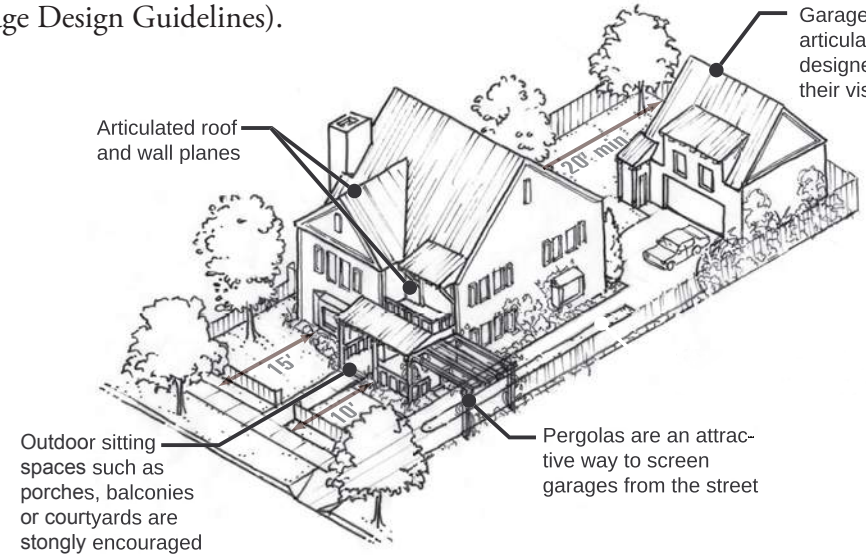
f. ~~Garage locations and articulation shall be such that structure visibility is minimized.~~ Alternate garage loading configurations are encouraged (see Residential Garage Design Guidelines).



Corner units should include enhanced features such as wrap around porches and additional articulation



Bringing the architecture forward with the rear placement of the garage improves the streetscape of neighborhoods.

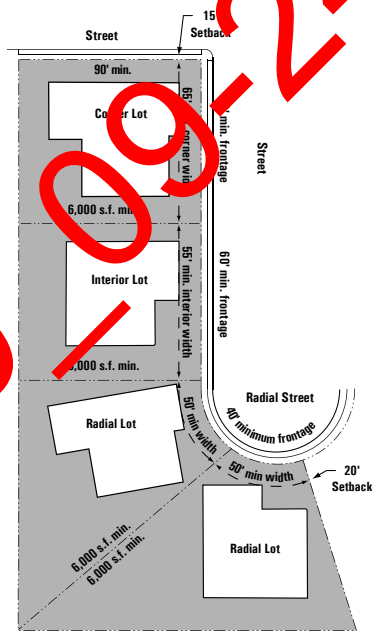


# Table 3.3 Low Density Residential (LD) Standards

| | |
|---|---|
| **Land Use** | **Low Density Residential** |
| Base Zone District | **R-1-6** |
| Density Range | **3-9 Dwelling units/gross acre** |
| Permitted Use | **HMC Section 17.18.020** |
| Administrative Approval | **HMC Section 17.18.030** |
| Conditional Uses | **HMC Section 17.18.040** |

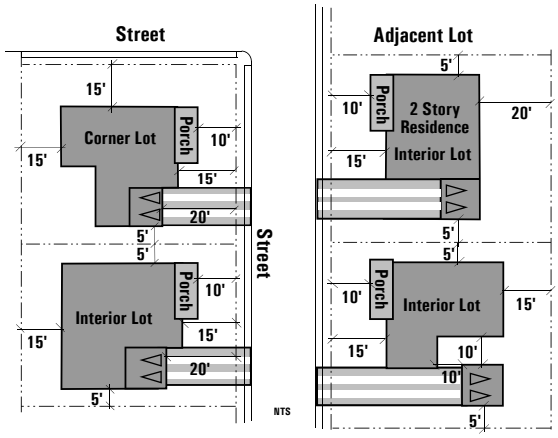
## Lot Configuration

| | |
|---|---|
| Lot Area | **6,000 square feet minimum** |
| Width | |
| Interior Lot | **55 feet minimum** (Measured at front yard setback) |
| Corner Lot | **65 feet minimum** (Measured at front yard setback) |
| Radial Lot | **50 feet minimum** (Measured at front yard setback) |
| Depth | **90 feet minimum** |
| Frontage | **55 feet minimum** (local streets) (Measure at the edge of ROW) |
| | **40 feet minimum** (radial streets) (Measure at the edge of ROW) |
| Lot Coverage | **40% maximum** |
| Landscaping | **30% of LA minimum** |




## Setbacks

| | |
|---|---|
| Front Yard | |
| Covered Porch | **10 feet minimum** |
| Living Space | **15 feet minimum** |
| Garage | **20 feet minimum** |
| Side Yard | |
| Interior | **5 feet minimum** |
| Corner (Street Side) | **15 feet minimum** |
| Garage (Side Entry) | **20 feet minimum** |
| Covered Porch | **10 feet minimum** |
| Rear Yard (one-story) | **15 feet minimum** |
| Multi-Story | **5 feet additional per story** |
| Accessory Structures | **5 feet from rear or side property line (When located in the rear yard)** |
| Distance Between Buildings | **10 feet minimum** |



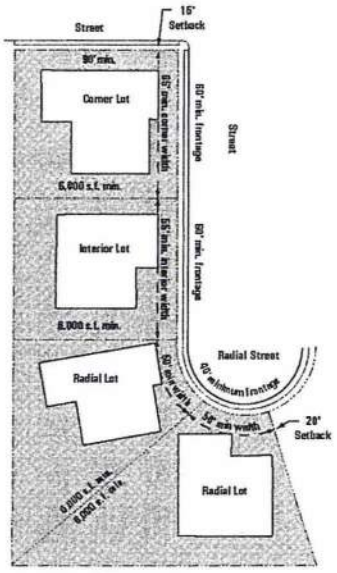

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# Table 3.3 Low Density Residential (LD) Standards

| | |
|---|---|
| Land Use | Low Density Residential |
| Base Zone District | ~~R-1-6~~ R-L-5 |
| Density Range | ~~3-9 Dwelling units/gross acre~~ 2-10 Dwelling units/gross acre |
| Permitted Use | HMC Section ~~17.18.020~~ 17.10 |
| Administrative Approval | HMC Section ~~17.18.030~~ 17.10 |
| Conditional Uses | HMC Section ~~17.18.040~~ 17.10 |

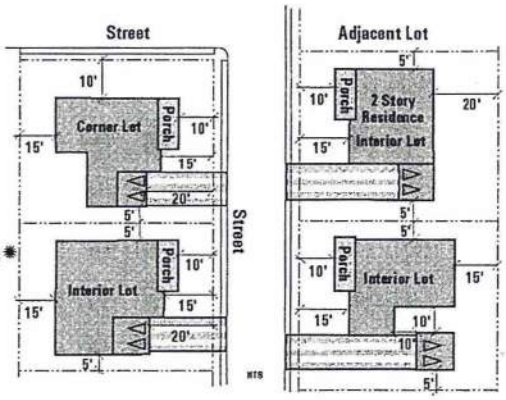
## Lot Configuration

| | |
|---|---|
| Lot Area | 5,000 ~~6,000~~ square feet minimum |
| Width | |
| Interior Lot | 55 feet minimum (Measured at front yard setback) |
| Corner Lot | 65 feet minimum (Measured at front yard setback) |
| Radial Lot | 50 feet minimum (Measured at front yard setback) |
| Depth | 90 feet minimum |
| Frontage | 55 feet minimum (local streets) (Measure at the edge of ROW) |
| | 40 feet minimum (radial streets) (Measure at the edge of ROW) |
| ~~Lot Coverage~~ | ~~40% maximum~~ |
| Landscaping | 30% of lot minimum |




## Setbacks

| | |
|---|---|
| Front Yard | |
| Covered Porch | 10 feet minimum |
| Living Space | 15 feet minimum |
| Garage | 20 feet minimum |
| Side Yard | |
| Interior | 5 feet minimum |
| Corner (Street Side) | **10** feet minimum |
| Corner (Street Side) | **15** feet minimum **at collector streets*** |
| Garage (Side Entry) | 20 feet minimum |
| Covered Porch | 10 feet minimum |
| Rear Yard (one-story) | 15 feet minimum |
| Multi-Story | 5 feet additional per story |
| Accessory Structures | 5 feet from rear or side property line (When located in the rear yard) |
| Distance Between Buildings | 10 feet minimum **, or allowed per the Building Code** |

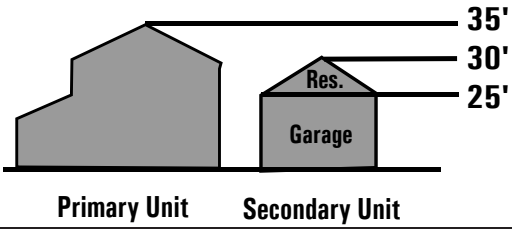



***Collector Streets are as defined by City of Hanford Municipal Code**

## Building Heights

Measured from finished floor elevation

| | |
|---|---|
| Primary Unit | 35 feet maximum |
| Accessory Structure | 25 feet maximum |
| With Res. Unit | 30 feet maximum |




## Off Street Parking

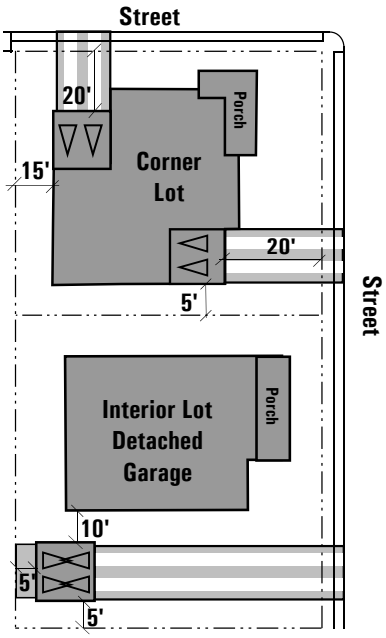
Parking Requirement: **2 spaces/unit minimum (4 spaces/unit if no street driveway access)**

(Minimum two covered spaces within a garage or carport)

## Garages

Refer also to Section 3.3.6

| | |
|---|---|
| Coverage | 50% maximum of first floor front elevation |
| Front Loaded Garage | |
| Front Yard Setback | 20 feet minimum |
| Corner Side Yard Setback | 20 feet minimum |
| Detached Garage | |
| Side Yard (Interior) | 5 feet minimum |
| Side Yard (Street side) | 20 feet minimum |
| Rear Yard | 5 feet minimum (setback a min. of 15' from alley centerline) |




Note: When alley is available, no front loaded garage is allowed. (Refer to Residential policy F. and Garage Design Guidelines E.)

## Porches

Refer also to Section 3.3.7

Requirement: 60% of all units

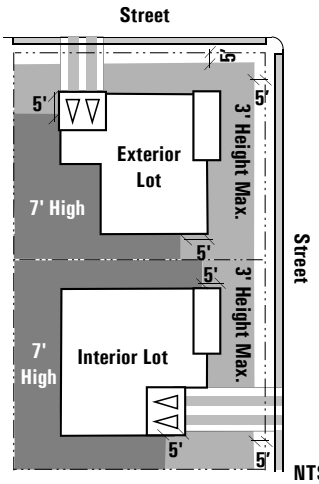
## Fencing and Walls

Refer also to Section 3.3.8

Within Setbacks

| | |
|---|---|
| Front and Side Yard | 3 feet maximum height (Must be 5' minimum behind property line and a minimum of 50% transparent) |
| Rear and Side Yard | 7* feet maximum height (Along rear and side property line when setback a minimum of 5' behind leading edge of house) |
| Along Alley | 7* feet maximum height (Along rear property, setback 3 feet minimum from alley Right of Way. |

*As per city standards.




HANFORD California



Alternative Garage location for small lot development.



Centrally located common spaces provide a safe place for children to play

### 3.4.4 Small Lot Low Density Development

The Live Oak Master Plan provides for small lot single family residential units as permitted under the Planned Unit Development (PUD) provision of the Hanford Municipal Code. These small lot configurations are allowed under the General Plan in exchange for public amenities such as open space and parks. The smaller lot size allows for zero lot line homes, patio homes, and town homes providing greater variety and price ranges for housing. Small lot residential units also add character to achieve the goal of variation of architectural styles within neighborhoods.

Small lot residential units shall be similar to Low Density units, but on a smaller scale and at a higher density. Careful attention to detail and architectural design will ensure these residential units share the same character and qualities of larger lot units within neighborhoods. The following are site planning and building design guidelines for the development of small lot residential units.

#### Site Planning Guidelines

a. Open street patterns that create a network of circulation connections with multiple points of access are encouraged.

b. Walled and isolated residential enclaves are strongly discouraged.

c. Use of cul-de-sacs shall be minimized. Where feasible, access from cul-de-sacs shall be daylighted and connected to a larger circulation system to allow for pedestrian access.

d. All yard areas and setbacks shall be landscaped in accordance with the Hanford Municipal Code section 17.10.160 ~~17.18.100 D and E~~. Street trees shall be planted 30 feet on center within planting strips. An additional 3 trees shall be planted within lots to improve passive solar design.

e. Lots shall vary in width, depth and articulation to allow variety and flexibility in building placement and massing.

f. ~~The use of alleys is strongly encouraged within small lot development.~~

g. Provisions for the storage of 3 refuse containers are required for all single family, detached SMLD homes.

### Building Design Guidelines

a. A variety of building types and styles shall be provided within a residential neighborhood. This is accomplished through variation in building heights, massing, setbacks, and architectural elevations and floorplans. No more than 33% of homes within Small Lot LD designation shall have the same architectural design.

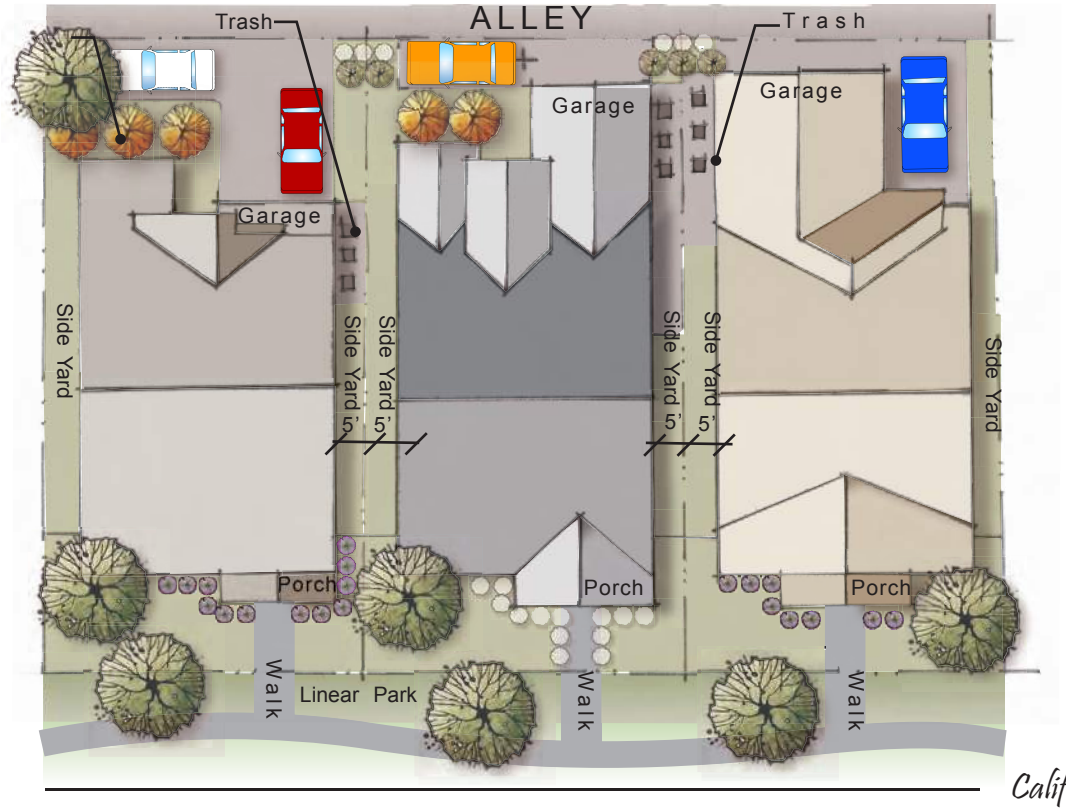
b. Houses shall be oriented toward the street or park. Outdoor sitting spaces such as porches, balconies, or courtyards are strongly encouraged.

c. Architectural features such as porches, chimneys, door placement, window proportions, dormers, wood detailing, siding, and color scheme shall be coordinated, compatible with the neighborhood context, and complement the overall building design.

d. Building wall and roof planes shall be varied and articulated into smaller modules and features to reduce the bulk and size of the structure.

e. All utility and mechanical equipment shall be screened from view (except photovoltaic panels). Roof mounted air conditioners, coolers, and antennas are discouraged.

f. Garage locations and articulation shall be designed to minimize their visibility. Alternate garage loading configurations are encouraged (see Residential Garage Design Guidelines).

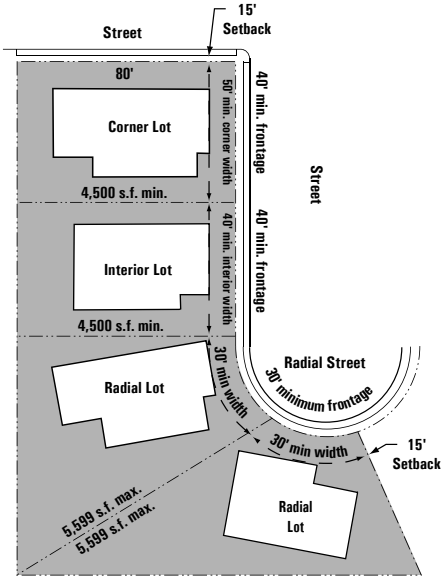


# Table 3.4 Small Lot (LD) Development Standards

| | |
|---|---|
| **Land Use** | **Low Density Residential** |
| Base Zone District | RM2 |
| Density Range | 7-9 Dwelling units/gross acre |
| Permitted Use | HMC Section 17.18.020 |
| Administrative Approval | HMC Section 17.18.030 |
| Conditional Uses | HMC Section 17.18.040 |

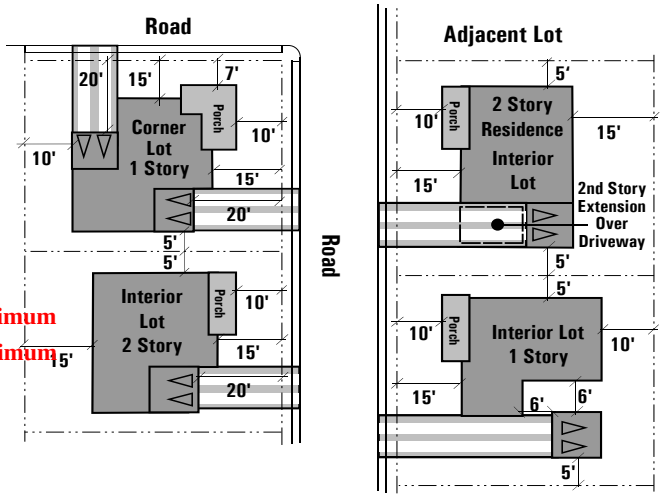
## Lot Configuration

| | |
|---|---|
| Lot Area | 3,200 sq. feet-5,999 sq. feet<br>min max |
| Width | |
| Interior Lot | 40 feet minimum<br>(Measured at front yard setback) |
| Corner Lots | 50 feet minimum<br>(Measured at front yard setback) |
| Radial Lots | 30 feet minimum<br>(Measured at front yard setback) |
| Depth | 80 feet minimum |
| Frontage | 40 feet minimum (local streets)<br>(Measured at edge of ROW) |
| | 30 feet minimum (radial streets)<br>(Measured at edge of ROW) |
| ~~Lot Coverage~~ | ~~50% maximum~~ ~~(May be exceeded when fronting linear green)~~ |
| Landscaping | 30% of lot minimum |




## Setbacks

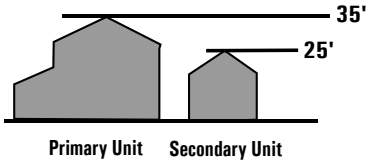
| | |
|---|---|
| Front Yard | |
| Covered Porch | 10 feet minimum |
| Living Space | 15 feet minimum |
| Garage | 20 feet minimum |
| Side Yard | |
| Interior Lot | 5 feet minimum |
| ~~Corner Lot (Street Side)~~ | ~~13 feet minimum~~ 10 feet minimum |
| ~~Garage (Side Entry)~~ | ~~15 feet minimum~~ 20 feet minimum |
| Covered Porch | 7 feet minimum |
| Rear Yard | 10 feet minimum (one story) |
| Multi-Story | 5 feet additional per story |
| | (Homes fronting linear parks require 5 feet rear yard setback regardless of building height) |
| Accessory Structures | 5 feet from rear or side property line |
| | (When located in the rear yard) |
| Distance Between Buildings | 6 feet minimum, or allowed per the Building Code |



## Building Heights

Measured from finished floor elevation

| | |
|---|---|
| Primary Unit | 35 feet maximum |
| Accessory Structure | 25 feet maximum |




## Off Street Parking

Parking Requirement: **2 spaces/unit minimum (4 spaces/unit if no street driveway access)**

(Minimum two spaces within a garage or carport)

## Garage

Refer also to Section 3.3.6

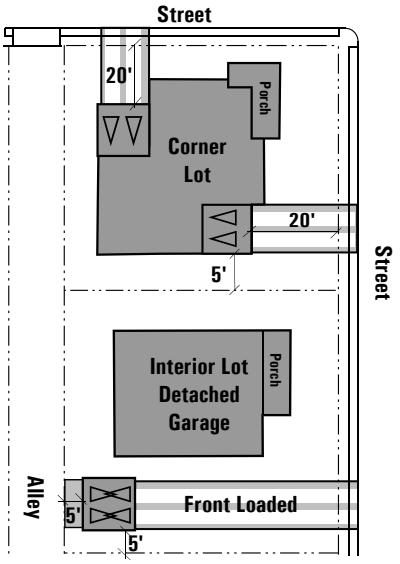
Coverage: **50% maximum of first floor front elevation**

Front Loaded Garage

| | |
|---|---|
| Front Yard Setback | 20 feet minimum |
| Corner Side Yard Setback | 20 feet minimum |

Detached Garage

| | |
|---|---|
| Side Yard (Interior) | 5 feet minimum |
| Side Yard (Corner) | 20 feet minimum |
| Rear Yard | 5 feet minimum |
| ~~Setback from Alley~~ | ~~(Setback 15 feet minimum from centerline of alley)~~ |




~~Note: When alley is available, no street loaded garage is allowed. (Refer to Residential policy F. and Garage Design Guidelines E.)~~

## Porches

Refer also to Section 3.3.7

Requirement: 60% of all units

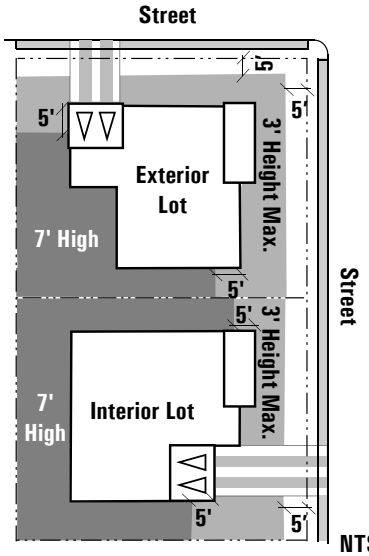
## Fencing and Walls

Refer also to Section 3.3.8

Within Setbacks

| | |
|---|---|
| Front and Side Yard | **3 feet maximum height** (Must be 5' **minimum behind property line and** a minimum of 50% transparent) |
| Rear and Side Yard | **7* feet maximum height** (Along rear and side property line when setback a minimum of 5' behind leading edge of house) |
| Along Alley | **7* feet maximum height** (Along rear property, setback 3 feet minimum from alley Right of Way. |

*As per city standards.




NTS

HANFORD California



Alley-loaded garages provide for direct park frontage, increasing the sense of community.



Common landscaped areas adjacent to residences are strongly encouraged



Elevated porches provide a sense of privacy and also provide interesting architectural articulation.

### 3.4.5 Medium Density Residential (MD)

Medium Density Residential (MD) provides for a variety of single-family detached, attached, and multi-family units with density ranging from 7-15 units per gross acre. This designation is intended to provide a variety of housing options within the Plan Area through the use of creative site planning, unit clustering and design innovation. Detached MD products are encouraged when abutting LD designated areas to create a sense of continuity amongst neighborhoods. The MD designation is located along Hume Avenue. The following are site planning and building design guidelines for Medium Density Residential.

#### Site Planning Guidelines

a. Open street patterns that create a network of circulation connections with multiple points of ingress and egress are encouraged.

b. Walled and isolated residential enclaves are strongly discouraged.

c. Use of cul-de-sacs shall be minimized. Where feasible, access from cul-de-sacs shall be daylighted to allow for pedestrian access.

d. The design and character of all fencing and walls shall complement the design of adjacent structures, and provide adequate privacy and security.

e. Common areas, yards, and parking areas shall be thoroughly landscaped.

f. All yard areas and setbacks shall be landscaped in accordance with the Hanford Municipal Code section 17.10.160 ~~17.18.100 D and E~~. Street trees shall be planted 30 feet on center within planting strips. An additional 3 trees shall be planted within lots to improve passive solar design.

g. Yard areas shall accommodate garbage can storage ranging from 1 to 3 cubic yards per City Standards.

### Building Design Guidelines

a. A variety of building types and styles shall be provided within each residential neighborhood. This is accomplished with variation in building heights, massing, setbacks, and architectural elevations and floorplans. No more than 33% of individual units within MD designation shall have the same architectural design.



Outdoor sitting spaces create an inviting affect for a neighborhood.

b. Houses shall be oriented toward the street or park. Outdoor sitting spaces such as porches, balconies, and courtyards are strongly encouraged. Attached products that face LD designated areas should be of similar building mass and design.

c. Architectural features such as porches, chimneys, door placement, window proportions, dormers, wood detailing, siding, and color scheme shall be coordinated, compatible with the neighborhood context, and complement the overall building design.



Landscaping helps to enhance the alley/parking court

d. Building wall and roof planes shall be varied and articulated into smaller modules and features to reduce the bulk and size of the structure.

e. Two or three story structures of varying height are encouraged for attached dwelling units to provide variety in building mass.

f. Building wall and roof planes shall be varied and articulated into smaller modules and features to reduce the structures' apparent bulk and size.



Variation in architectural style gives interest to the streetscape

g. All utility and mechanical equipment shall be screened from view (except photovoltaic panels). Roof mounted air conditioners, coolers and antennas are discouraged.

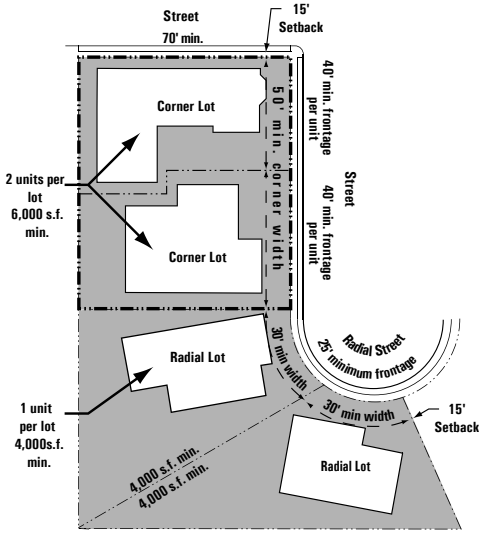
h. Garage locations and articulation shall be such that structure visibility is minimized. Alternate garage loading configurations are encouraged. Garages and car ports should be accessible from parking courts or internal parking lots. ~~Street-loaded garages are discouraged.~~

# Table 3.5 Medium Density Residential (MD) Standards

| | |
|---|---|
| **Land Use** | **Medium Density Residential** |
| Base Zone District | ~~RM2~~ **RM** |
| Density Range | **7-15 Dwelling units/gross acre** |
| Permitted Use | **HMC Section ~~17.20.020~~ 17.10** |
| Administrative Approval | **HMC Section ~~17.20.030~~ 17.10** |
| Conditional Uses | **HMC Section ~~17.20.040~~ 17.10** |

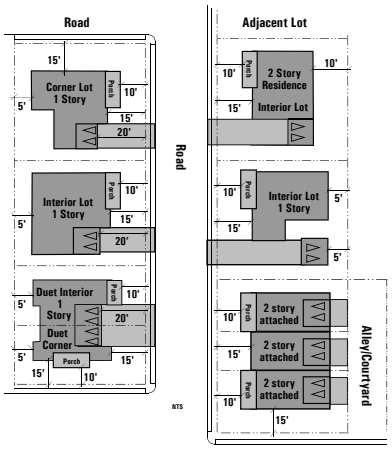
## Lot Configuration

| | |
|---|---|
| Lot Area | **4,000 square feet minimum** (2 units may be permitted per minimum lot size. Additional 2,000 s.f. per unit above minimum) |
| Width | |
| Interior Lot | **40 feet minimum** (Measured at front yard setback) |
| Corner Lot | **50 feet minimum** (Measured at front yard setback) |
| Radial Lot | **30 feet minimum** |
| Depth | **70 feet minimum** |
| Frontage (per unit) | **40 feet minimum (Local street)** (Measured at edge of ROW) |
| | **25 feet minimum (Radial lot)** (Measured at edge of ROW) |
| ~~Lot Coverage~~ | ~~**50% maximum**~~ |
| Landscaping | **30% of lot minimum** |
| 5 or more units | **Common Recreation Area Required** |




## Setbacks

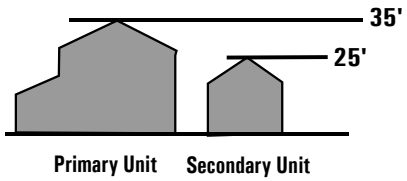
| | |
|---|---|
| Front Yard | |
| Covered Porch | **10 feet minimum** |
| Living Space | **15 feet minimum** |
| Garage | **20 feet minimum** (Setback a min. of 3 feet from leading edge) |
| Side Yard | |
| Covered Porch | **10 feet minimum** |
| Interior | **0 feet minimum** |
| Corner (Street Side) | **15 feet minimum** |
| Garage | **20 feet minimum** |
| Rear Yard | |
| Primary Building | **5 feet minimum per story** (Homes fronting linear parks require 5 feet rear yard setback regardless of building height) |
| Accessory Structures | **5 feet from rear or side property line** (When located in the rear yard) |



## Building Heights

Measured from finished floor elevation

| | |
|---|---|
| Primary Unit | 35 feet maximum |
| Accessory Structure | 25 feet maximum |




## Off Street Parking

Parking Requirement: **2 spaces / unit minimum (4 spaces/unit if no street driveway access)**

(Minimum two spaces within a garage or carport)

## Garage

Refer also to Section 3.3.6

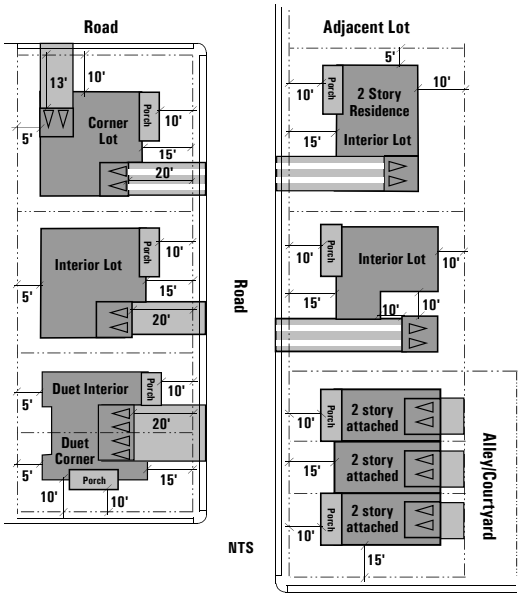
~~Coverage~~ **50% maximum of first floor front elevation**

Front Loaded Garage

| | |
|---|---|
| Front Yard Setback | 20 feet minimum |
| Corner Side Yard Setback | 20 feet minimum |

Detached Garage

| | |
|---|---|
| Side Yard (Interior) | 0 feet minimum |
| Side Yard (Corner) | 20 feet minimum |
| Rear Yard | 5 feet minimum (Setback 15 feet minimum from centerline) |




~~Note: When alley is available, no street loaded garage is allowed. (Refer to Residential Policy F. and Garage Design Guidelines E.~~

## Porches

Refer also to Section 3.3.7

Requirement: 60% of all units

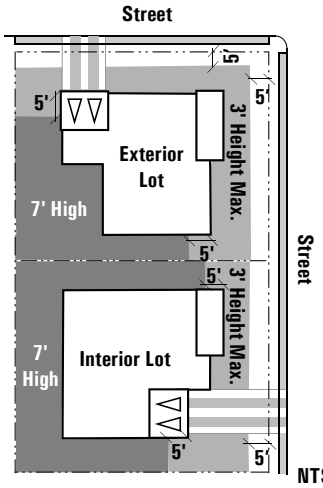
## Fencing and Walls

Refer also to Section 3.3.8

Within Setbacks

| | |
|---|---|
| Front and Side Yard | 3 feet maximum height (Must be 5' minimum behind property line and a minimum of 50% transparent) |
| Rear and Side Yard | 7* feet maximum height (Along rear and side property line when setback a minimum of 5' behind leading edge of house) |
| Along Alley | 7* feet maximum height (Along rear property, setback 5 feet minimum from alley Right of Way. |

*As per city standards.



### 3.4.6 Neighborhood Garage Design Guidelines

~~The Live Oak Master Plan encourages alternative garage placement within neighborhoods to de-emphasize the dominance of garages,~~ thereby enhancing the streetscape. This distinction provides a community identity that is set apart from other residential subdivisions. The following are garage design guidelines that encourage various garage configurations.

#### Garage Design Guidelines

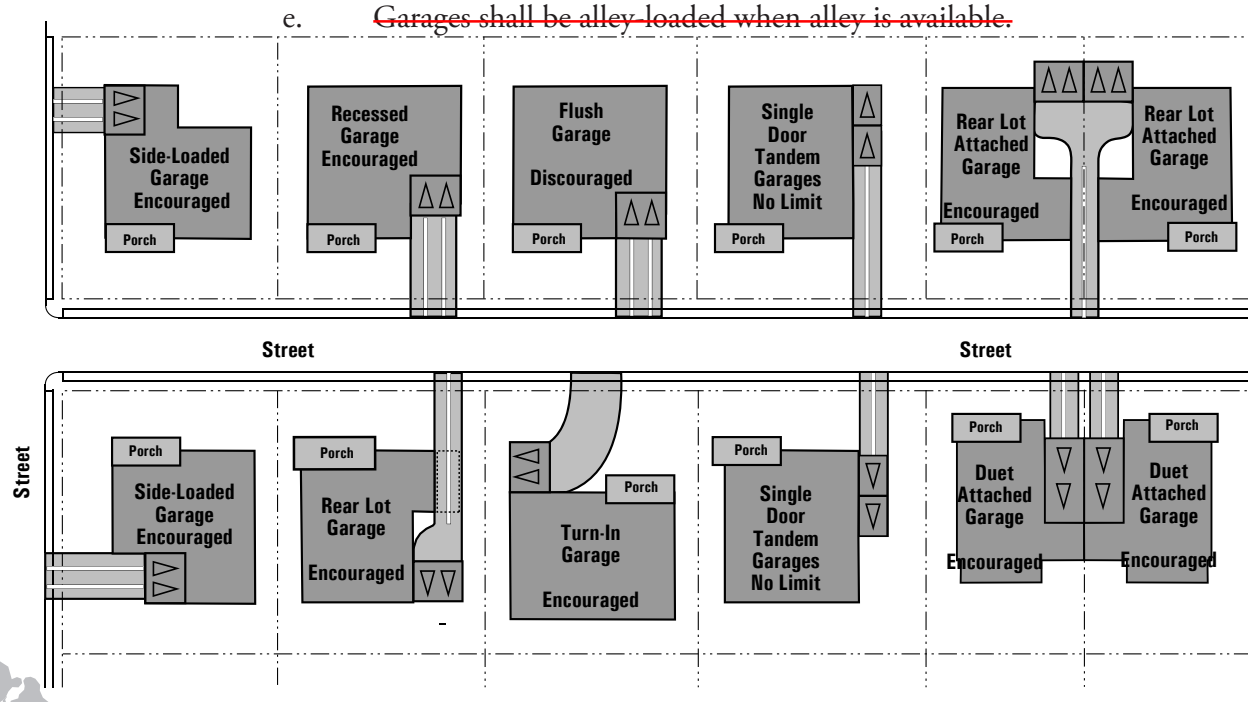
a. Alternative garage loading configurations are strongly encouraged (i.e. rear lot garages, turn-in garages, ~~alley loaded garages~~, detached garages).

b. Each individual development shall include a variety of garage placement configurations to meet the goal of a variety of housing types and architectural designs.

c. The visual impact of garages and driveway aprons shall be minimized. ~~Driveway aprons shall not be wider than 16 feet at street edge.~~

d. The prominence of the garage shall be minimized to create a visual relationship between the front entrance of the residence and the street.

e. ~~Garages shall be alley-loaded when alley is available.~~



### 3.4.7 Residential Porch/Courtyards Design Guidelines

Residential units within the Plan Area are strongly encouraged to provide porches, balconies, courtyards, and other gathering spaces outside of primary residential structures to create an inviting community. These spaces shall be designed and articulated to maximize visibility and enhance the pedestrian-oriented atmosphere. The following guidelines establish how porches/courtyards shall be designed within the Plan Area.

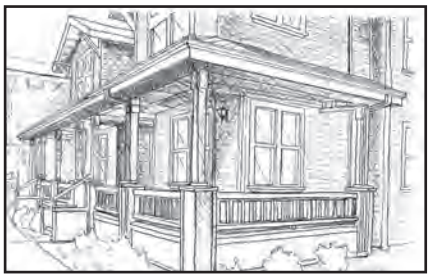


Corner lots are strongly encouraged to include a wrap around porch on both street sides to establish a strong "street relationship"

#### Porch/Courtyard Design Guidelines

a. Residential units are strongly encouraged to provide an outdoor sitting area that is oriented to the street.

b. Porches and courtyards should be used to maximize the front entry of a home that provides an opportunity for increased interaction among residents.



Porches shall include detail columns and railings consistent with the architectural character of the building or neighborhood

c. Porches shall have a minimum 6-foot depth of unobstructed sitting area.

d. ~~Corner lots are strongly encouraged to include a wrap around porch on both street sides to establish a strong "street relationship".~~



Porches should be used to maximize the front entry of a home, providing an opportunity for increased interaction among residents

e. Porches shall include detailed columns and railings consistent with the architectural character of the building or neighborhood.

f. Courtyards shall be a semi-enclosed private, front-yard living area that is large enough to accommodate seating.

g. Porches shall be consistent with the setbacks found within the Master Plan.



Residential units are strongly encouraged to provide an outdoor sitting area that is visually oriented to the street

### 3.4.8 Residential Walls and Fences

Walls and fences can provide a setting for entryway landscaping and treatments that differentiate neighborhoods and assist in defining a sense of place. Fences also provide separation between residential units for individual privacy, safety, and security. Solid fences or block walls may also provide separation between residential and more intense uses to mitigate noise and other encroachments. All fencing will be installed by the developer(s) and shall coordinate with landscape treatments.

In addition to providing a setting for entryway landscaping, walls perform functions such as noise attenuation for residential and noise sensitive uses along major and heavily traveled streets. Berms and landscaping of walls along public streets is essential to create a boulevard effect and avoid a solid walled environment that may be susceptible to vandalism.

#### Wall and Fence Design Guidelines

a. Walls and fences shall be coordinated throughout the Plan Area.

b. Walls and fences shall incorporate materials, colors, and shapes that reflect the character of the Plan Area and its surroundings.

c. Walls and fencing shall be constructed of high quality, long lasting, low maintenance, and graffiti resistant materials.

d. Fencing and walls shall be designed to minimize policing problems, indefensible spaces, hiding spots, and shall not diminish public or private views.

e. A ~~6 foot high minimum~~ decorative wall of solid material (refer to Table 3.6) shall be provided along Hume Avenue, 12th Avenue, collector streets located along slough frontages, and portions of Houston Avenue adjacent to residential uses for noise attenuation.

f. Perimeter walls shall not exceed 7 feet in height (as per city standards), except as required for noise attenuation purposes, and shall be constructed of solid material (i.e. decorative masonry, split face concrete block, plaster, stucco, or brick).

g. Residential yard fencing shall not exceed 7 feet in height (as per city standards), shall be constructed from redwood, cedar or comparable, durable material.

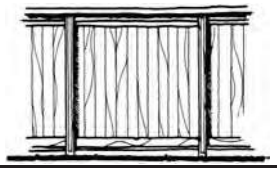
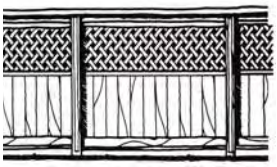
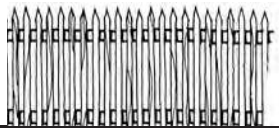
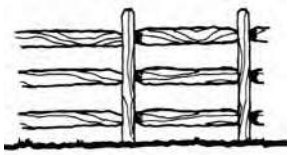
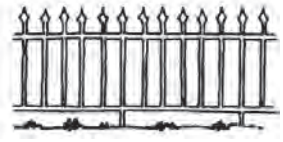
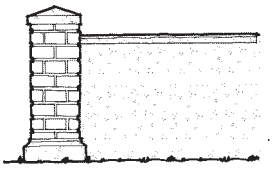
h. Open fencing used in front yard setbacks shall not exceed 3 feet in height, be of decorative material (i.e. wood pickets, split rail, etc.), maintaining a minimum transparency of 50%.

i. Edge Fencing along the open space conservation areas shall not exceed 3 feet in height shall be of decorative material (i.e. wood pickets, split rail, etc.)

j. Landscape improvements shall complement the character of the wall or fence.

k. Chain-link fencing is prohibited within the front yard, side yard or rear yard.

**Table 3.6 Walls and Fencing Guidelines**

| Fence Type | Height Limit (feet) | Permitted Application | Image |
|---|---|---|---|
| **Wood:** Wood fence with galvanized metal posts. | 7' | Rear & side yard of residential lots |  |
| **Good Neighbor:** Wood fence with galvanized metal posts and a decorative cap. Cap should be a semi-transparent panel. | 7' | Rear & side yard of residential lots when visible from public view |  |
| **Picket:** Picket fence with galvanized metal posts. | 3' | Front yard of residential lots, and along side yard property lines to the front façade of the house |  |
| **Split Rail:** White vinyl split rail fencing that reflects the agrarian character of the area. | 4' | Front yard of R-1-12 residential lots, along side yard property lines to the front façade of the house; Open ended cul-de-sacs leading to open space; May also be used in conjunction with neighborhood entries. (Min. 50% transparency) |  |
| **Wrought Iron:** Wrought iron fence with wrought iron posts. | 4' | Front yard of residential lots, and along side yard property lines to the front façade of the house. |  |
| **Solid Masonry Wall:** Solid masonry wall constructed per City of Hanford Standards. | 7' | Decorative wall to be provided along Hume Avenue, 12th Avenue, Houston Avenue and all areas bordering landscaped common areas for noise attenuation purposes |  |



Units fronting onto parks and open space encourages "eyes on the park"

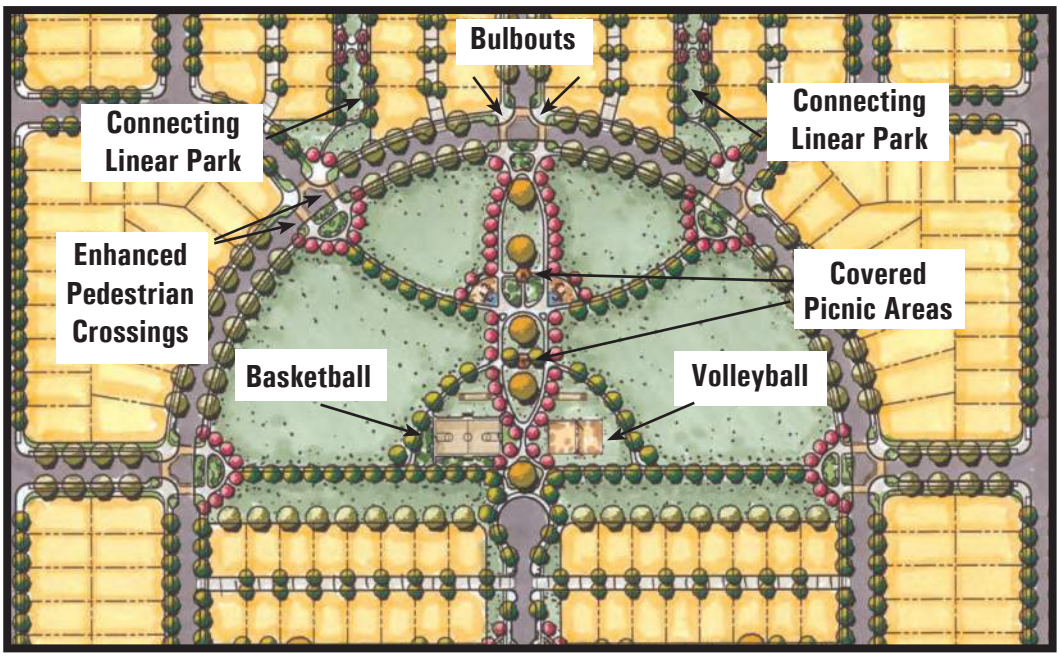


Neighborhoood parks and tot-lots should include play structures

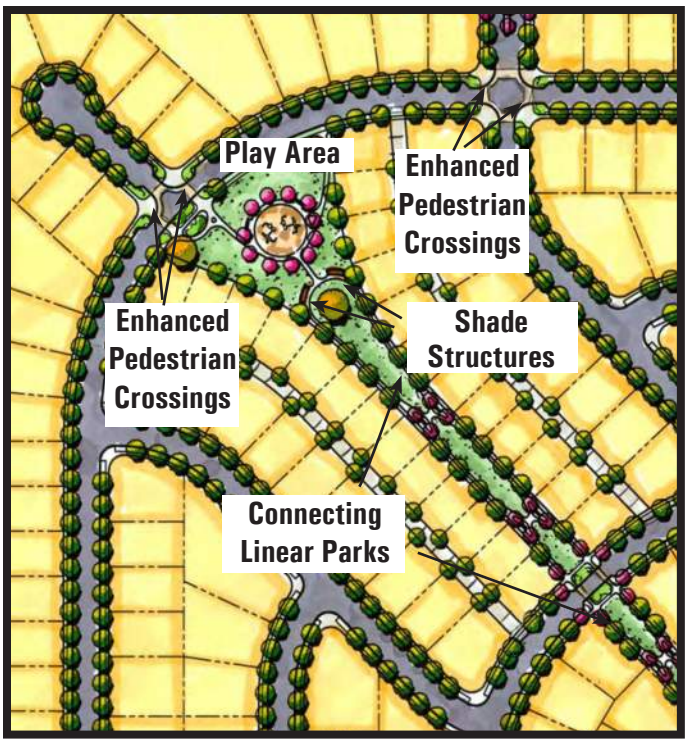
## 3.5. Parks and Open Space

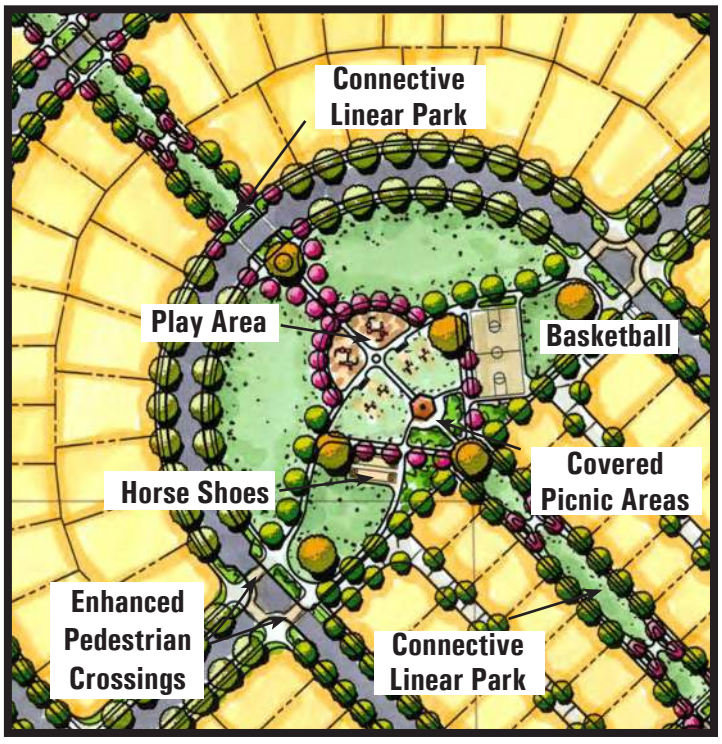
Parks (P) and Open Space (OS) are located within the Plan Area. There are three planned neighborhood parks totaling 21.0 gross acres, and smaller pocket parks located in various neighborhoods. Designated Open Space, totaling 31.6 acres, is located within Lone Oak and Sand Sloughs, as well as directly adjacent to the west side of 12th Avenue, along the minor park entry collector. The Open Space corridors preserve riparian woodland areas and will be accessible through pedestrian paths that are linked to adjacent streets and accessible to neighborhoods. Design Standards for parks and trails are located in Chapter 5.

**Figure 3-2 Conceptual Neighborhood Parks**




Neighborhood Park west of 12th Avenue




Neighborhood Parks east of 12th Avenue

## 3.6. Community Gateways

Community gateways create a statement that clearly identifies entry into a specific place for residents and visitors alike. There are two types of gateways within the Plan Area: Major Gateway and Minor Gateway. The major gateways are located near areas of significance, including the intersections of 12th and Hume Avenues and Houston and 12th Avenues. Minor gateways are located at Houston Avenue and Lone Oak Slough, Hume Avenue and Lone Oak Slough, Hume Avenue and Sand Slough, as well as Houston Avenue and Sand Slough. Major gateways should convey a sense of arrival into this area of Hanford. Gateways should be designed to incorporate specific elements that identify and reinforce the history of Hanford, and correspond with like colors and elements of architectural styles that exist throughout the Master Plan Area. The following are descriptions and sketches of the gateways within the Plan Area.

### 3.6.1 Major Gateways

#### *12th Avenue at Hume Avenue*

The gateway along 12th Avenue at Hume Avenue should create a sense of arrival into the Plan Area. This gateway should face southbound motorists along 12th Avenue. Accent paving within crosswalks in the entire intersection, accent lighting for the main gateway, and ornamental trees should be incorporated into this gateway design. If the gateway is located along a landscape easement, the landscaping should blend in with the gateway.




Major Gateway

***Houston Avenue at 12th Avenue***

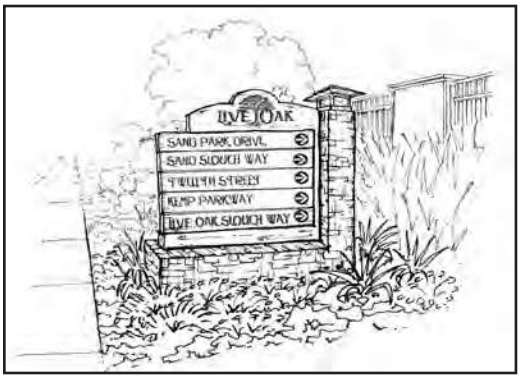
The gateway along Houston Avenue at 12th Avenue should provide a sense of arrival, not only to the Plan Area, but the City of Hanford as well. ~~The City should work closely with developers to design a gateway incorporating an entry feature to both the Plan Area and the City.~~ A rural characteristic responding to adjacent agriculture lands that includes accent lighting and ornamental trees should be incorporated into this gateway.

## 3.6.2 Minor Gateways

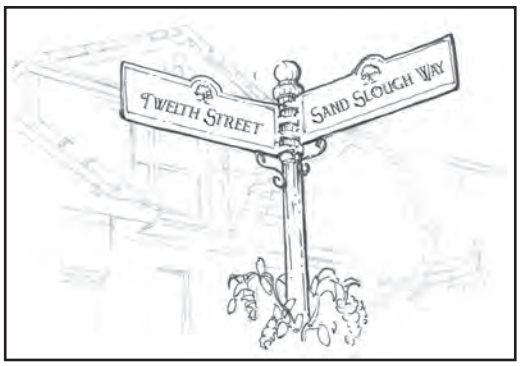
Minor gateways define the eastern and western Plan Area Boundaries and should be located at the intersection of the Minor Collector along the sloughs with Houston and Hume Avenues, and should welcome residents and visitors who are traveling from the east or west. The gateways should be oriented towards Houston or Hume Avenue as appropriate, and incorporate a more rural characteristic compared to other gateways within the Plan Area. The minor gateway should include accent lighting and vegetation that is comparable to that found within Lone Oak and Sand Sloughs. Tree species that are used within the gateway should include species found within the Master Tree list in Section 3.9.



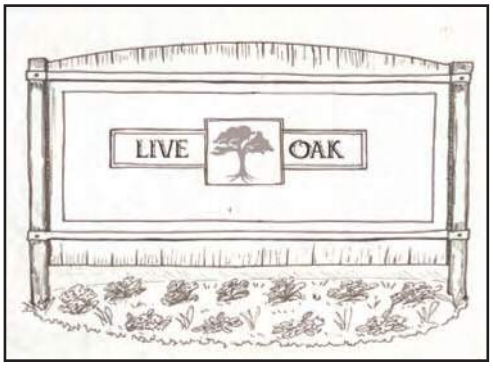

Minor Gateway at Slough




Neighborhood directional signage should be grouped




Enhanced street name signs are encouraged




Signage should be used to indicate entrance to Plan Area, or identify amenities such as parks

## 3.7 Neighborhood Signage

Signs within neighborhoods provide a cohesive character and identity. Proper design and application of signs orient future residents and visitors. By directing drivers to locations, signage improves circulation efficiency and access to important neighborhood designation points. ~~Temporary project specific signs and marketing logos shall not be permitted because these signs reinforce a notion that each neighborhood is separate within the community, rather than each neighborhood as part of a whole community.~~

### 3.7.1 Neighborhood Signage Design Guidelines

a. Ensure all elements reinforce and are coordinated with the character of the Plan Area and its surroundings.

b. Signage should incorporate like materials, colors, and shapes that reflect the Plan Area and Hanford.

c. Sign design should coordinate with any adjoining walls or fences.

d. Signs should be constructed of high quality, low maintenance, and long lasting materials.

e. Signs should be clear, concise, and informative.

f. Signs shall be used to identify uses such as various residential developments, open space paths, neighborhood parks, and pocket parks.

g. Street signs and directional signs should have a common design theme.

## 3.8 Neighborhood Lighting

Lighting standards respond to the need for safe, secure, and well lit streets, while encouraging pedestrian-scaled thematic lighting in key areas. Lighting is encouraged to contribute to the character of the Plan Area. Unobtrusive lighting, with its ability to provide soft, down-lit pockets of light, is required.

### 3.8.1 Neighborhood Lighting Design Guidelines

a. Efficient lighting patterns that minimize glare and avoid lighting pollution should be utilized.

b. Use of accent lighting to highlight features such as entries, trails, and accent landscaping is strongly encouraged.

c. Street lighting shall occur at all traffic intersections, and at regularly spaced intervals along public Rights-of-Way to provide safety for motorists and pedestrians.

d. Cobra style street lamps shall be limited to arterial streets and major collector streets (i.e. Hume Avenue).

e. Lighting performance standards shall meet those set forth by the Hanford Department of Public Works.

f. Lighting fixtures should be coordinated throughout the Plan Area and be consistent with architectural elements within neighborhoods.

g. Ornamental lighting of rural character within open space shall be placed at entrances of trails to help maintain a agricultural environment.

h. Ornamental street lighting shall utilize fixtures and poles available from Southern California Edison (SCE). The following combinations should be utilized:

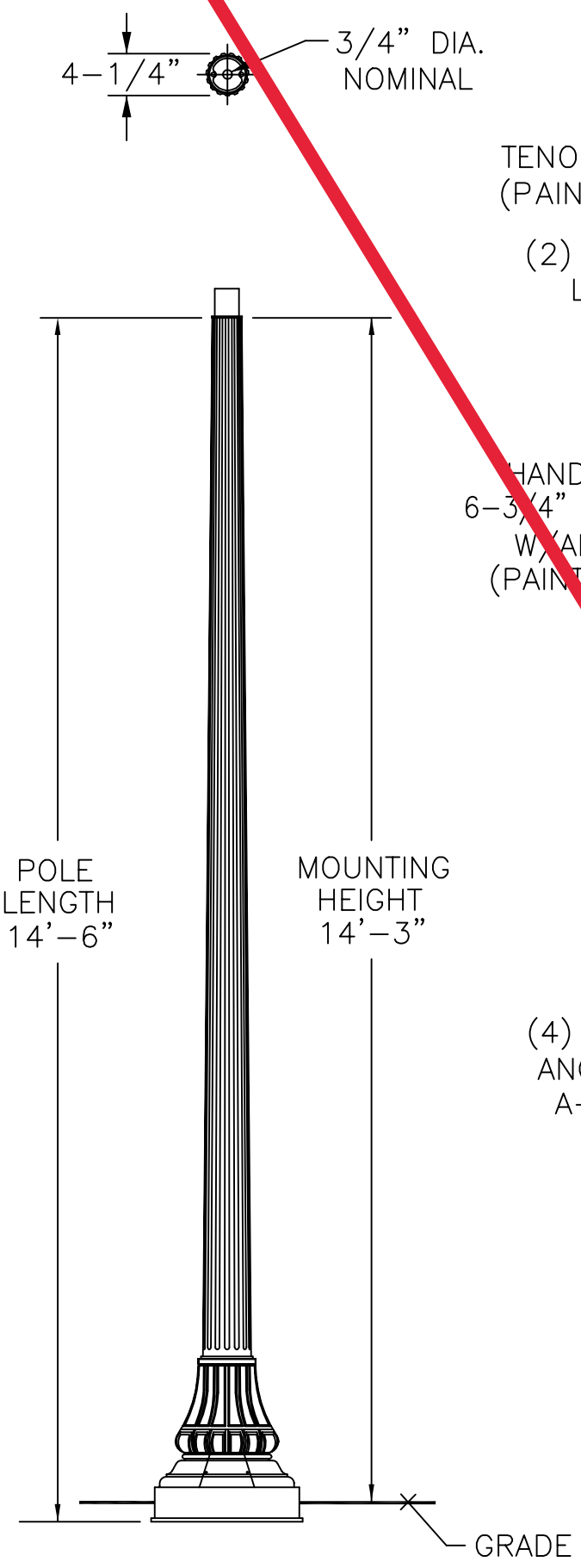
- For park areas: Glendora Sidewalk Pole with Acorn Pole ~~Top Fixture - 10 feet tall~~
- For residential and minor collector streets: Glendora ~~Sidewalk Pole with Acorn Pole Top Fixture - 18 feet tall.~~

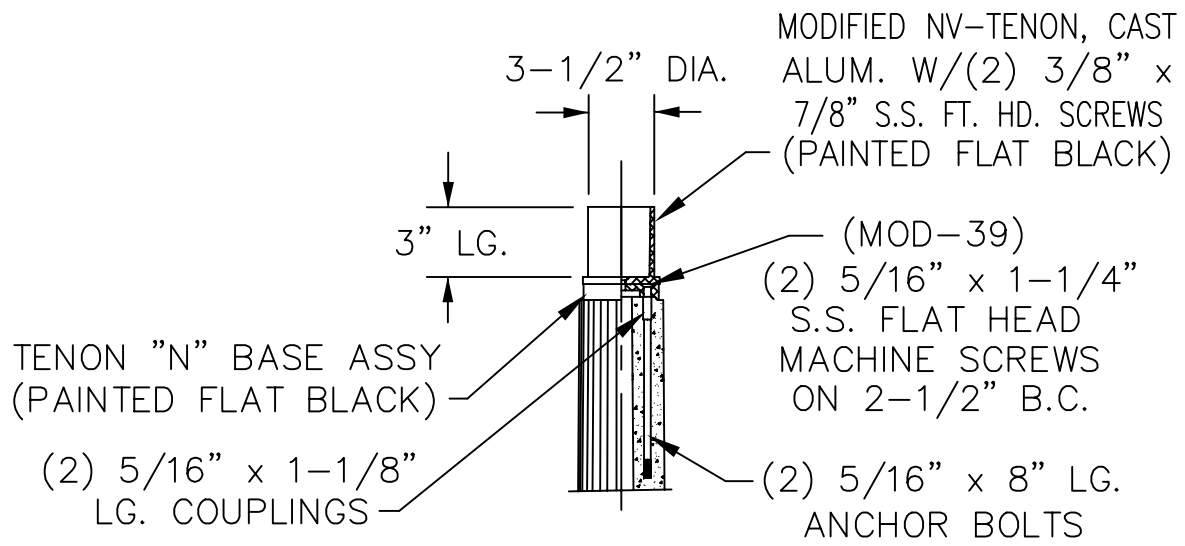


Neighborhood Lighting Example

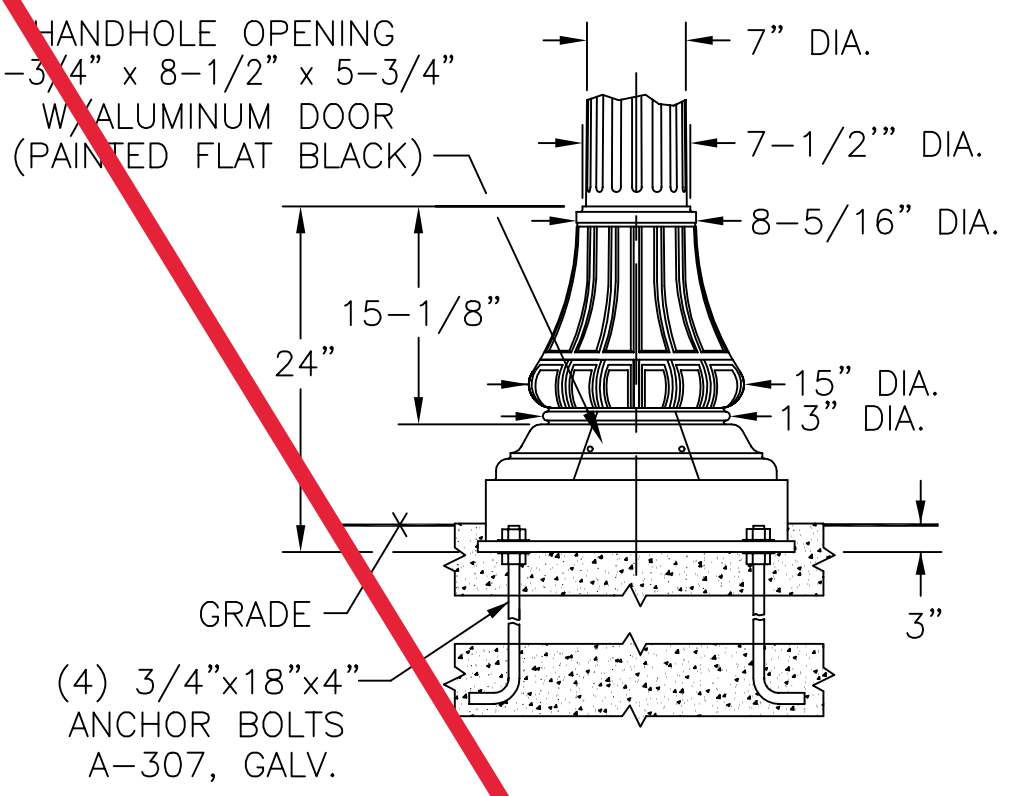
| QTY. | MATERIAL LIST |
|---|---|
| 1 | 26CT–14–12 EDISON BLACK W/MOD–39. |
| 1 | MODIFIED NV–TENON ASSY. (40022EM3P1A) |
| 1 | TENON "N" BASE ASSY. (40021EP1A) |
| 4 | ANCHOR BOLTS 3/4"x18"x4" A–307, GALV. |

(SCE MATERIAL CODE #040–01541)

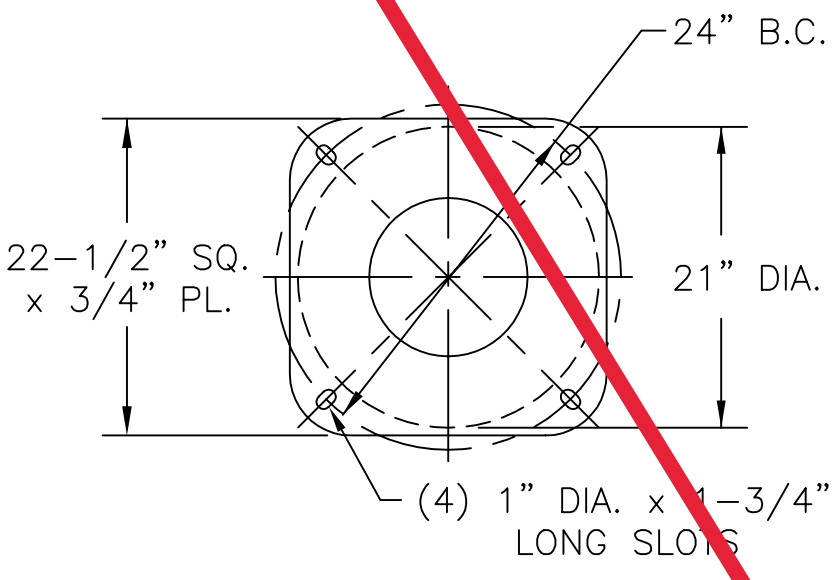



TOP DETAIL




BASE DETAIL




**NOTES:**

FINISH: (OTHER COLORS & ANTI–GRAFFITI COATING IS AVAILABLE).

CONCRETE TO BE 6,000 PSI COMPRESSION MINIMUM IN 28 DAYS.

POLES MANUFACTURED TO ASTM C–1089–88.

BASEPLATE ASTM A–36 FULLY PRESTRESSED WITH (4) 5/16" DIA. A–416 WIRES.

Ameron POLE PRODUCTS & SYSTEMS

**SOUTH CALIFORNIA EDISON**
**(040-01541) 26CT-14 W/TENON**

THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AMERON. IT SHALL NOT BE REPRODUCED, USED OR DISCLOSED TO ANYONE WITHOUT THE PRIOR WRITTEN PERMISSION OF AMERON

| DRAWN: G.C. | 2/00 | SCALE | DWG. NO. | REV |
|---|---|---|---|---|
| CHK'D: | | NONE | 040–01541 | |

City of HANFORD
COMMUNITY DEVELOPMENT DEPARTMENT
317 N. Douty St., Hanford, CA 93230
www.hanford.city | 559-585-2580

**RE: Minor Modification to the Live Oak Master Plan: 3.8.1 Neighborhood Lighting Design Guidelines**

In accordance with Planning Commission Resolution 2020-15 and Planned Unit Development No. 2005-04, Amendment #1, the Community Development Department may approve "minor modifications" to the approved Live Oak Master Plan.

The Community Development Department has received a request to modify 3.8.1 Neighborhood Lighting Design Guidelines (h) to replace the Glendora Sidewalk Pole with Acorn pole design. The City has reviewed the requested changes and has made the following modifications to the Plan:

*h. Ornamental Street lighting shall utilize fixtures and poles available from Southern California Edison (SCE). The following combination should be utilized:*

- *For residential and minor collector streets: ~~Glendora Sidewalk Pole with Acorn Pole~~* ***Ameron 1C123 Pole, "B" Scroll Carpinteria 41435 Arm, and K825 Bell. Pole, arm, and bell shall be black.***

Jason Waters, Community

Development Director

**MAYOR** Travis Paden
**VICE MAYOR** Mark Kairis
**COUNCIL MEMBERS** Lou Martinez | Kalish Morrow | Diane Sharp

Follow us!

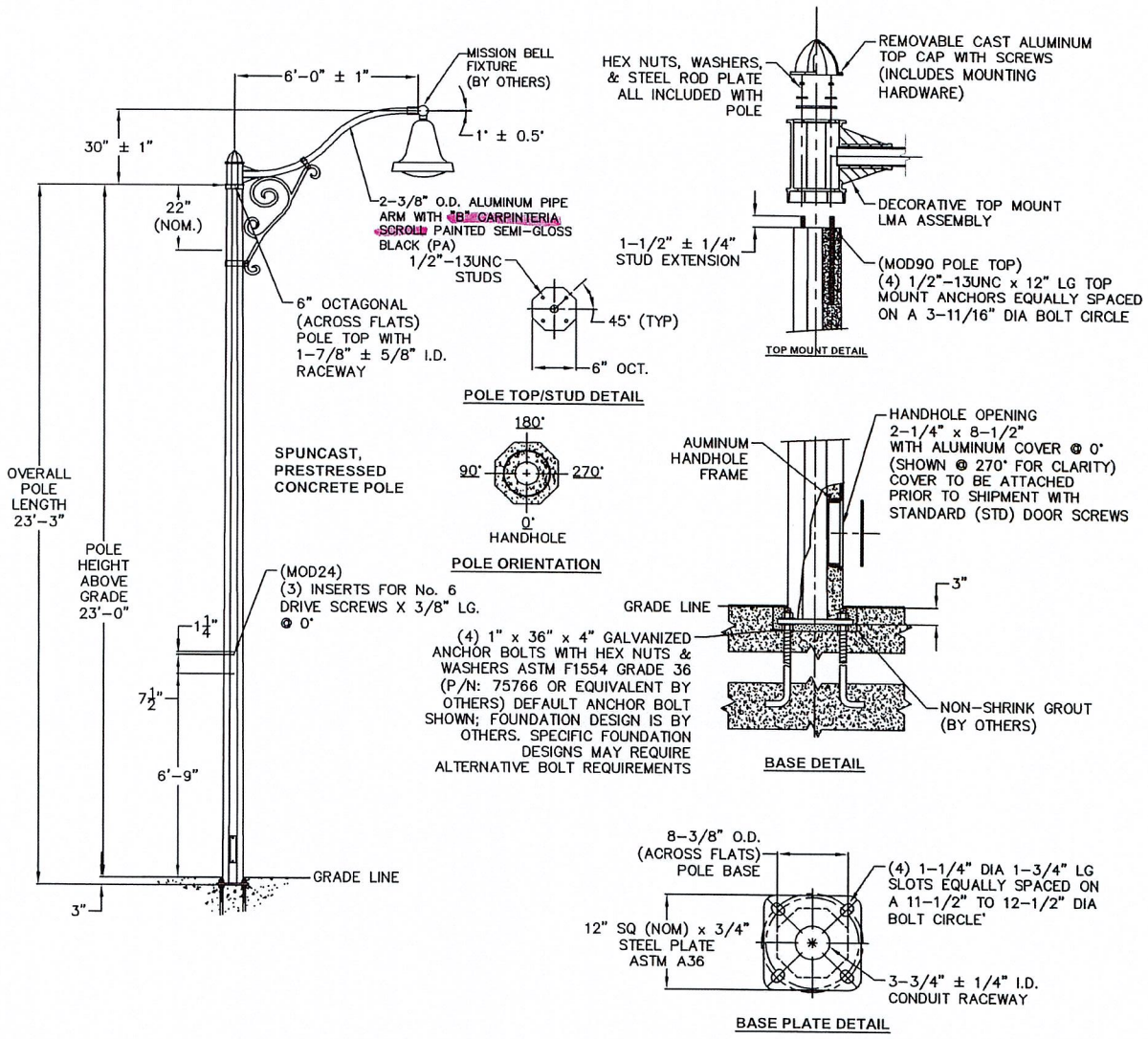
The undersigned hereby consent to the foregoing modification to the Master Plan:



AUG 3 0 2023

(Name) (Date)

(Name) (Date)




COMPLIANCE TO ANY CODE NOT EXPLICITLY LISTED ON THIS DRAWING IS NOT GUARANTEED. PLEASE CONTACT NATIONAL OILWELL VARCO IF YOU HAVE SPECIFIC CODE REQUIREMENTS.

| REV | DATE | DESCRIPTION | BY | APPR |
|---|---|---|---|---|
| | | | | |

CONTEMPORARY SERIES BASE PLATE OCTAGONAL POLE

| POLE DESIGNATION | POLE HIEGHT ABOVE GRADE | OVERALL POLE LENGTH | BASE O.D | BOLT CIRCLE | ULTIMATE GROUND LINE MOMENT (ft-lbs) | POLE WEIGHT (lbs) |
|---|---|---|---|---|---|---|
| 1C123 | 23'-0" | 23'-3" | 8-3/8" | 12-1/2" | 22,200 | 940 |

"F" LEVEL POLE CONFIG CODES

| OPTION CLASS | ENTRY | INFO |
|---|---|---|
| COATING | I | |
| HH COVER | 45209 | |
| DOOR SCREWS | STD | |
| MISC. MOD | MOD24 | |

"P" LEVEL POLE CONFIG CODES

| OPTION CLASS | ENTRY | INFO |
|---|---|---|
| MIX | 12 | |
| FINISH | 3 | |
| BASE PLATE | 45084 | NOTE 10 |
| POLE TOP CONFIG. | MOD90 | |

( ) POLES REQUIRED, EACH WITH:
(1) 6' SINGLE ALUMINUM PIPE ARM ASSEMBLY (P/N: 1AZB6PAA)
(4) 1" x 36" x 4" ASTM F1554 GR 36 GALVANIZED ANCHOR BOLTS (P/N: 75766)

NOTES:

1. MIX(123I): BLACK, EXPOSED AGGREGATE FINISH WITH ANTI-GRAFFITI COATING.
2. ASTM C-150 TYPE III GRAY CEMENT.
3. f'c @ 28 DAYS = 6,000 PSI, USING SPUN CYLINDER TEST.
4. f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
5. POLES MANUFACTURED PER ASTM C-1089-13 SPECIFICATIONS.
6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
7. BASEPLATE (ASTM A36) IS FULLY PRESTRESSED WITH (8) 5/16" DIA PRESTRESSING CABLES (ASTM A416).
8. THE OCTAGONAL ARM BRACKET MAY BE ROTATED & SET TO ALIGN WITH ANY OF THE POLE'S OCTAGONAL FLATS PER THE CUSTOMER'S REQUIREMENTS.
9. THE POLE (& TOP MOUNT SINGLE LMA) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY A SINGLE ALUMINUM PIPE LUMINAIRE ARM (NOT TO EXCEED 6' LENGTH, 2.1 SQ FT EPA & 25 LBS, ARM & CAN COMBINED) WITH ARM HOLDING A SINGLE LUMINAIRE (NOT TO EXCEED 2.5 SQ FT EPA & 50 LBS) PER THE 2013 AASHTO LTS-6 USING A 90 MPH WIND ZONE (3-SECOND GUSTS) CRITERIA FOR STREET LIGHT POLES. PLEASE CONTACT & ADVISE MANUFACTURER IF INTENDED LOADING EXCEEDS THESE VALUES.
10. POLE SHOWN IS SUITABLE FOR CAPPED BASEPLATE (ENCASED IN CONCRETE), OTHERWISE, OTHER NON-CAPPED INSTALLATION REQUIRES A GALVANIZED BASEPLATE.

**September 22, 2021**

APPROVED BY DATE

Ameron POLE PRODUCTS NOV
www.ameronpoles.com

CITY OF FARMERSVILLE
FARMERSVILLE, CA
1C123 POLE WITH SINGLE 6' ARM ASSEMBLY

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| DRAWN: | DATE: | APPR: | DATE: |
|---|---|---|---|
| T.L. | 8/12/21 | | |

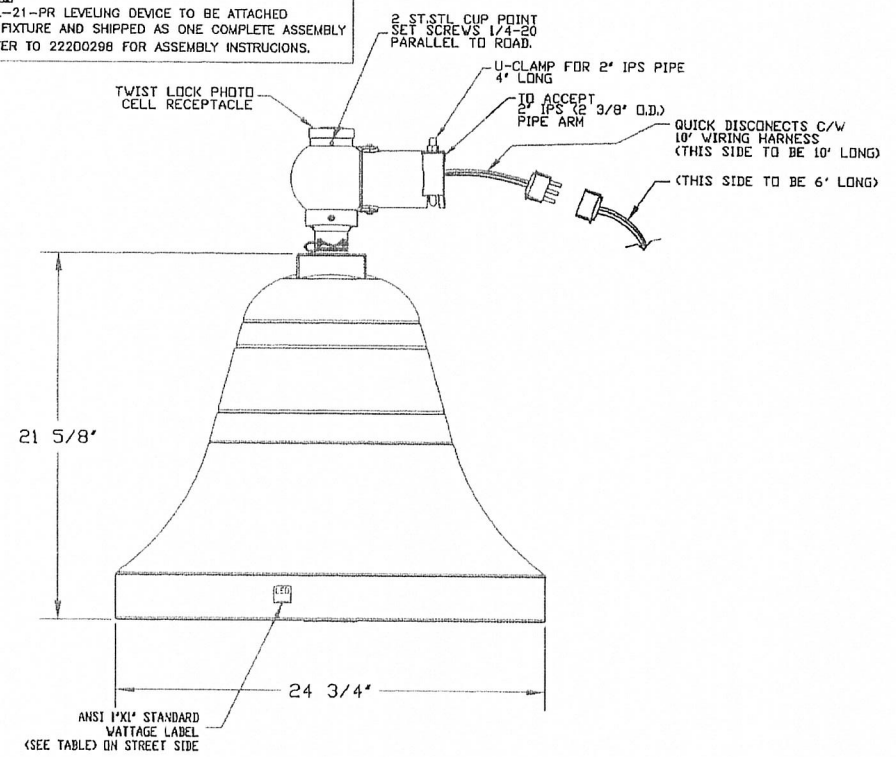
| DRAWING NUMBER | REVISION | SHEET | SCALE |
|---|---|---|---|
| 2108-022 | - | 1 OF 1 | NTS |

| PAINT: | |
|---|---|
| COLOUR: | |

| REV. | ALTERATION | DATE | BY |
|---|---|---|---|
| C | DRAWING HAD 3K/4K SELECTION, NOW ONLY 4K. | 09/05/19 | M.M. |
| D | B-U-G RATINGS ADDED | 03/11/20 | D.D. |

| SELECT ONE | EXISITING HID WATTAGE | REPLACE WITH 4K LED WATTAGE | SCE CATALOG NO. | BUG RATINGS | SCE MATERIAL # | KING CATALOG NO. |
|---|---|---|---|---|---|---|
| | 50W | 30W | K825-P4-III-30-KPL21-PR7-4K | B1-U0-G1 | 10203301 | K825-P4FL-III-30(SSL)8080-120:277-KPL21-PR7-4K |
| | 70W | 50W | K825-P4-III-50-KPL21-PR7-4K | B1-U0-G1 | 10203297 | K825-P4FL-III-50(SSL)8060-120:277-KPL21-PR7-4K |
| | 100W | 75W | K825-P4-III-75-KPL21-PR7-4K | B2-U0-G2 | 10203302 | K825-P4FL-III-75(SSL)8080-120:277-KPL21-PR7-4K |
| | 150W | 100W | K825-P4-III-100-KPL21-PR7-4K | B2-U0-G2 | 10203300 | K825-P4FL-III-100(SSL)8060-120:277-KPL21-PR7-4K |
| | 200W | 120W | K825-P4-III-120-KPL21-PR7-4K | B2-U0-G2 | 10203303 | K825-P4FL-III-120(SSL)8060-120:277-KPL21-PR7-4K |
| | 250W | 150W | K825-P4-III-150-KPL21-PR7-4K | B3-U0-G3 | 10203298 | K825-P4FL-III-150(SSL)8084-120:277-KPL21-PR7-4K |
| | 400W | 220W | K825-P4-III-220-KPL21-PR7-4K | B3-U0-G3 | 10203299 | K825-P4FL-III-220(SSL)8084-120:277-KPL21-PR7-4K |

NOTE:
KPL-21-PR LEVELING DEVICE TO BE ATTACHED TO FIXTURE AND SHIPPED AS ONE COMPLETE ASSEMBLY REFER TO 22200298 FOR ASSEMBLY INSTRUCIONS.




QUANTITY:
OPTICAL SYSTEM: FLAT ARRAY
IES CLASS.: TYPE III
WATTAGE: SEE TABLE
SOLID STATE LIGHTING
LINE VOLTAGE: 120:277 V
LIGHT SOURCE: LIGHT EMITTING DIODE – 4000K
POWDERCOAT: AS SPECIFIED
OPTIONS: TWISTLOCK RECEPTACLE
RIPLEY 6390-LL
(PHOTO-EYE BY OTHERS)
DRIVER TYPE: ELECTRONIC

OPTIONS
QUICK DISCONNECT [X]
OTHER: TMOV 390 JOULE 20kA @ 8/20uS SURGE PROTECTION
KPL-21 LEVELING DEVICE C/W PR7
10 FT WIRING HARNESS

| CUSTOMER ORDER No: |
|---|
| KING U.S. ORDER No: |

CUSTOMER APPROVAL & DATE:

* – ALL EQUIVALENCY RATINGS REFER TO POLE SPACING BASED UPON CURRENT IES RECOMMENDATIONS, AND MAY VARY DEPENDING ON THE INTENDED APPLICATION. CONSULT FACTORY FOR PERFORMANCE INFORMATION SPECIFIC TO DIFFERENT APPLICATIONS.

** – 3K = 3000K
4K = 4000K

King Luminaire • StressCrete • Est. 1953
STRESSCRETE GROUP

*Manufacturing Locations:*
*Burlington, Ontario 1-800-268-7809*
*Northport, Alabama 1-800-435-6563*
*Atchison, Kansas 1-800-837-1024*
*Jefferson, Ohio 1-800-268-7809*

PROJECT/CUSTOMER:
**4000K** – SOUTHERN CALIFORNIA EDISON

| DRAWN BY: | AT: | CHECKED BY | DATE: | REVISION: |
|---|---|---|---|---|
| TASHI B. | SC1 | | 03/28/16 | D |

| DRAWING TYPE: | DRAWING NUMBER: |
|---|---|
| APPROVAL/MFG. DWG. | K825-P4FL-1 |



Red Maple



Louisiana Live Oak



Raywood Ash



Chaste Tree

## 3.9 Neighborhood Landscaping

Landscaping creates a pleasant, pedestrian–scaled character and identity for the Plan Area. Informal groupings of native and non-native tree species will be used to provide shade and create a vibrant neighborhood. Attention to entry features, streetscapes, and the open space conservation area will establish the character and overall identity of the Plan Area.

### 3.9.1 Plan Area Tree Species

The following tree species shall be used within the Live Oak Master Plan Area. These species have been selected from the City's Master Street Tree List. Specific groups of the same species shall be planted along both sides of streets for consistency.

**~~Street Trees~~**

- ~~Pistacia Chinensis (Chinese Pistache)~~
- ~~Celtis Sinensis (Chinese Hackberry)~~
- ~~Fraxinus Oxycarpa (Raywood Ash)~~
- ~~Quercus Ilex (Holly Oak)~~
- ~~Platanus Acerifolia (London Plane)~~

**~~Ornamental Trees / Median Trees~~**

- ~~Fraxinus Oxycarpa (Raywood Ash)~~
- ~~Vitex Agnus-Castus (Chaste Tree)~~

**~~Parks and Pedestrian Paths Trees~~**

- ~~Zelkova Serrata (Sawleaf Zelkova)~~
- ~~Platanus Agrifolia - Bloodgood (London Plane)~~
- ~~Quercus Ilex (Holly Oak)~~
- ~~Quercus Wislizenil (Interior Live Oak)~~
- ~~Platanus Rcemosa (California Sycamore)~~
- ~~Quercus Virginiana (Louisiana Live Oak)~~
- ~~Fraxinus Oxycarpa (Raywood Ash)~~
- ~~Acer Rubrum (Red Maple)~~

# MASTER TREE LIST
**City of Hanford**
**2015**

## STREET TREES

**If the space between the curb and sidewalk is less than five feet:**

| Botanical Name | Common Name | Description |
|---|---|---|
| Callistemon citrinus | Lemon Bottlebrush | 15'-25' high; 15'-25' wide |
| Callistemon viminalis | Weeping Bottlebrush | 18'-25' high; 12'-15' wide |
| Cercis Canadensis | Oklahoma Redbud | 15'-18' high; 12'-18' wide; spring bloom |
| Dodonaea viscose | Purple Hopseed | 10'-15' high; 10'-15' wide |
| Feijoa | Pineapple Guava | 15'-20' high; 15'-20' wide |
| Lagerstroemia indica/hybrids | Crape Myrtle | 10'-20' high; 6'-15' wide; summer bloom |
| Nerium | Oleander | 12'-20' high; 12'-20' wide; evergreen |
| Prunus cerasifera | Purple Pony Plum | 10'-15' high; 10'-15' wide; spring bloom; no fruit |
| Quercus robur x biclor 'long' | Regal Prince Oak | 40'-45' high; 18'-25' wide |
| Rhamnus alaternus | Italian Buckthorn | 10'-20' high; 10'-20' wide; evergreen |
| Vitex agnus castus | Chaste Tree | 20'-25' high; 20'-25' wide |

**If the space between the curb and sidewalk is more than five feet, any tree from the list above or below can be used.**

| | | |
|---|---|---|
| Arbutus unedo | Strawberry Tree | 8'-35' high; 8'-35' wide; evergreen |
| Chionanthus retusus | Chinese Fringe Tree | 15'-20' high; 15'-20' wide |
| Chitalpa tashkentensis | Pink Dawn Chitalpa | 20'-30' high; 20'-30' high |
| Cinnamomum camphora | Camphor Tree | 30'-45' high; 30'-45' wide |
| Gingko biloba | Maidenhair Tree grafted male | 35'-50' high; 20'-30' wide |
| Grevilla robusta | Silky Oak | 50'-60' high; 30'-35' wide |
| Koelreuteria bipinnata | Chinese Flame Tree | 20'-40' high; 20'-40' wide |
| Malus | Flowering Crab Apple | 12'-25' high; 12'-25' wide |
| Nyssa sylvatica | Sour Gum Tree | 30'-50' high; 15'-25' wide |
| Pistacia chinensis | Chinese Pistache grafted male 'Keith Davey' | 40'-60' high; 40'-60' wide |
| Pyrus kawakamii | Evergreen Pear | 15'-25' high; 15'-25' wide |
| Quercus frainetto 'Schmidt' | Forest Green Oak | 45'-50' high; 25'-30' wide |
| Quercus robur x biclor 'long' | Regal Prince Oak | 40'-45' high; 18'-25' wide |

### 3.9.2 Landscaping Design Guidelines

a. Provide landscaping that reflects the pedestrian oriented design of the Plan Area.

b. Ensure the adequate and appropriate provision of landscaping within all development phases.

c. Street trees should be planted at maximum intervals of 30 feet on center within planting strips. Typically, each lot shall plant a minimum of 2-3 street trees. An additional 2-3 street trees shall be planted along the side yard of a corner lot.

d. Ensure shade tree planting occurs to improve the cooling efficiency of buildings and minimize heat island effects of paved surfaces.

e. Entry feature landscapes should complement the surrounding neighborhood character.

f. Ornamental and specialty planting are considered appropriate accents to entry features consistent with the rural character of the Plan Area and its surroundings.

g. Landscaping is encouraged to use native, drought-tolerant plants, that require low maintenance.



Street trees should be planted at maximum intervals of 30 feet on center



Lush front yard landscaping gives this neighborhood a pleasant pedestrian experience

# 4.0 Circulation

## 4.1 Introduction

Safety and efficiency are priorities for the Plan Area's circulation system. The circulation system is designed to provide an interconnected pattern for motorized and non-motorized travel, and allow convenient access between neighborhood amenities and residential units.

Pedestrian accessibility has been incorporated into the Master Plan circulation system. High speed, through traffic has been minimized, and a safe pedestrian and bicycle system from one neighborhood to the next has been implemented. The circulation pattern utilizes bulb-outs adjacent to the neighborhood parks to reduce the effective crossing distance and help remind drivers of the likely presence of children. The use of bulb-outs, landscaped planting strips, street trees, daylighted cul-de-sacs, linear greens, and other elements contribute to the quality of neighborhoods and reflect the pedestrian oriented qualities of older neighborhoods within Hanford.

The Live Oak Master Plan utilizes a combination of rectilinear and radial grid street patterns that connect neighborhoods within the Plan Area as well as to existing development. The Plan also provides for stub connections that will allow future adjacent development to be integrated with the larger community. The Master Plan promotes greater personal mobility by discouraging the use of typical dead end cul-de-sacs. In their stead, daylighted cul-de-sacs provide connection points to the pedestrian system along major streets.

The Plan Area's circulation system consists of arterials, collectors, local streets, Class II bikeways, sidewalks, and pedestrian paths. The following are goals used in developing the Plan Area's circulation system.

### 4.1.1 Circulation Goals

1. Create a pedestrian-friendly community through connectivity of internal streets, the use of sidewalks, and linked pedestrian paths.

2. Maintain a system of external Arterials and Collectors established by the Hanford General Plan and Hanford Public Works Department.

3. Integrate with existing development by connecting to existing neighborhood stub streets and provide stub connections for future development.

4. Enhance neighborhood safety by providing a street pattern that promotes fronting lots onto public parks and discouraging the use of dead end cul-de-sacs.

5. Provide pedestrian and bicycle access along sloughs with paths that connect to neighborhood parks.

### 4.1.2 Circulation Policies



Landscaping enhances this daylighted cul-de-sac pedestrian connection

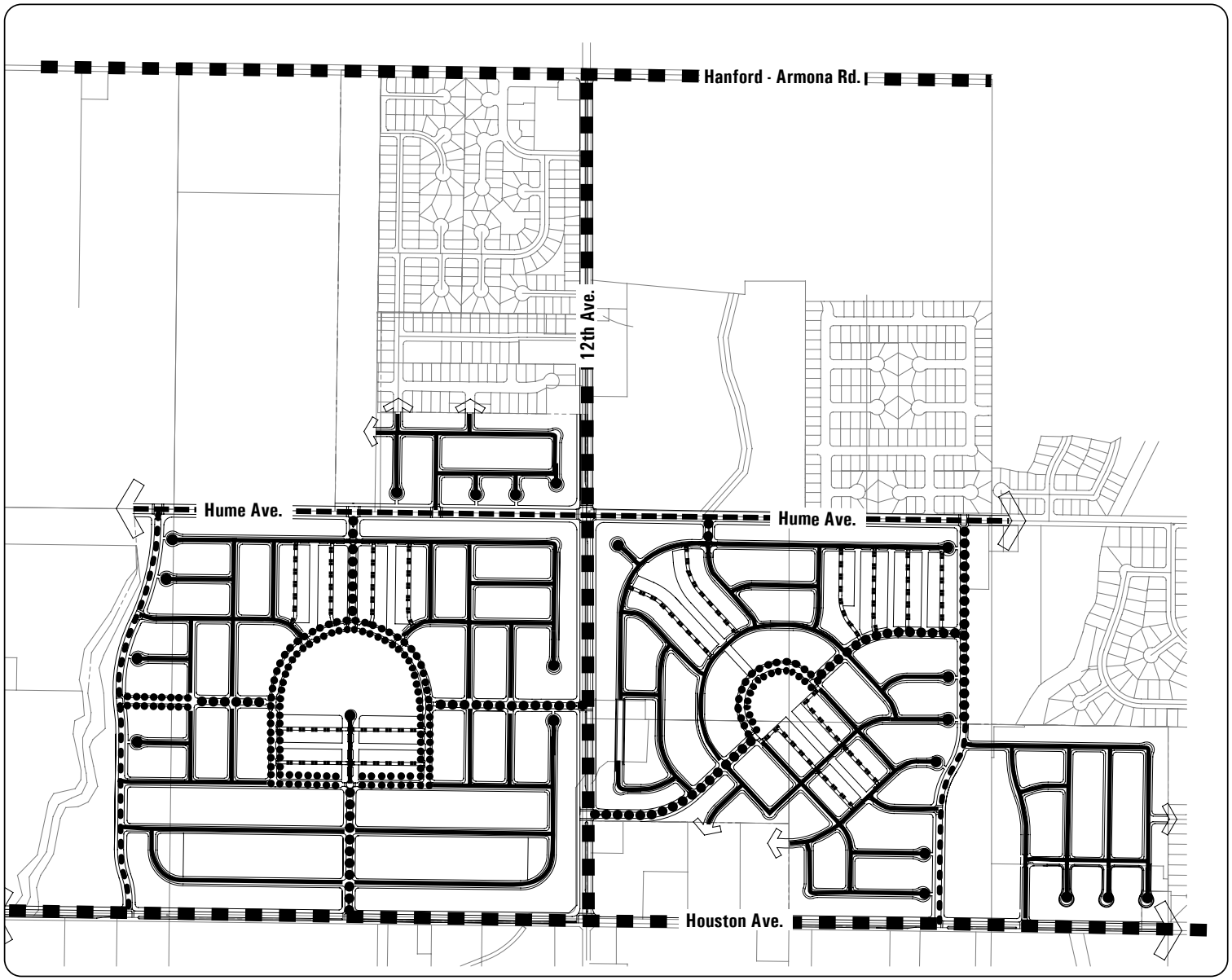
a. All Streets shall be consistent with the Circulation Diagrams in Figures 4.1-4.14.

b. The City of Hanford Standards and Specifications shall be used for items not covered in the Master Plan.

c. Cul-de-sacs are strongly encouraged to be daylighted to provide pedestrian and bicycle access. The Community Development Department shall approve the design of all daylighted cul-de-sacs.

d. Bulb-outs shall be utilized as traffic calming measures at all intersections & streets that abut neighborhood parks within the Plan Area.

e. All improved public Right-of-Ways shall be dedicated to the City of Hanford. The City shall assume responsibility for maintenance and repair of all street facilities. Property owners shall be responsible for maintaining the park strip adjacent to front or side yards.




# Figure 4-1
## Conceptual Circulation Map

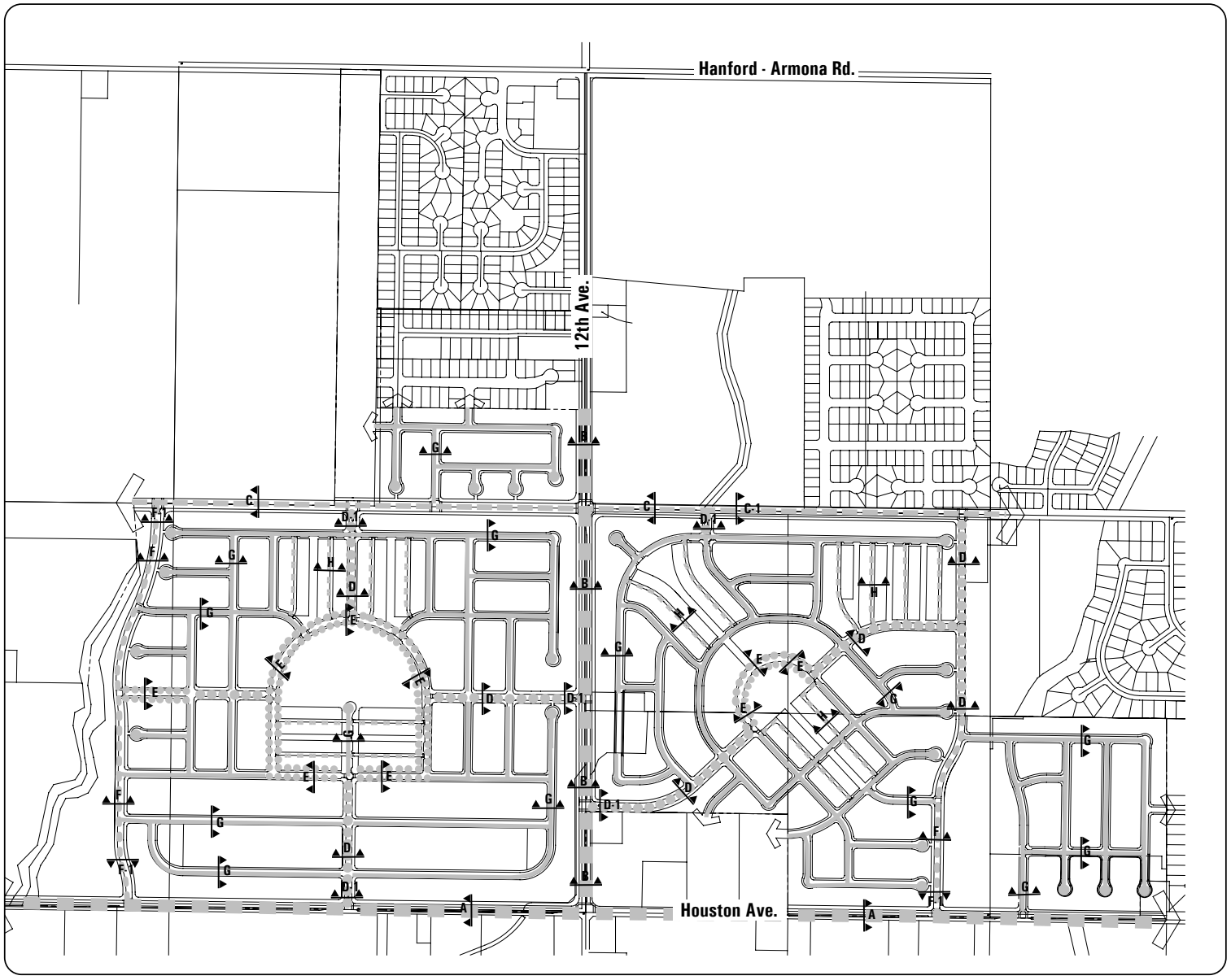
*Legend*

- Arterial
- Major Collector
- Minor Collector at slough
- Entry Collector
- Park Collector
- Local Road
- Local Road with cul-de-sac
- ~~Alley~~ (Alley Loaded Streets Removed)

N

0 200 400 600 800

## Conceptual Circulation Map




# Figure 4-2
## Street Section Location Map

*Legend*

- A / B — Arterial
- C / C-1 — Major Collector
- F — Minor Collector at slough
- D — Entry Collector
- E — Park Collector
- G — Local Road
- G — Local Road with cul-de-sac
- ~~H — Alley~~ (Alley Loaded Streets Removed)
- Section View

N

0 200 400 600 800

## Street Section Location Map

f. Pathways should be provided within open space corridors, and located to reduce impacts on the riparian woodland that exists.

g. Sidewalks with planting strips shall be provided on both sides of the Right-of-Way on all streets within the Plan Area.

h. Street trees shall be planted at intervals of 30 feet on center, within planting strips.

i. Landscaping shall be drought-tolerant plant material arranged within planting strips or medians to provide interest to pedestrians as well as automobile traffic.

j. Landscaping, lighting, special paving surfaces, and entry features shall be maintained by a Landscape and Lighting District, or comparable maintenance district, such as a community facility district.



Increased front yard setbacks along major residential streets should include attractive walking conditions for pedestrians



Paving materials at residential intersections let drivers know they are entering an intersection and adds richness to the streetscape

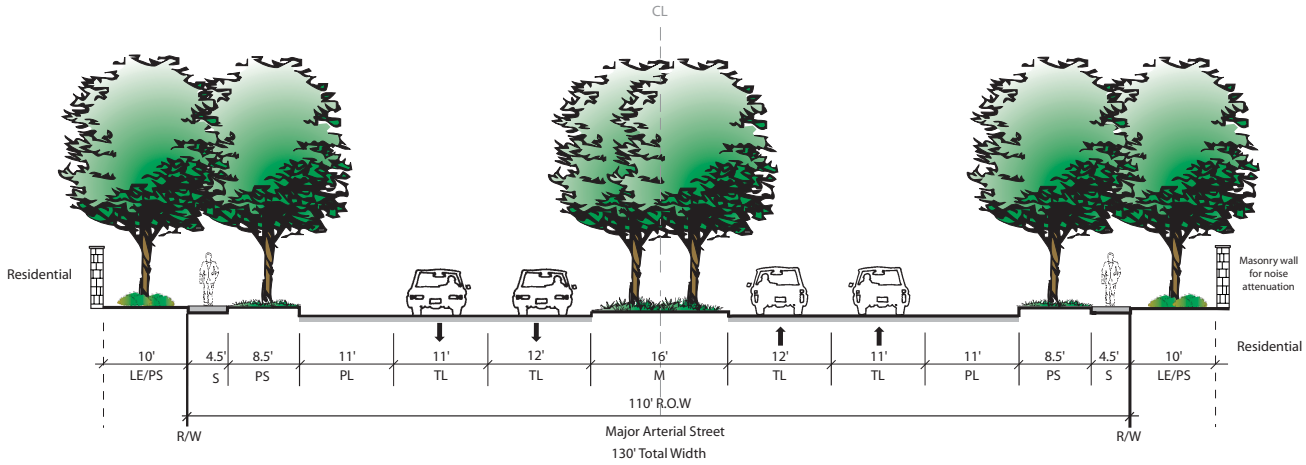
## 4.2 Arterial Streets

Two Major Arterials are located within the Plan Area: Houston Avenue and 12th Avenue. Vehicular access to these Major Arterials is limited to collectors with through intersections occurring approximately every ½ mile. However, pedestrian access is permitted through the use of daylighted cul-de-sacs. There are two types of arterials within the Plan Area: Major Arterial and Arterial.

### 4.2.1 Major Arterial Street

Houston Avenue is considered a Major Arterial within the Plan Area. Residential units along Houston Avenue will have a more rural character as specified in Section 3 with the abutting Very Low Density Residential designation. Houston Avenue will transition from an urban to rural character on the western edge and will act as a gateway for the city of Hanford at Lone Oak Slough.

**Figure 4.3 Major Arterial**



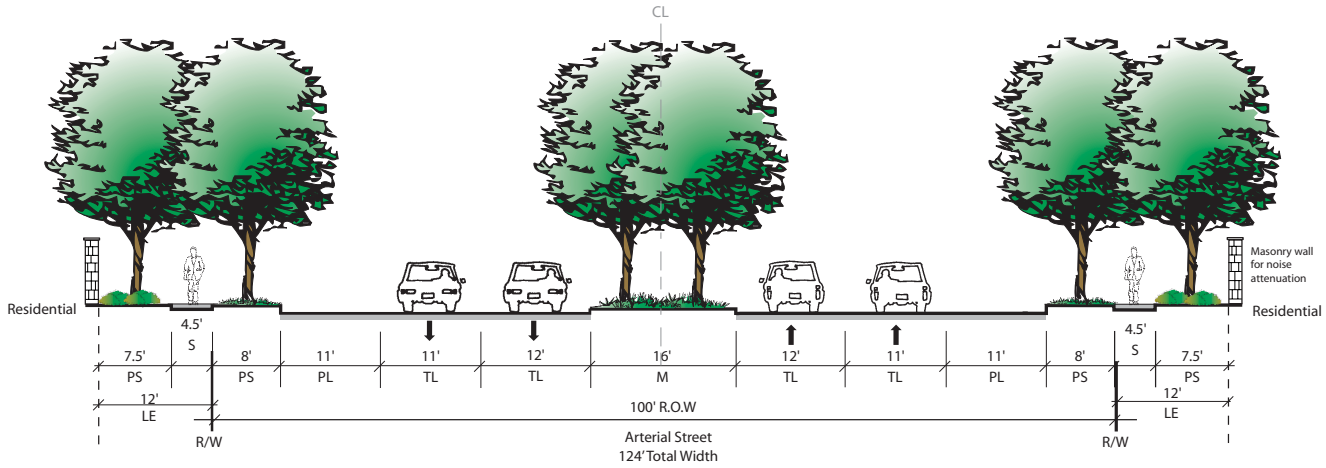

SECTION A

| | |
|---|---|
| **Designation** | Major Arterial Street |
| **Right of Way (R/W)** | 110 Feet |
| **Landscape / Public Utility Easement (LE)** | 10 Feet outside of Right-of-Way |
| **Median (M)** | 16 Foot landscaped median |
| **Travel Lane (TL)** | 12 Feet adjacent median, 11 Feet adjacent curb |
| **Parking Lane (PL)** | 11 Feet on both side of street |
| **Planting Strip (PS)** | 8.5 Feet on both side of street |
| **Sidewalk (S)** | 4.5 Feet on both sides of street |

### 4.2.2 Arterial Street

12th Avenue shall be considered an Arterial within the Plan Area. Residential units shall have a wall treatment along 12th Avenue however, pedestrian access through daylighted cul-de-sacs is permitted. The width of the Right-of-Way may increase when streets intersect with 12th Avenue.

**Figure 4.4 Arterial Street**



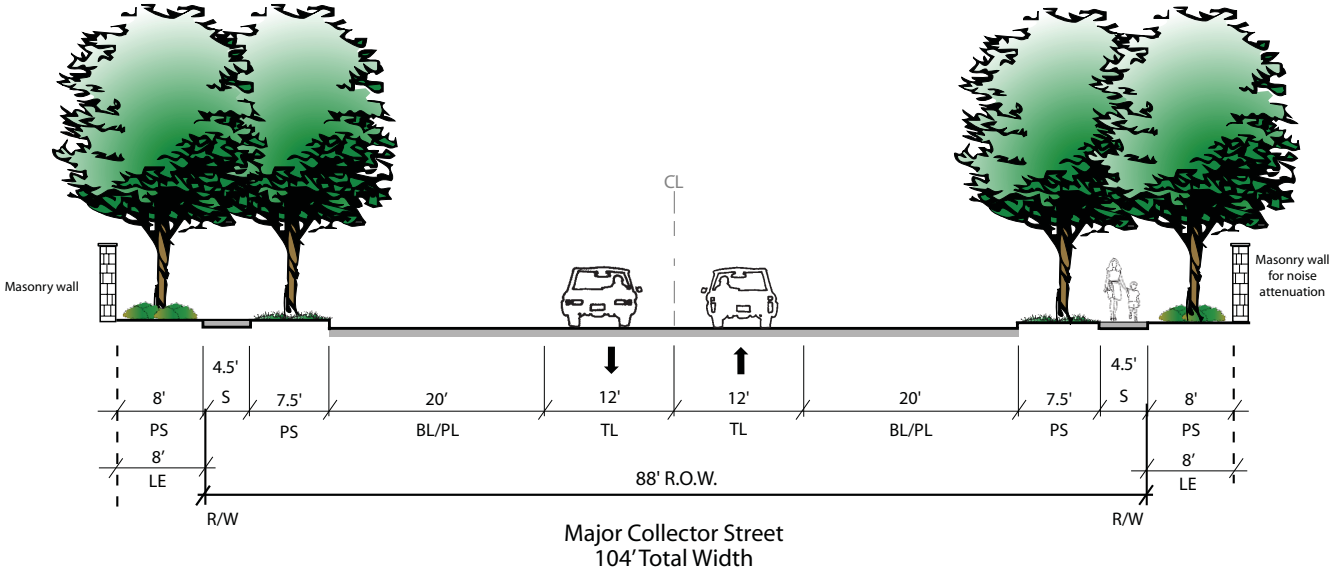

SECTION B

| | |
|---|---|
| **Designation** | Arterial Street |
| **Right of Way (R/W)** | 100 Feet |
| **Landscape / Public Utility Easement (LE)** | 12 Feet outside of Right-of-Way |
| **Median (M)** | 16 Foot landscaped median |
| **Travel Lane (TL)** | 12 Feet adjacent median, 11 Feet adjacent curb |
| **Parking Lane (PL)** | 11 Feet on both sides sides of street |
| **Planting Strip (PS)** | 8 Feet adjacent to curb, 7.5 Feet adjacent to residential area |
| **Sidewalk (S)** | 4.5 Feet on both sides of street |

## 4 .3 Collector Streets

Collector streets serve as connections between local streets and arterials by incorporating turning movements with occasional direct access to parcels, and ideally fall between two arterial streets. The Plan Area is served by one Major Collector, Hume Avenue, and eight future minor collectors that serve as access points to the neighborhoods. The Live Oak Master Plan utilizes three types of Minor Collectors that correspond to specific design features in the Land Use Development Plan: Entry Minor Collector, Park Minor Collector and Open Space Minor Collector. These collectors are designed to highlight the various amenities and features within the Plan Area and incorporate scenic and aesthetic vistas along these collectors.

**Figure 4.5 Hume Avenue- West of People's Ditch**




SECTION C

| | |
|---|---|
| **Designation** | Major Collector Street |
| **Right of Way (R/W)** | 88 Feet |
| **Landscape / Public Utility Easement (LE)** | 8 Feet outside of Right-of-Way (Adjacent to Plan Area) |
| **Travel Lane (TL)** | 12 Feet in both directions |
| **Parking Lane/ Bike Lane (BL/PL)** | 20 Foot parking lane on both sides of street |
| **Planting Strip (PS)** | 7.5 Foot adjacent to curb, 8 feet adjacent to residential area |
| **Sidewalk (S)** | 4.5 Foot Sidewalk on both sides of street |

### 4.3.1 Major Collector-Street

Hume Avenue functions as the major east-west collector within the Plan Area. Access will be limited along Hume Avenue to Minor Collectors and daylighted cul-de-sacs to allow for pedestrian access to adjacent neighborhoods from the sidewalk. There are two street sections for Hume Avenue. A 68-foot Right-of-Way east of People's Ditch, and an 84-foot Right-of-Way west of People's Ditch. This smaller Right-of-Way is provided to better connect with the existing infrastructure and residential neighborhood just east of the Plan Area along Hume Avenue.

**Figure 4.6 Hume Avenue- East of People's Ditch**



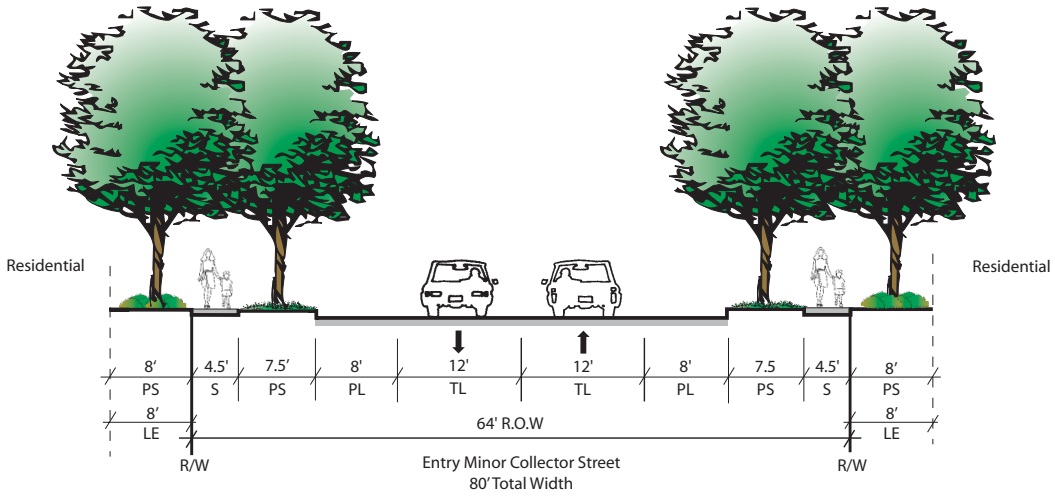

SECTION C-1

| | |
|---|---|
| **Designation** | Major Collector Road |
| **Right of Way (R/W)** | 72 Feet |
| **Landscape / Public Utility Easement (LE)** | 8 Feet outside of Right-of-Way |
| **Travel Lane (TL)** | 12 Feet in both directions |
| **Parking Lane/ Bike Lane (BL/PL)** | 12 Foot parking lane on both sides of street |
| **Planting Strip (PS)** | 7.5 Foot adjacent to curb, 8 Feet adjacent to residential area |
| **Sidewalk (S)** | 4.5 Foot Sidewalk on both sides of street |

### 4.3.2 Entry Minor Collector Street

The Entry Minor Collector provides neighborhood access from a Major Collector (Hume Avenue) or Arterial. These collectors direct traffic to local streets within residential neighborhoods. The Entry Minor Collector features a double row of planting strips on both sides of the Right-of-Way and 4.5-foot sidewalks between both planting strips. Streets carrying the Minor Entry Collector Street designation are indicated by "D" in Figure 4.2.

**Figure 4.7 Entry Minor Collector Street**



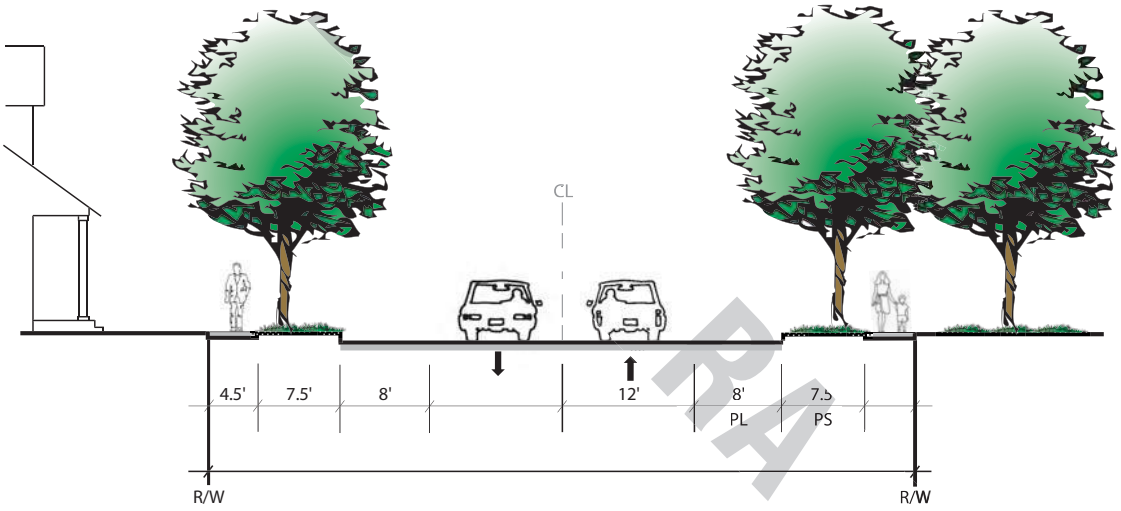

SECTION D

| | |
|---|---|
| **Designation** | Entry Minor Collector Street |
| **Right of Way (R/W)** | 64 Feet |
| **Landscape / Public Utility Easement (LE)** | 8 Foot outside of the Right-of-Way |
| **Travel Lane (TL)** | 12 Foot travel lanes in both directions |
| **Parking Lane (PL)** | 8 Foot parking lane on both sides of street |
| **Planting Strip (PS)** | 7.5 Feet adjacent to curb 8 Feet adjacent to residential area |
| **Sidewalk (S)** | 4.5 Foot on both sides of street |

### 4.3.3 Park Minor Collector Street

Minor Collector streets adjacent to Neighborhood Parks are designed to create a park like atmosphere along the public Right-of-Way. Travel lanes remain the same as other minor collectors; on-street parking is permitted, and residential units are encouraged to front onto these streets.

**Figure 4.8 Park Minor Collector Street**



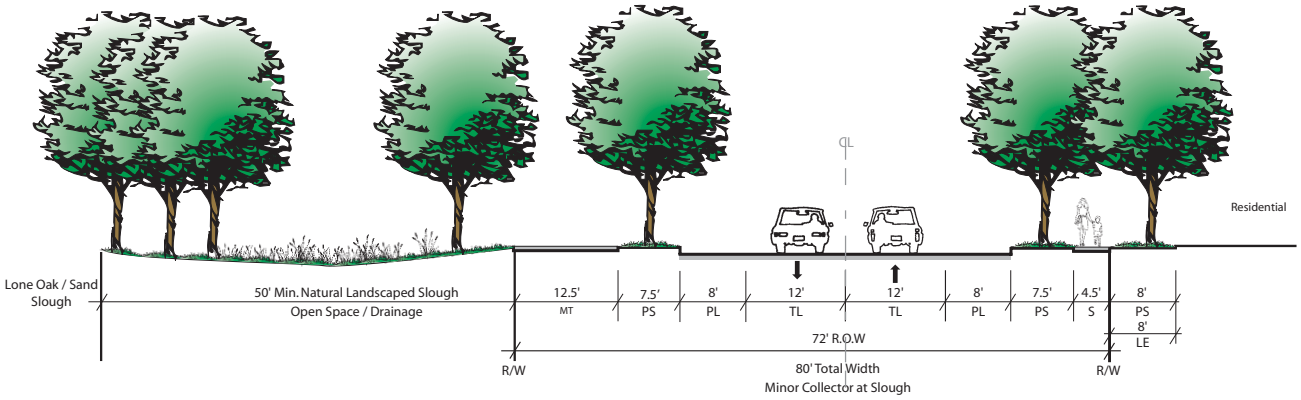

SECTION E

| | |
|---|---|
| **Designation** | Park Minor Collector Street |
| **Right of Way (R/W)** | 64 Feet |
| **Travel Lane (TL)** | 12 Feet both directions |
| **Parking Lane (PL)** | 8 Foot Parking Lane on both sides of street |
| **Planting Strip (PS)** | 7.5 Feet on both sides of street |
| **Sidewalk (S)** | 4.5 Feet on both sides of street |

### 4.3.4 Minor Collectors Abutting Open Space

Adjacent to the open space and sloughs, the Slough Minor Collector includes a 72-foot Right-of-Way that contains a 6.5-foot meandering pedestrian path abutting the open space/drainage corridor. Residential units side an 8-foot planting strip and a 4.5-foot sidewalk along the Slough Minor Collector. On-street parking is permitted on both sides of the Right-of-Way.

**Figure 4.9 Slough Minor Collector Street**



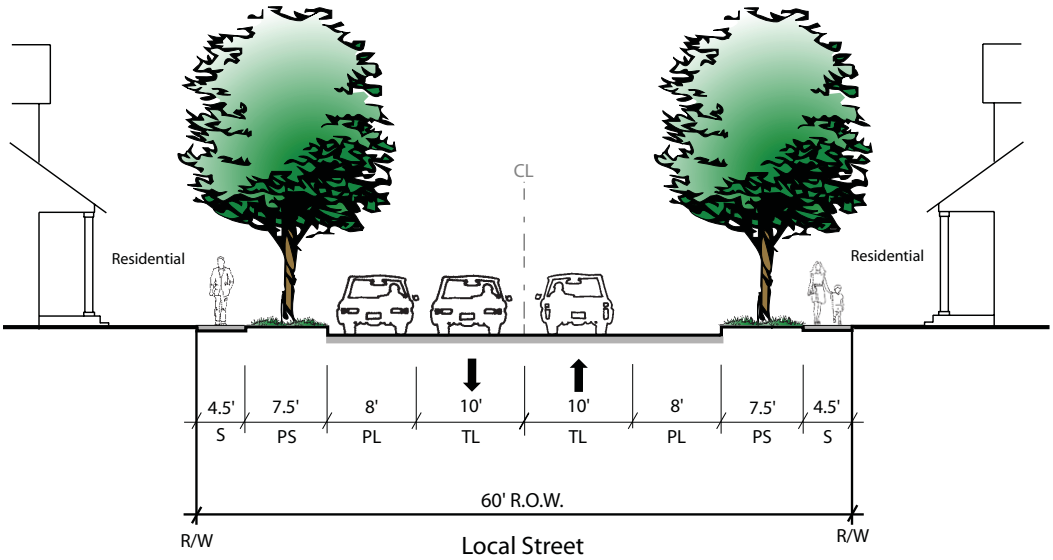

SECTION F

| | |
|---|---|
| **Designation** | Minor Collector Street |
| **Right of Way (R/W)** | 72 Feet |
| **Travel Lane (TL)** | 12 Feet both directions |
| **Parking Lane (PL)** | 8 Foot parking lane on both sides of Right-of-Way |
| **Planting Strip (PS)** | 7.5 Feet adjacent to curb, 8 Feet adjacent to residential area |
| **Sidewalk (S)** | 4.5 Foot adjacent to residential |
| **Meandering Trail (MT)** | 12.5 Feet minimum adjacent to open space |
| **Landscaped / Public Utility Easement (LE)** | 8 Feet outside of Right-of-Way |

## 4.4 Local Street

Local streets comprise the bulk of the circulation. These streets provide access to individual lots and form the internal circulation system of the neighborhoods. The layout and connectivity of local streets within the Master Plan Area is designed to feel open while providing safety and accessibility for the pedestrian and motorist. Local streets include 10-foot travel lanes in each direction and permit on-street parking. To create a more pedestrian-friendly environment, planting strips are located on both sides of the Right-of-Way to provide shade and aesthetic value.

**Figure 4.10 Local Street**



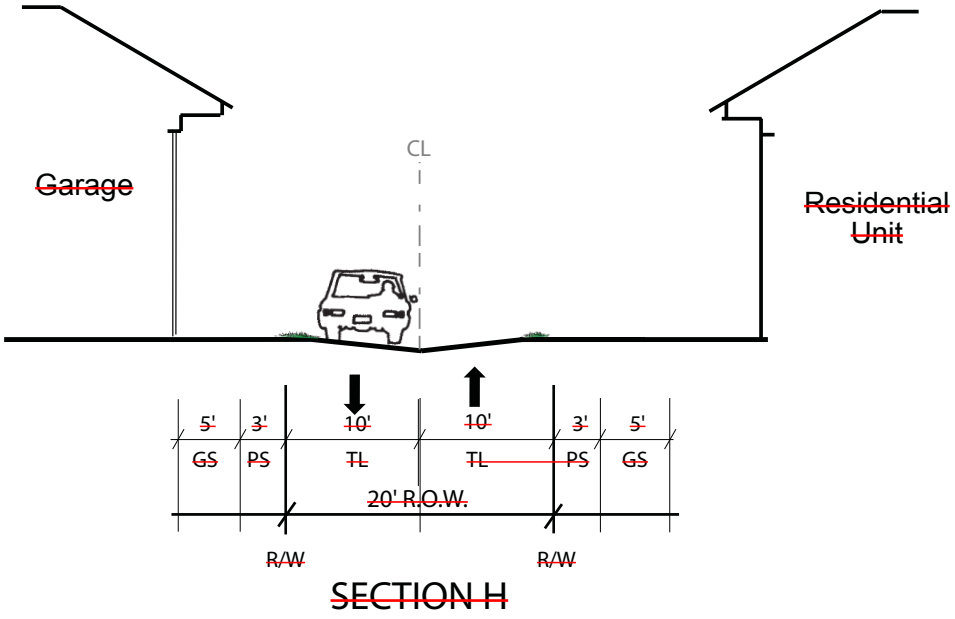

SECTION G

| | |
|---|---|
| **Designation** | Local Street |
| **Right of Way (R/W)** | 60 Feet |
| **Travel Lane (TL)** | 10 Feet both directions |
| **Parking Lane (PL)** | 8 Foot Parking Lane on Both sides of Right-of-Way |
| **Planting Strip (PS)** | 7.5 Foot Planting Strip on both sides of Right-of-Way |
| **Sidewalk (S)** | 4.5 foot Sidewalk on both sides of Right-of-Way |

## 4.5 Alleyways

Alleyways provide access to residential garages located in the rear of a lot. Alleyways are located near neighborhood parks and pocket parks to prevent unnecessary congestion where a higher level of activity may occur. Alleyways shall be designed as livable spaces through the incorporation of landscaping, setbacks, and decorative fencing. A five-foot setback shall be provided for driveway access adjacent to a garage. Alleyways are also encouraged in other areas where vehicular access is limited or constrained along frontages.

**Figure 4.11 Alleyways**




| | |
|---|---|
| **Designation** | Alleyway |
| **Right of Way (R/W)** | 20 Feet |
| **Travel Lane (TL)** | 10 Feet both directions |
| **Planting Strip (PS)** | 3 Feet on both sides of Right-of-Way |
| **Garage Setback (GS)** | 5 Feet from the edge of the Right-of-Way |

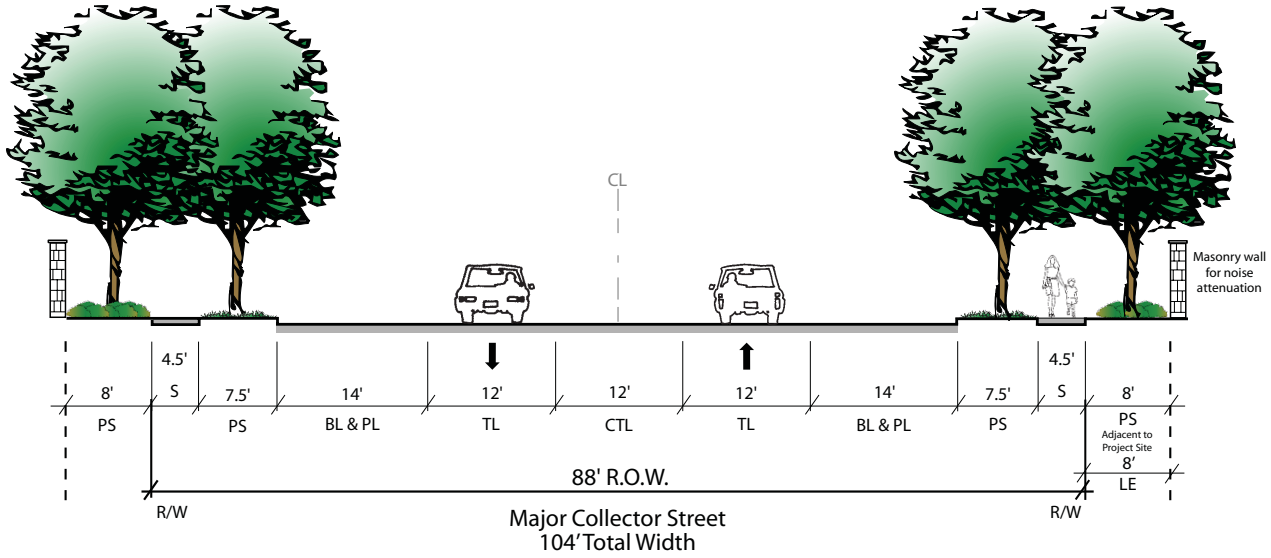
## 4.6 Alternative Street Striping

Some intersections or stretches may utilize alternative street striping approved by the Hanford Department of Public Works. These alternatives shall be used at the discretion of the Public Works Director, and only in specified locations and situations.

### 4.6.1 Hume Avenue at 12th Avenue Intersection

Figure 4.12 identifies the street section that shall be completed along the Hume Avenue and 12th Avenue intersection, providing a center turn lane absent from Hume Avenue street sections shown above.

**Figure 4.12 Hume Avenue at 12th Avenue Intersection**



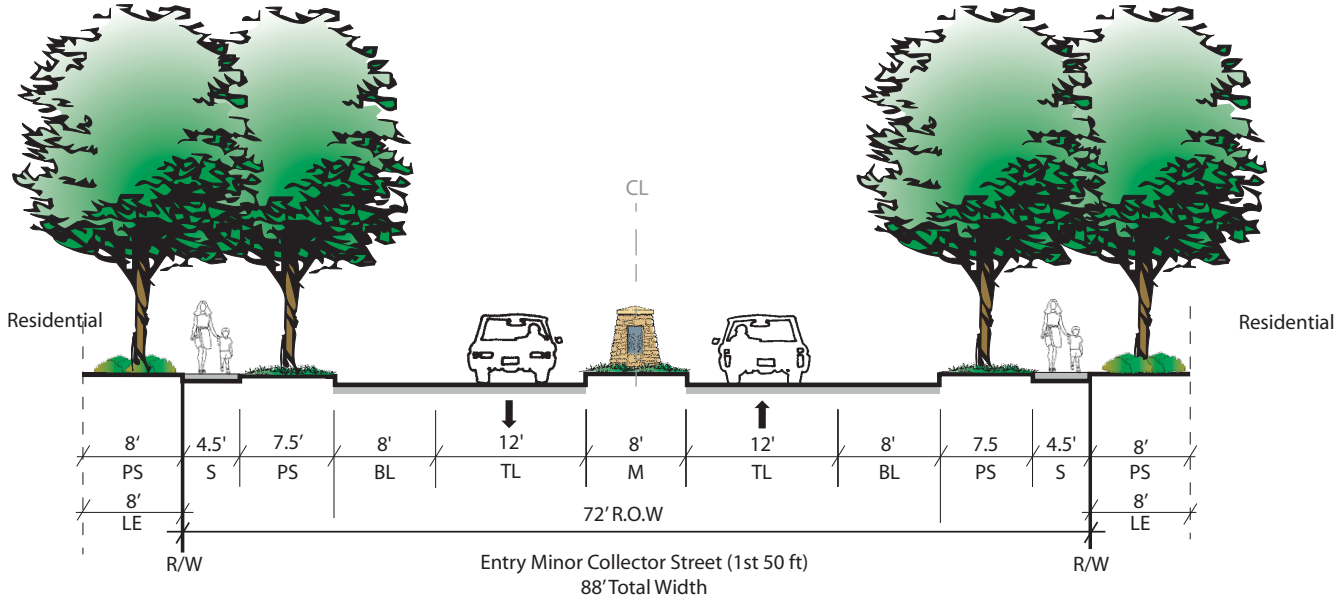

SECTION C2

| | |
|---|---|
| **Designation** | Major Collector Street |
| **Right of Way (R/W)** | 88 Feet |
| **Travel Lane (TL)** | 12 Feet both directions |
| **Center Turn Lane (CTL)** | 12 Feet between travel lanes |
| **Parking Lane Bicycle Lane (PL/BL)** | 14 Foot parking lane on both sides of Right of Way |
| **Planting Strip (PS)** | 7.5 Feet adjacent to curb, 8 Feet adjacent to Residential |
| **Sidewalk (S)** | 4.5 Foot adjacent to residential |
| **Landscape / Public Utility Easement (LE)** | 8 Feet outside of Right of Way |

### 4.6.2 Entry Minor Collector Street at Intersection

Roads designated "Minor Collector Entrance Street" shall use the following street section at the first 50 feet from a Major Arterial, Arterial, or Major Collector.

**Figure 4.13 Entry Minor Collector Street at Intersection (First 50')**



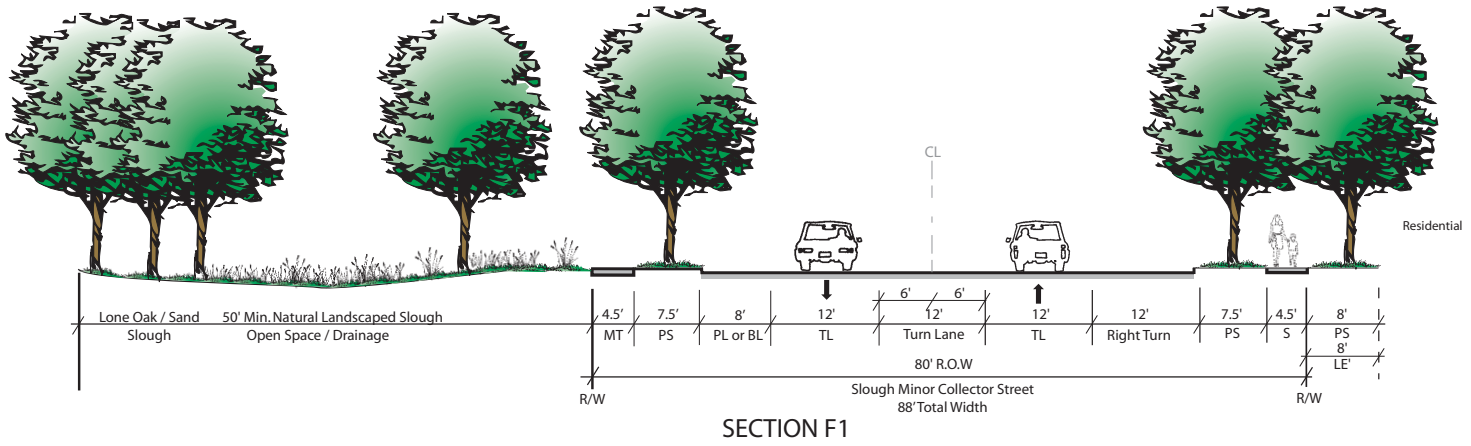

SECTION D1

| | |
|---|---|
| **Designation** | Entry Minor Collector Street at Intersection |
| **Right of Way (R/W)** | 72 Feet |
| **Travel Lane (TL)** | 12 Feet in both directions |
| **Bicycle Lane (BL)** | 8 Feet on both sides of Right-of-Way |
| **Planting Strip (PS)** | 7.5 Feet adjacent to curb, 8 Feet adjacent to sidewalk |
| **Sidewalk (S)** | 4.5 Foot on both sides of Right-of-Way |
| **Median (M)** | 8 Foot Median |
| **Landscape / Public Utility Easement (LE)** | 8 Feet on both sides of the street |

### 4.6.3 Slough Minor Collector Street at Intersection

Roads designated "Minor Collectors" at sloughs approaching intersections shall use this street section. The appropriate location for transition of street sections shall be determined by the Hanford Public Works Department.

**Figure 4.14 Slough Minor Collector at Intersection**

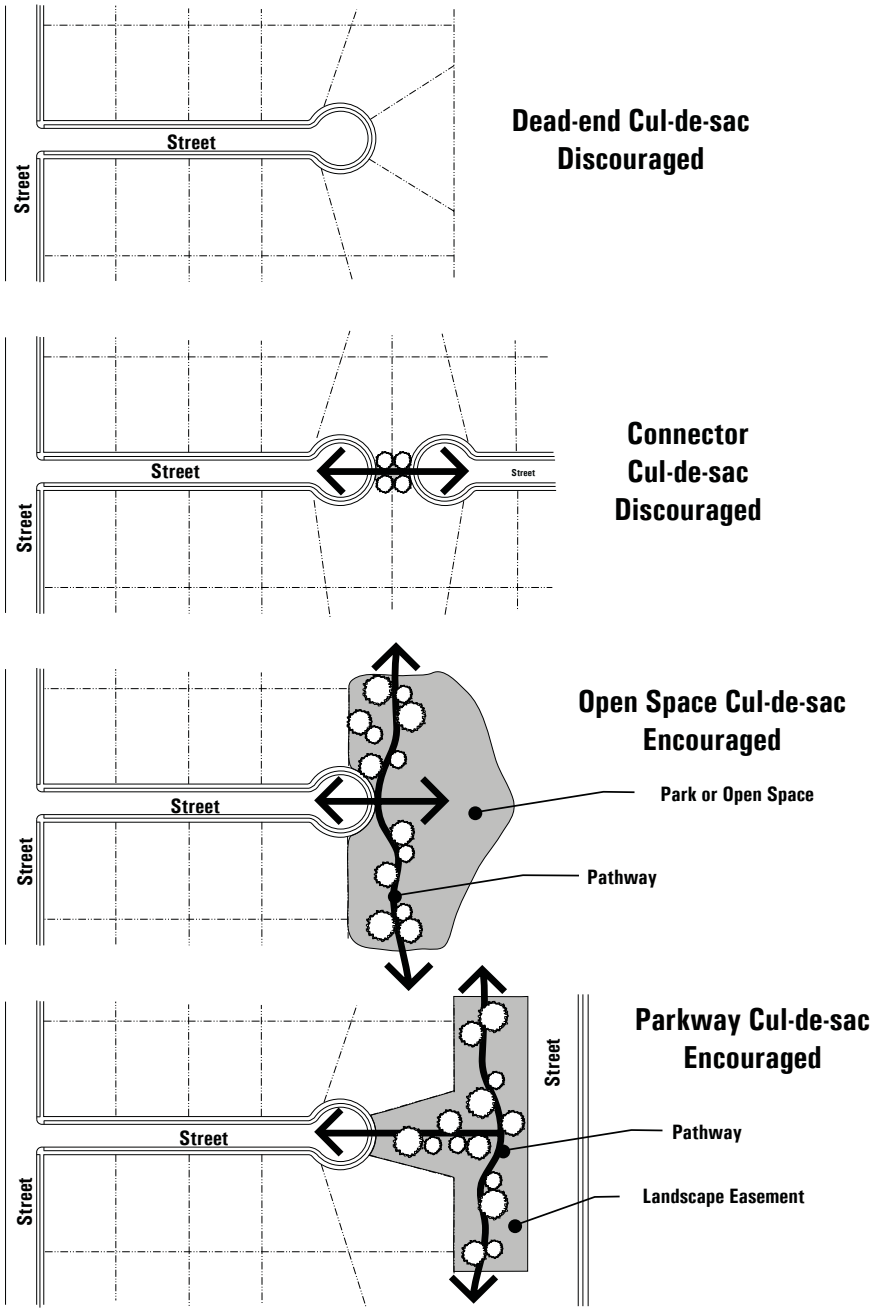


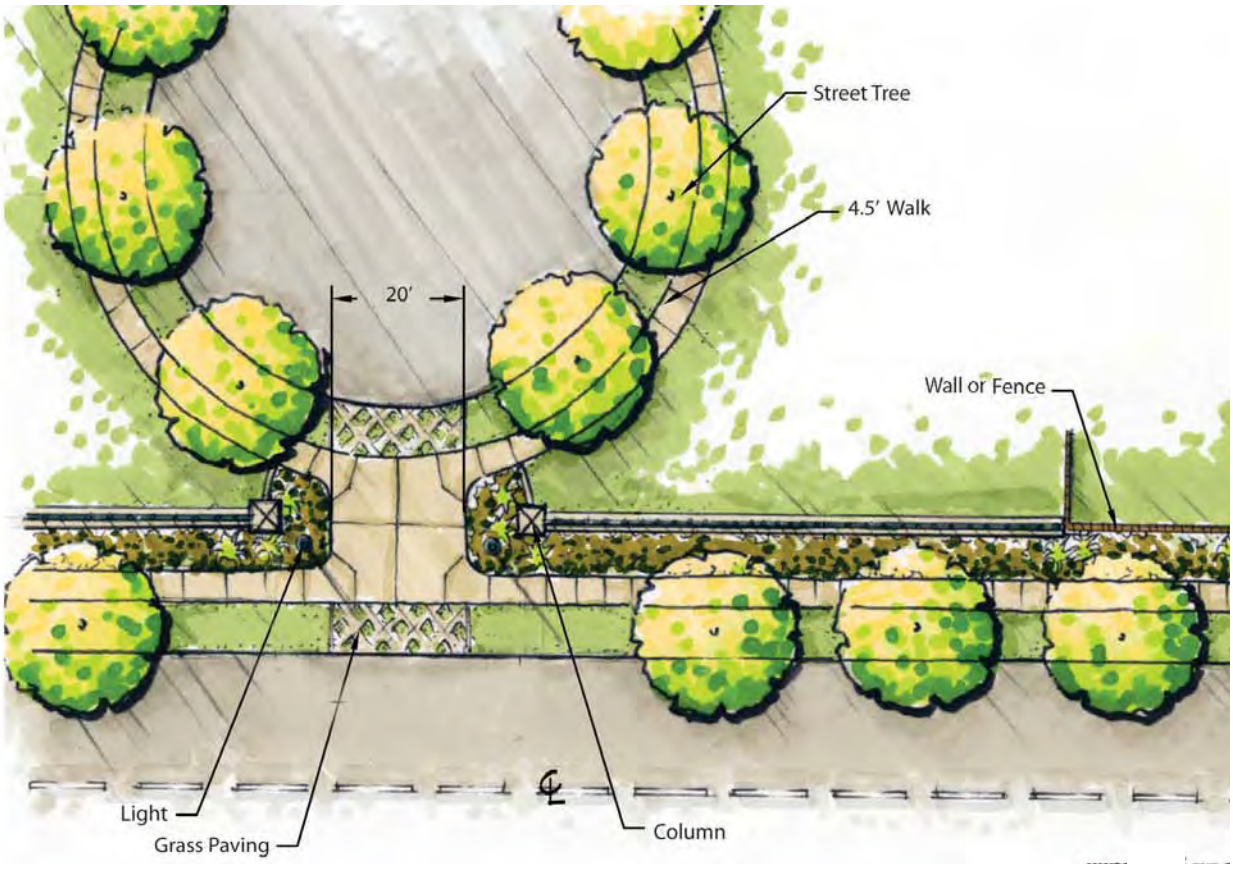

SECTION F1

| | |
|---|---|
| **Designation** | Slough Minor Collector Street at Intersection |
| **Right of Way (R/W)** | 80 Feet |
| **Travel Lane (TL)** | 12 Feet in both directions |
| **Parking Lane-Bicycle Lane (BL)** | 8 Feet adjacent to Slough |
| **Planting Strip (PS)** | 7.5 Feet adjacent to curb |
| **Sidewalk (S)** | 4.5 Feet adjacent to residential |
| **Landscape / Public Utility Easement (LE)** | 8 Feet adjacent to residential |
| **Turn Lane** | 12 Feet between travel lanes, 12 Feet adjacent to residential |
| **Meandering Trail (MT)** | 4.5 Feet minimum adjacent to open space |

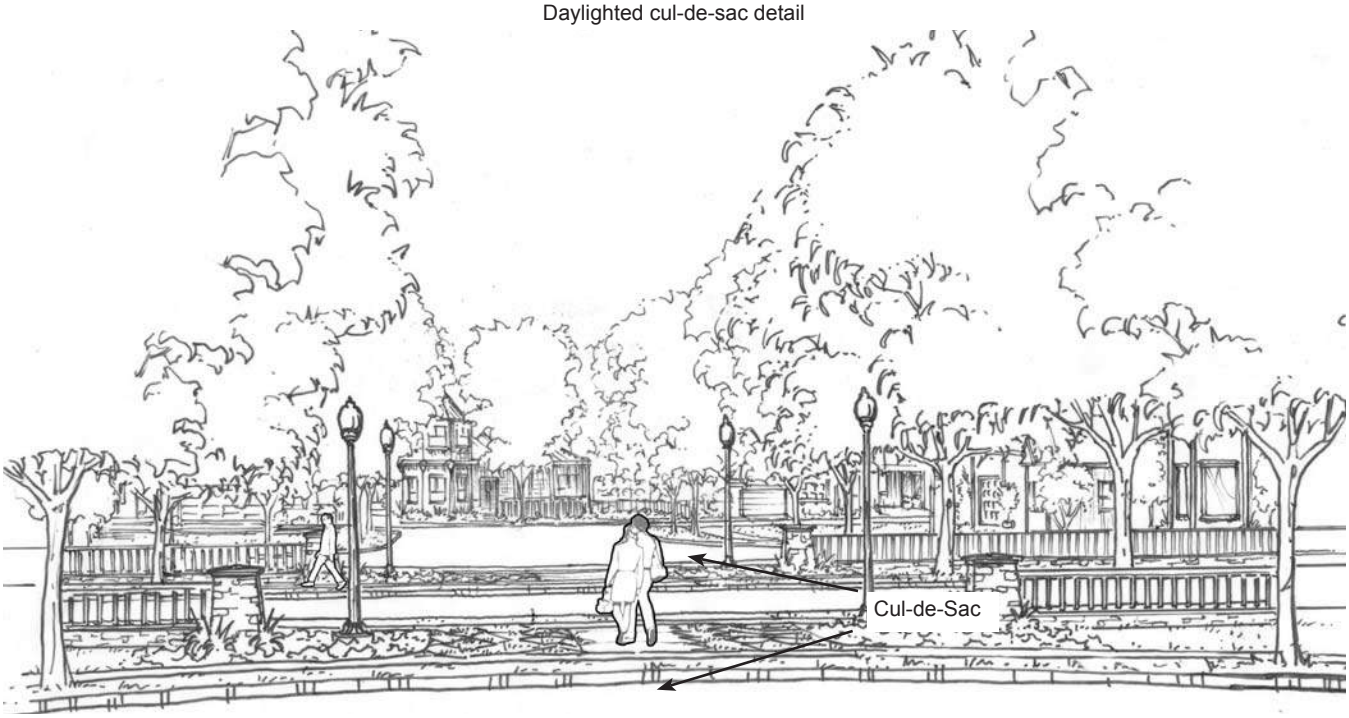
## 4.7 Cul-de-sacs

Conventional subdivision design utilizes the cul-de-sac to gain lot premiums and provide privacy for residents. However, cul-de-sacs strongly impede mobility within a neighborhood, relegating pedestrians and traffic to a few streets. Day-lighted cul-de-sacs provide pedestrian and bicycle access to amenities such as open spaces and parks, while restricting automobile access and reducing vehicle emissions from unnecessary vehicle trips. The use of conventional cul-de-sacs should be limited throughout the Plan Area. In situations where major streets with walls adjoin residential areas, day-lighted cul-de-sacs should be used to create wall openings with pathway connections. The use of dead-end cul-de-sacs is strongly discouraged.






Daylighted cul-de-sac detail



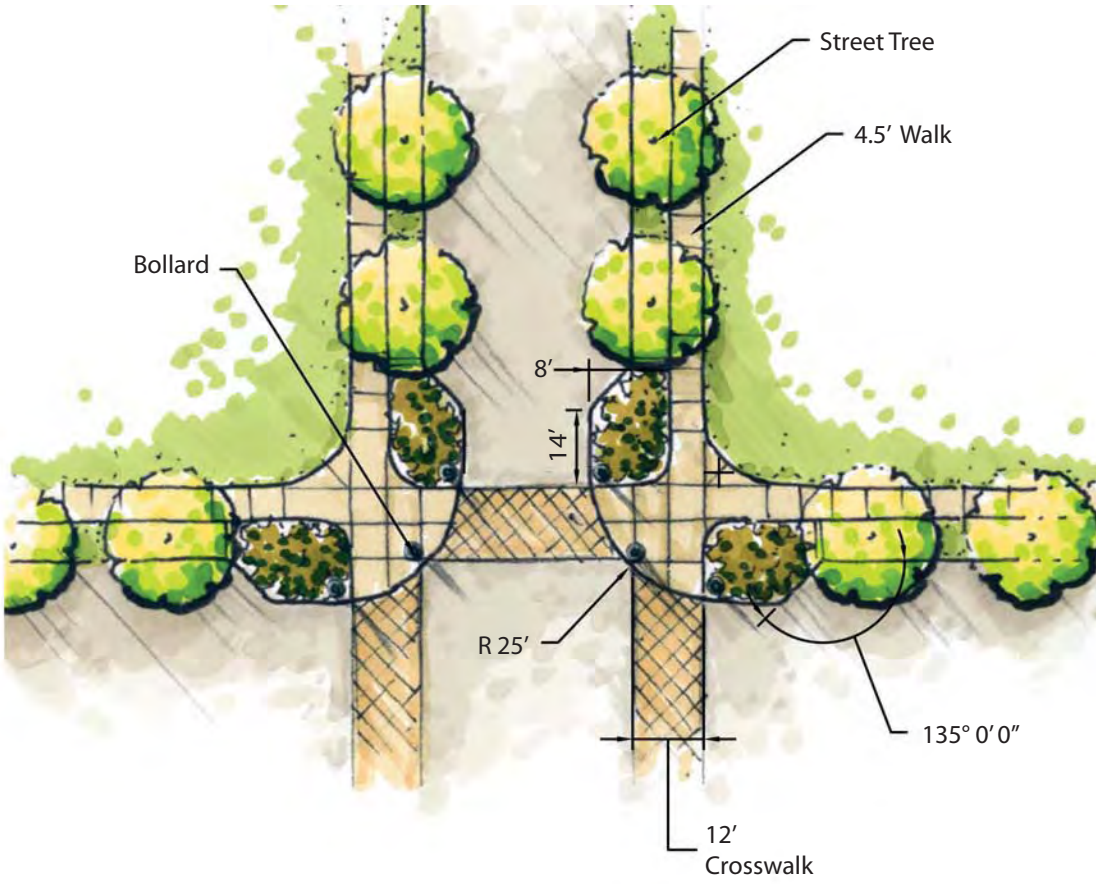

Daylighted cul-de-sac perspective drawing

## 4.8 Traffic Calming

Traffic calming is important to creating a safe and enjoyable neighborhood. Traffic calming devices can control traffic volumes and speeds to promote a safe neighborhood feel within the Plan Area.

Intersection bulb-outs reduce the paved surface width of a street at an intersection to serve two purposes: control traffic movements and provide safer pedestrian crossings as driving speeds tend to decrease as a street narrows. Intersection bulb-outs are encouraged at all intersections near open spaces, and are required adjacent to neighborhood parks. These bulb-outs should include special paving and landscaping that does not decrease driver sight lines at intersections.

To provide greater pedestrian safety, the Live Oak Master Plan has reduced paving on both collector as well as local streets, narrowing curb to curb widths from 48 feet to 40 feet, and 40 feet to 36 feet, respectively.

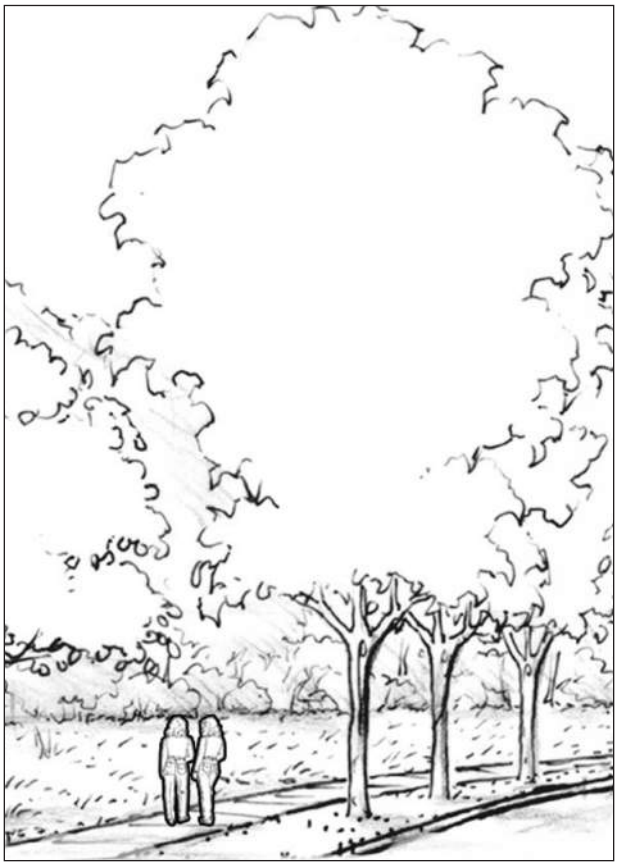



Example of bulb-outs

## 4.9 Pedestrian / Bicycle Circulation

Providing pedestrian and bicycle circulation is a priority of the Live Oak Master Plan. The land use pattern and circulation system incorporate safe, efficient routes for pedestrians and bicyclists between public amenities, such as parks and open space. Pedestrian and bicycle routes include sidewalks, bicycle lanes, and pedestrian / bicycle trails. All streets within the Plan Area contain sidewalks on both sides of the street edge. All sidewalks shall be a minimum 4.5 feet unless otherwise noted in street sections. Collector and Arterial streets contain bike lanes that serve a dual use with parking lanes.

The edge of Sand Slough and the Lone Oak Slough are utilized for Class I paths. These paths run the lengths of the sloughs and shall be paved and connected to the neighborhoods through the use of day-lighted cul-de-sacs or side lots. Both paths begin at Hume Avenue and terminate at Houston Avenue. These paths should be readily accessible to pedestrians and bicyclists.



Perspective view of the pedestrian trail at Lone Oak Slough

## 4.10 Public Transportation

There are public transportation opportunities within the Plan Area. Currently, transit service is provided by Kings Area Rural Transit (KART). KART currently has one bus stop within the Plan Area located at 12th Avenue at Hume Avenue. Future transit stops such as one at the proposed neighborhood commercial center should be examined for possible inclusion in the fixed route system. Any transit stops located within the Plan Area shall include climate protection structures, lighting and seating areas. Adequate Right-of-Way providing access to the circulation system should also be allocated.

# 5.0 Parks & Recreation

## 5.1 Introduction

The Live Oak Master Plan provides a variety of active and passive recreational opportunities for residents within and outside of the Plan Area. The Plan provides ~~three~~ neighborhood parks interconnected via linear greens and a series of sidewalks leading to open space trails. The parks create a central focal point within neighborhoods.

Three areas of open space totaling 31.6 acres are located along Lone Oak and Sand Sloughs, and adjacent to the west side of 12th Avenue along the Minor Park Collector. The sloughs are riparian woodland areas that should be enhanced by removal of debris and buffered from development. The edges of Lone Oak and Sand Sloughs can also provide trails for pedestrians and bicyclists.

The Hanford General Plan requires a dedication of 1.5 acres of neighborhood and 2.0 acres of community parkland per 1,000 residents. The Live Oak Master Plan exceeds this requirement with 21.0 acres of neighborhood parkland, providing above 3.0 acres per 1,000 residents.

~~Additionally, the following amenities should be included in Neighborhood Parks: 3 play areas and equipment for children 2-5 and 6-12 years of age, basketball courts, volleyball courts, horseshoe pits and covered picnic areas.~~

Requirements for community parkland will be met through payment of in-lieu fees ~~toward the construction of Community Park facilities.~~

Table 3.1 includes a summary of the total park (including linear and pocket parks) and open space acreage provided within the Plan Area. Figure 5.1 illustrates the conceptual locations of parks, open space, and parkways that parallel Entry Collectors.

The overall vision of the Live Oak Master Plan is accomplished through the following goals.

### 5.1.1 Parks and Recreation Goals

1. Utilize neighborhood parks as neighborhood focal points.

2. Establish pedestrian connections within the Plan Area providing non-motorized access to neighborhood parks.

3. Provide linear and pocket parks within neighborhoods that are not within a quarter-mile walking distance to neighborhood parks.

4. Preserve and enhance the riparian woodland areas that exist along the remnant sloughs within the Plan Area.

### 5.1.2 Parks and Recreation Policies

a. Parks and open space shall be located within the general area shown in Figure 5.1.

b. Neighborhood parkland shall exceed the City's General Plan requirements. Parks may be developed in stages as each phase builds out, in coordination with City staff.

c. All parks and trails developed within the Plan Area shall follow the guidelines and standards set forth in this section.

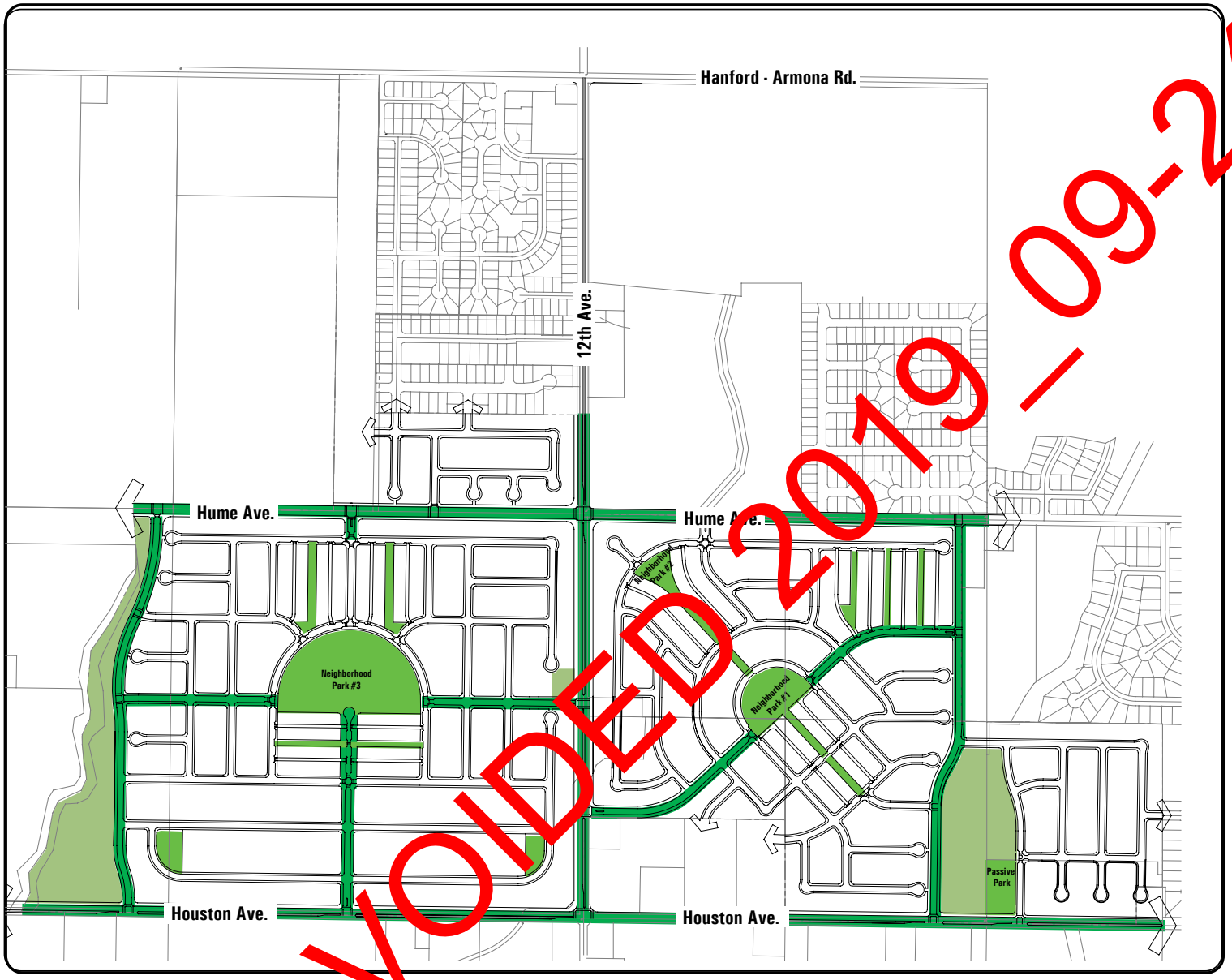
d. Neighborhood Parks shall accommodate a variety of active, semi-active, and passive recreational features that meet the needs of all ages, abilities, and interests.

e. Parks shall be located at prominent sites to provide focal points and landmarks for the residential neighborhoods.

f. Parks shall be located to maximize access and visibility. Orientation of structures adjacent to parks should promote the "eyes on the park" effect.

g. All parks shall be connected to neighborhoods through sidewalks or paths.

h. All park, safety, and maintenance standards shall comply with City and Americans with Disabilities Act standards.




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# Figure 5-1
## Open Space Diagram

*Legend*

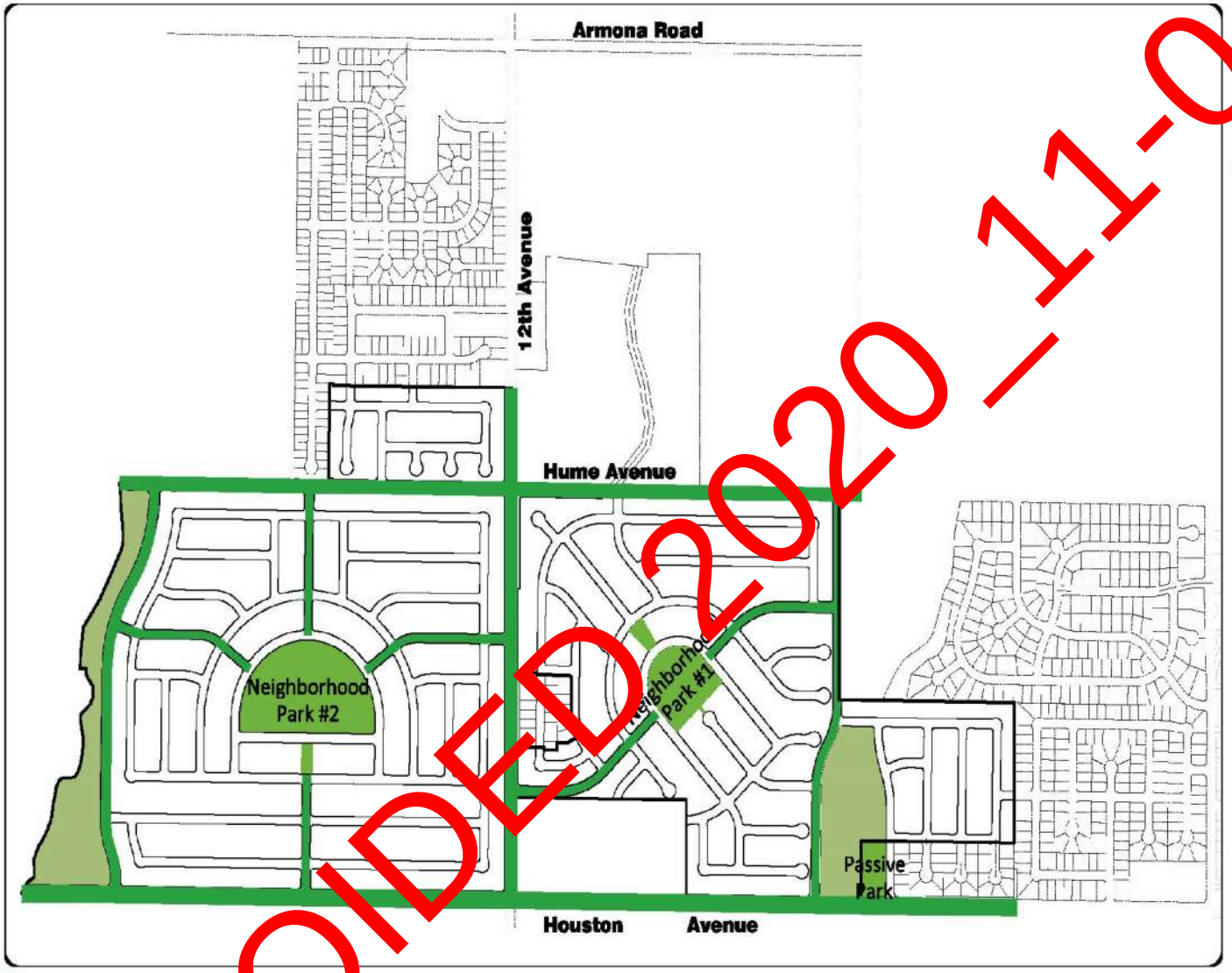
- Park / Linear Park / Pocket Park
- Open Space
- Enhanced Landscape Edge

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## Open Space Diagram

Live Oak master plan




## Figure 5-1
## Open Space Diagram

*Legend*

- Park / Linear Park / Pocket Park
- Open Space
- Enhanced Landscape Edge

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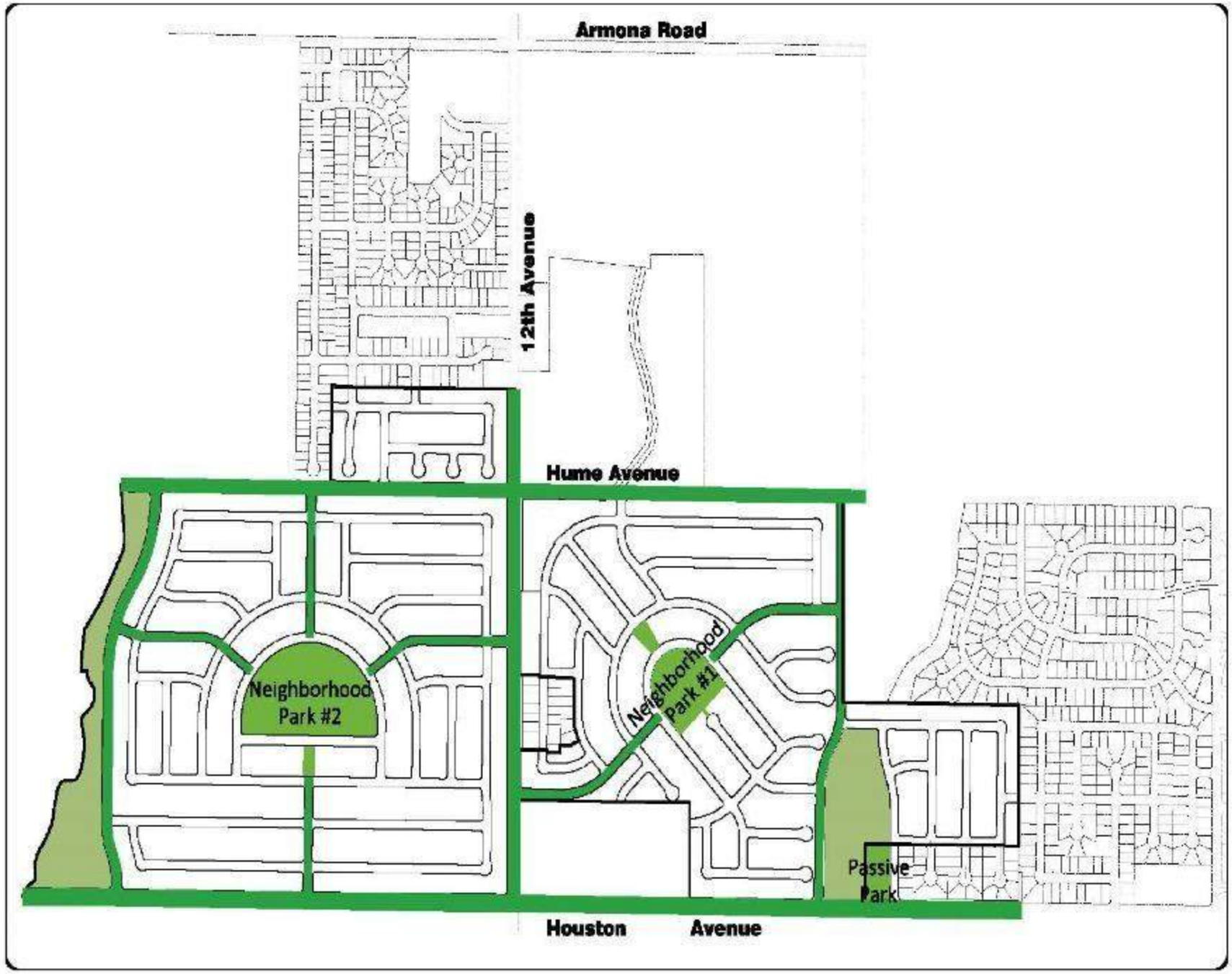
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Live Oak master plan

**Open Space Diagram**

5-3

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## Figure 5-1
## Open Space Diagram

*Legend*

- Park / Linear Park / Pocket Park
- Open Space
- Enhanced Landscape Edge

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Live Oak master plan

# Open Space Diagram

i. All parks and open space improvements shall be designed by a licensed landscape architect, as required by state law.

j. Parks are strongly encouraged to be designed and landscaped for easy maintenance, water efficiency, shade, and accommodation of recreational uses.

k. Off-street parking within neighborhood parks, if provided, shall be minimized. Off-street parking within pocket parks is prohibited.

l. Site furniture and structures shall be selected based on durability, vandalism resistance, and long term maintenance. These structures are to be consistent with the neighborhood character within the Plan Area.

m. When necessary, any neighborhood park that has storm water storage capability shall not have a slope greater than 8:1.

n. Appropriate landscaping shall be provided within landscape easements located adjacent to new residential development along major streets. Shade trees should be planted within this easement every 30 feet on center.

o. Appropriate landscaping shall be provided within planting strips along public Right-of-Ways. Street trees shall be planted within these planting strips every 30 feet on center.

p. Public utilities shall be located within easements outside of the Right-of-Way. All utilities shall be placed underground.

q. There shall be a minimum 50' setback from the edge of Lone Oak and Sand Sloughs to the curb of the adjoining street.

## 5.2 Neighborhood Parks

There are ~~three~~ neighborhood parks within the Plan Area. These parks are located on the east and west sides of 12th Avenue and just south of Hume Avenue. All neighborhood parks are accessible by streets and linear parks. The neighborhood parks, intended to be focal points with active recreational areas, will service new residents as well as existing neighborhoods.

Neighborhood Park #1 (refer to Figure 5.1) is approximately 2.6 gross acres, with centralized access to the eastern half of the Plan Area. The park is connected to residents through sidewalks and linear parks emanating from the northwest and southeast. Passive recreational amenities such as a tot lot, turf play areas, and picnicking facilities are envisioned. A local street, which terminates at the linear park, enables pedestrian access to the open space path located along Sand Slough and the neighborhoods across from Sand Slough.

~~Neighborhood Park #2 (refer to Figure 5.1) is approximately 2.0 gross acres in size, just south of Hume Avenue in the eastern half of the Plan Area. The Park site is connected to Neighborhood Park #1 through a linear park and a series of sidewalks that provide access to neighborhoods not directly adjacent to the linear park. The park will provide passive recreation and include such amenities as play areas, horse shoes, turf play areas and picnicking facilities.~~

Neighborhood Park #3 (refer to Figure 5.1) is approximately 9.6 gross acres, centrally located between Hume Avenue and Houston Avenue in the western portion of the Plan Area. The largest of the three neighborhood parks, it is envisioned to contain large turf areas for active recreation, surface courts, picnicking, seating facilities, tot lots, and pedestrian paths for passive recreation. Neighborhoods connect to the park through a



Birds eye view from the south of the neighborhood park west of 12th Avenue

series of sidewalks and multiple linear parks. Connections to Lone Oak Slough open space trails are provide via park / entry collectors west of Neighborhood Park #3.

A 2.0 acre passive park will be provided on the southeastern corner of Sand Slough, where the riparian woodland area will be especially enhanced with recreational opportunities, such as an open field, a trail, and / or park benches.



Fronting units onto the park not only provide a nice view, but also create an "eyes on the park" effect, providing greater safety

### 5.2.1 Neighborhood Park Standards

The following neighborhood park standards are required in the development of each neighborhood park.

a. Parks shall be centrally located within a neighborhood.

b. A neighborhood park should be fronted on all sides by streets, linear parks, or residential units. Residential units may side on to a neighborhood park if directly adjacent to a linear park.



Offer a variety of recreation opportunities by providing play structures as well as open fields

c. Separate play areas and equipment for children 2-5 years of age and children 6-12 years of age shall be provided.

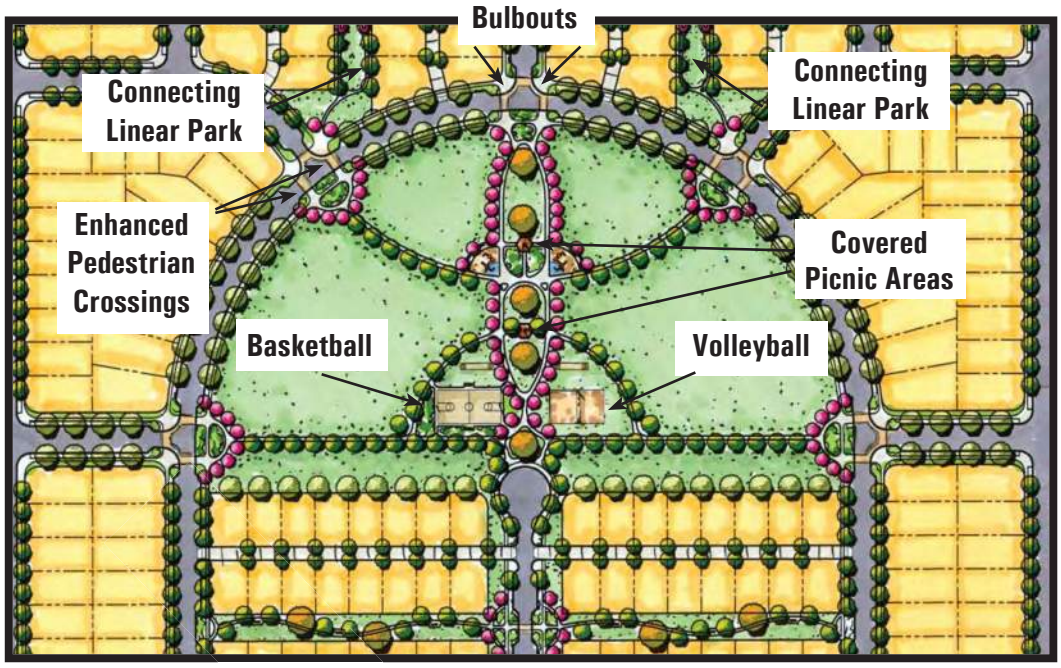
d. Seating areas shall be adjacent to play areas; individual and small group picnic areas shall be equipped with tables and individual barbecues.

e. Multi-purpose courts shall be provided for various activities.

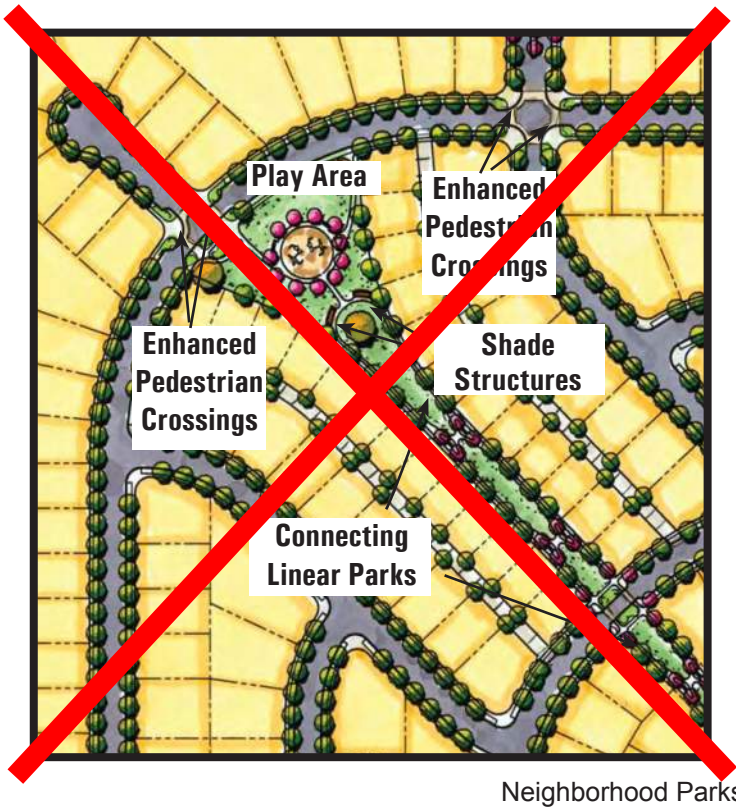
f. Trees and structures shall provide shade as appropriate in play areas, picnic areas, and seating areas.

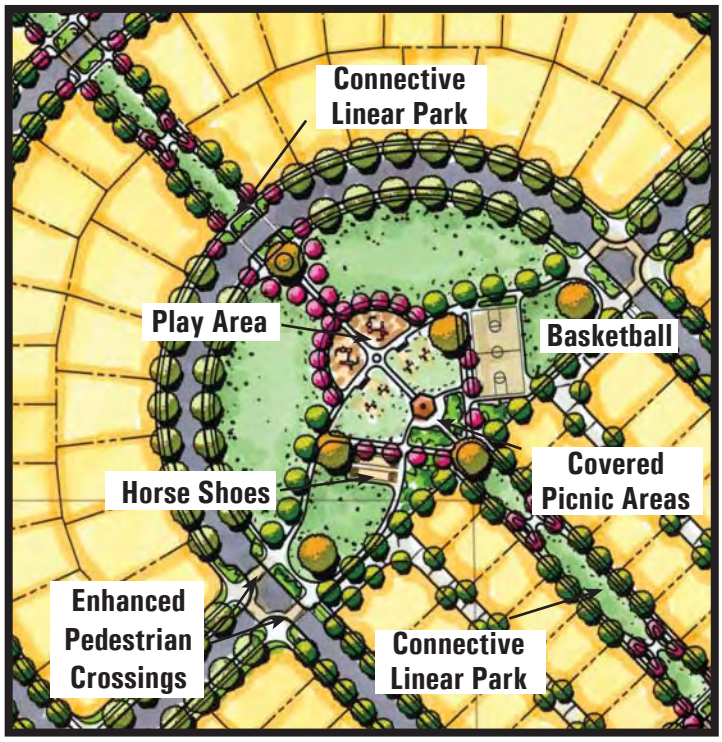
g. Links to neighborhoods by pedestrian paths, or sidewalks shall be implemented.

**Figure 5.2 Conceptual Neighborhood Parks**




Neighborhood Park west of 12th Avenue




Neighborhood Parks east of 12th Avenue

## 5.3 Pocket Parks

~~Pocket parks are located throughout the Plan Area to provide limited recreation opportunities to neighborhoods that are not within reasonable walking distance of a neighborhood park.~~ Additionally, they provide green space opportunities for limited passive recreation. These pocket parks are located within some neighborhoods that are separated by sloughs or other barriers that limit pedestrian access.



An example of a pocket park

Pocket Parks are smaller than neighborhood parks, generally no more than 2 acres in size. Pocket Parks should not necessarily just be dedicated solely to green space. Amenities such as a neighborhood communal garden, shade areas, or play structures should be considered. Pocket Parks shall follow these standards in their development.

### 5.3.1 Pocket Park Standards

a. Pocket Parks shall be prominently located within a neighborhood.

b. A pocket park shall be fronted on two sides by local streets.

c. Activity within the park, such as play structures, communal neighborhood gardens, or grass areas with planted shade trees should be provided.

d. ~~Park size should be approximately 1-2 acres in size.~~



The addition of play structures offers opportunity for community gathering among neighborhood children and parents.

## 5.4 Linear Parks

Linear parks provide access to neighborhood parks and also serve as limited recreation opportunities to residents that are directly adjacent or within close proximity to linear parks. Linear parks are also provided in the medium density residential. Linear parks vary in width and length and are essential components to the public infrastructure such as water and wastewater provisions (refer to Chapter 7, Public Facilities and Services).

Linear Parks are smaller than pocket parks, generally no more than two acres in size. Linear Parks should be dedicated solely to green space with additional shade trees and vegetation. Linear Parks shall follow these standards in their development.

### 5.4.1 Linear Park Standards

a. Linear Parks shall provide connections to neighborhood parks, open space sloughs, or paths along collectors.

b. Linear Parks should be fronted by residential units.

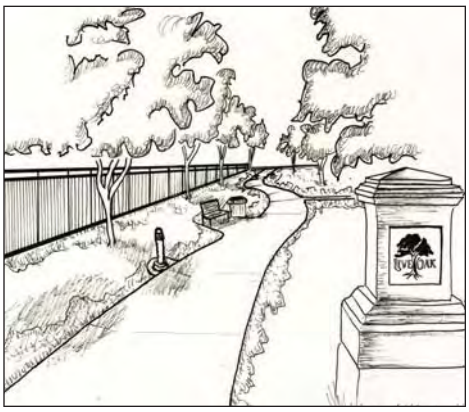
c. Fences, walls, or other privacy screens shall not be permitted to isolate linear parks. Fences shall be permitted for residential units fronting linear parks pursuant Section 3.4.8 Residential Walls and Fences.



Aerial view of linear park depecting residential units fronting the park

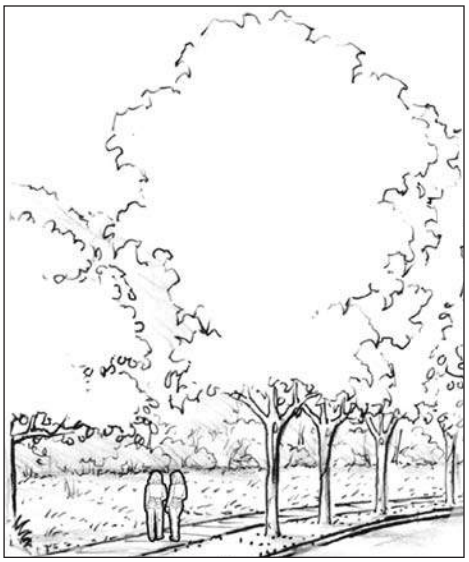
## 5.5 Open Space Sloughs / Pedestrian Paths

There are two remnant sloughs located within the Plan Area: Lone Oak and Sand Slough. Sand Slough is located in the eastern area of the Plan Area between Hume Avenue and Houston Avenue. Lone Oak Slough stretches from Houston Avenue to the Hume Avenue extension in the western portion of the Plan Area. Both sloughs will be maintained as conservation/open space for the riparian habitat and occasional seasonal drainage it provides the Plan Area. These sloughs have been treated as the backyard of development within existing neighborhoods. However, it is the intention of the Master Plan to embrace these sloughs as an integral part of the overall community design scheme for every resident to enjoy.



Pedestrian paths should be of concrete material, and landscaped to maintain consistency with the Plan Area.

Within the Plan Area boundary, pedestrian paths are located on the east side of Lone Oak Slough and the west side of Sand Slough within a 50-foot easement. These paths shall have connections to surrounding residential neighborhoods by local streets and daylighted cul-de-sacs. The use of dead end cul-de-sacs is prohibited along the sloughs. Material for pedestrian paths shall be of a concrete material, or porous material that maintains the rural characteristic of the sloughs. It is important to keep these areas as natural as possible. Only open or rail fencing should be used along the sloughs.



An example of a pedestrian path

### 5.5.1 Open Space Sloughs/Pedestrian Paths Standards

a. Pedestrian paths shall be located adjacent to streets parallel to open space sloughs.

b. Trails shall be composed of concrete or porous material.

c. Limited lighting and open rail fencing shall be used to maintain a rural characteristic.

d. Parkways shall be well lit; lights shall be consistent with the Community Lighting Guidelines in Chapter 3.

## 5.6 Landscape / Public Utility Easement

Landscaping is recognized as an important aesthetic and environmental ambient to the Plan Area. Even with the incorporation of open space corridors, planting strips within or along street Right-of-Ways, and planting of trees within lots, the Live Oak Master Plans provides additional landscape easements to provide shade and other landscaping treatments to enhance the character of the neighborhood. The landscape easements are located along major roads adjacent to residential development. These 8-10-foot easements are provided on both sides of the 12th Avenue, Right-of-Ways adjacent to new residential development along Houston Avenue, Hume Avenue, and some minor collectors. Landscaping within these easements should include shade trees every 30 feet on center. Section 3.9 entitled "Community Landscaping" lists the landscaping appropriate for these easements.

Public Utility Easements should be located within landscape easements as deemed necessary by the various public utility companies. Residential units shall not be located within parcels that are owned by the People's Ditch Irrigation Company. Irrigation canals that are present within the Plan Area shall be placed underground in coordination with the People's Ditch Irrigation Company.

# 6.0 Conservation

## 6.1 Introduction

The Conservation Chapter provides direction regarding some of the environmental resources that surround and are within the Live Oak Master Plan Area. The topics within this chapter address issues such as agricultural interface, air quality, biological resources, and energy conservation within new development. The following Conservation Goals and Policies shall guide the Live Oak Master Plan in accommodating growth and preserving the natural resources that surround the Plan Area.

### 6.1.1 Conservation Goals

1. Preserve and enhance the riparian woodland that exists along the remnant sloughs within the Plan Area.

2. Minimize environmental impacts to endangered species and their habitat.

3. Utilize Best Management Practices (BMP's) to reduce air and water pollution.

4. Allow agricultural operations to continue during implementation of the Master Plan.

5. Reduce energy consumption within the Plan Area by encouraging use of photovoltaic solar panels, passive solar design, and energy star appliances.

### 6.1.2 Conservation Policies

a. Any residential units that are located within a 1/4 mile from existing agriculture shall be notified of existing farming operations in accordance with the Kings County and City of Hanford "Right to Farm Ordinance."

b. ~~Very Low Density Residential (VLD) shall be provided as a transition between agriculture and rural areas with urban uses. Large lot residential~~

~~uses shall be located approximately 1/8 mile north of the Houston Avenue Right-of-Way.~~

c. No parcel under a Williamson Act Contract shall be developed until the contract has been terminated.

d. Residential development shall provide an interconnected street network that allows alternative routes for pedestrian, bicyclists, and motorists to reduce vehicle emissions associated with development.

e. Improve the quality of stormwater runoff and recharge groundwater by reducing the amount of impervious surfaces, and utilizing active filtering prior to discharge within stormwater runoff facilities.

f. A minimum 50-foot open space easement shall be established between each Slough and adjacent street.

g. Only passive meandering pedestrian paths may be permitted within the 50-foot easement.

h. The amount of paved surfaces shall be reduced on local and collector streets and street trees shall be planted every 30 feet within planting strips to reduce the effect of Heat Islands.

i. Photovoltaic (PV) Panels shall be offered in all new residential development within the Plan Area.

j. Residential units are strongly encouraged to be oriented along the north-south axis to reduce energy consumption.

k. Energy star appliances shall be offered with new residential units.

## 6.2 Agriculture

Agriculture is an important part of the Central Valley, especially within Kings County and the Hanford Area. It is important to recognize that surrounding farmland is not a nuisance to development, but an important industry critical to the local economy. The Plan Area will abut existing agriculture south of Houston Avenue, west of Lone Oak Slough, and along portions of the Hume Avenue extension. Existing agriculture has a right to exist and operate in proximity to the Plan Area. Any residential units located within a 1/4 mile from existing agriculture shall be notified of the existing farming operations in accordance with the Kings County and City of Hanford "Right to Farm Ordinance." This ordinance is explained further in 6.6.2.

~~The City of Hanford has made it a priority to buffer agriculture west of 12th Avenue along Houston Avenue. The Plan Area has adhered to the General Plan's Land Use Policy that Very Low Density Residential (VLD) is provided as a transition between agriculture and rural areas with urban uses. Large Lot residential is located from Houston Avenue to 1/8 mile north of its Right-of-Way edge~~.

### 6.2.1 Williamson Act

Williamson Act preserves agriculture and open space lands through property tax incentives and voluntary restrictive use contracts. Landowners restrict their land to agricultural and open space uses for a minimum of 10 years and in return are assessed property tax based on their actual use, rather than the potential market value.



Agriculture near the Plan Area

There is one Williamson Act Contract within the Plan Area. The contract, consisting of 3 parcels east of Sand Slough, has a notice of non-renewal filed against it. These parcels shall not be developed until the contract is terminated. Parcels subject to the Williamson Act provision are located in Figure 2.2.

### 6.2.2 Right to Farm

The Kings County and the City of Hanford's Right to Farm Ordinance, No. 546 and 16.40.110 respectively, states that agriculture and agricultural operations are priority uses in productive agriculture lands and residents in the vicinity of, or adjacent to land designated or utilized for agriculture uses, facilities, or operations maybe subject to inconveniences or discomforts from these agriculture operations. All residential units located within 1/4 of existing or zoned city or county agriculture lands shall be notified of the "right to farm" ordinance.

## 6.3 Air Quality

Pursuant to the standards of the Federal Clean Air Act, the San Joaquin Valley Air Pollution Control District monitors the air quality for the San Joaquin Air Basin. The San Joaquin Valley has been in a non-attainment status for the majority of the constituent categories since the standards were devised. Although air pollution is created by many different sources, vehicle emissions (mobile sources) are a leading generator of air pollutants in metropolitan areas of the San Joaquin Valley. Additionally, the air-trapping basin that is formed by the San Joaquin Valley provides for a geographic disadvantage by holding pollution and compounding its affect on ambient air quality. Land use patterns and the availability of different modes of transportation affect the number of vehicle trips, miles traveled, and related vehicle emissions per household. The Live

Oak Master Plan seeks to avoid the impact on air quality by providing a variety of housing types located within walking distance of neighborhood amenities.

The urban form has a measurable impact on air quality by affecting the desirability and necessity of automobile usage. Opportunities for non-motorized forms of transportation were contemplated in the formation of the land use and circulation plan for this area. The Live Oak Master Plan implements air pollution reduction policies contained in the Hanford General Plan (refer to Appendix B of City of Hanford General Plan). Specifically, the plan seeks to reduce overall vehicle emissions associated with urban development by providing an interconnected street network that allows for options in routes for pedestrians, bicyclists, and motorists alike. In areas where through auto traffic is not desired, the use of daylighted cul-de-sacs and trail connections provide pedestrians and bicyclists with routes that are safe and attractive alternatives to the automobile. The resulting development will provide choices in modes of transportation thereby reducing project specific impacts associated with automobile emissions.

## 6.4 Water Quality

Waterways that are protected and managed are an asset to a community bringing recreational and ecological benefits to residents. The Plan Area is flanked by remnant sloughs on the east and west boundaries. Due to the profound influence urban development has on the amount and quality of stormwater runoff, it is critical to implement methods of non-point source pollution reduction. One important method is to retain as much stormwater as possible on site by reducing impervious surfaces, thereby allowing more water to be recharged as would be prior to urban development. Lone Oak and Sand Sloughs, which can increase in size if necessary, will reduce impervious surfaces, as well as serve as on site stormwater retention. In addition, any stormwater collection system must utilize active filtering prior to discharge to any waterway. The Live Oak Master Plan utilizes both methods of reducing runoff from impervious surfaces and active filtering of stormwater.

## 6.5 Biological Resources

Though not present within the Plan Area, it is possible that biological resources considered "special status species" by either the U.S. Fish and Wildlife Department (USFWD) and the California Department of Fish and Game (CDFG) may use the Plan Area for breeding, nesting, or roosting. The biological study of the Plan Area and surrounding area has determined that development within the Live Oak Master Plan Boundary would yield no adverse impact to any special status species. It is the intention of the Master Plan to protect any habitat that may be used by these special status species.

## 6.6 Energy Efficiency

Creating an environmentally friendly community starts with using more effective techniques to reduce energy consumption at the residential unit level. Within the Live Oak Master Plan, residential neighborhoods and residential units are strongly encouraged to promote energy efficiency. The following techniques are some of the ways the Live Oak Master Plan promotes energy efficiency.



Swanson's Hawk that may nest within the Plan Area

### 6.6.1 Reduction of Paved Surfaces

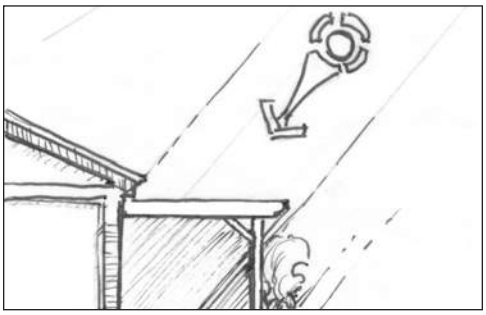
Summers within the Southern San Joaquin Valley are very hot, with temperatures reaching above 100 degrees on several days during the summer. The average summer temperature within Hanford is approximately 94 degrees during the months of June through August. Ground temperatures become even hotter near paved surfaces surrounded by buildings as their dark construction materials and lack of vegetation trap the sun's energy – a phenomenon known as the "Heat Island" effect. Heat accumulates on paved surfaces during the day and releases at night. The Live Oak Master Plan area eases the Heat Island effect by reducing paved surface area on local and collector streets by 4 and 8 feet respectively. Over 350,000 square feet of paved surface has been omitted from the Plan Area by street narrowing, coupling increased pedestrian safety with heat mitigation. Street trees planted 30 feet on center provide an added canopy of shade, further reducing the surface temperature of the paved surface by 1 degree with each additional 10 percent of canopy cover.



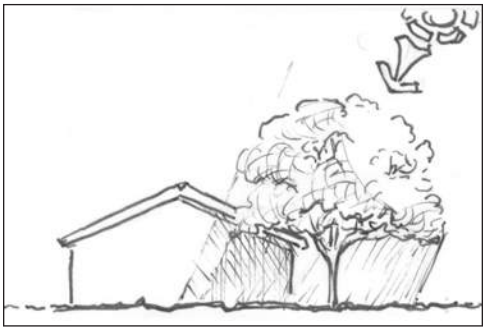
An example of PV Panels on a residential unit

### 6.6.2 Photovoltaic Panels

The use of Photovoltaic (PV) Panels is strongly encouraged in all residential development within the Plan Area. These panels convert sunlight directly into electricity. Connecting PV panels to the utility grid (Southern California Edison will provide electricity to the Plan Area), would enable PV panels to supply energy to the home during days of sunlight. When consumption is less than the electricity generated by PV Panels, consumers can sell back excess electricity to the utility



Covered patio and porches not only provide comfort for outdoor seating but also reduce the amount of solar heat gain on walls that have south and west exposure



Deciduous trees planted on the south and west exposure of structure provides shade in the summer and allows sun to warm the house in the winter

company (referred to as "Net Metering") at the rate charged for electricity consumption, as permitted by the state of California. When PV Panels are not generating electricity, such as during evening hours, the utility company meets the demand by providing electricity.

### 6.6.3 Design of Residential Units-Passive Solar Heating

Residential units should be designed with environmentally friendly approaches that reduce energy consumption. This includes the southern-orientation of residential units to take advantage of the sunlight, achieved by utilizing an east-west street orientation. Providing deciduous trees on the southern and western elevations of residences reduces the solar heat gain during summer afternoons, but allow sunlight through in the winter months. Other design features include use of energy efficient windows that reject the sun's heat in the summer and reduce heat loss in the winter. These windows allow high levels of light penetration without tinting, also helping to reduce energy bills.

# 7.0 Public Services & Facilities

## 7.1 Introduction

The goal of the Public Services and Facilities Chapter is to ensure that adequate public infrastructure, utilities, and services are available to serve future residents. This chapter describes the planned public infrastructure improvements that will be needed to provide orderly development within the Plan Area. In addition to public infrastructure, public services such as fire protection, police services and public schools are also addressed.

Public infrastructure will be completed in six phases (refer to Figure 7.1, Infrastructure Phasing). These phases are necessary to create orderly development and ensure improvements are made to existing public infrastructure at the appropriate time. The following are goals that guide improvements to public facilities and services within the Live Oak Master Plan Area.

### 7.1.1 Public Facilities and Services Goals

1. To provide an efficient system of public infrastructure and utilities that services the needs of future residents within the Live Oak Master Plan Area.

2. Ensure that adequate public services are made available for the safety and well being of future residents of the Live Oak Master Plan Area.

### 7.1.2 Public Facilities and Services Policies

a. Require the availability of an adequate water supply to be demonstrated before approving new development phases.

b. Minimize wastewater flows through water conservation efforts.

c. Require that collected wastewater be of a quality consistent with State Regional Water Quality Control Board standards and those adopted by the City of Hanford.

d. Ensure provision and sizing of adequate stormwater facilities to accommodate the Plan Area and provide for water detention sufficient to limit outflow.

e. Design stormwater detention basins to ensure public safety, be visually unobtrusive, and be planted in a manner consistent with existing sloughs.

f. Require that public utilities such as electricity, natural gas, telecommunications, and waste disposal are provided to residents.

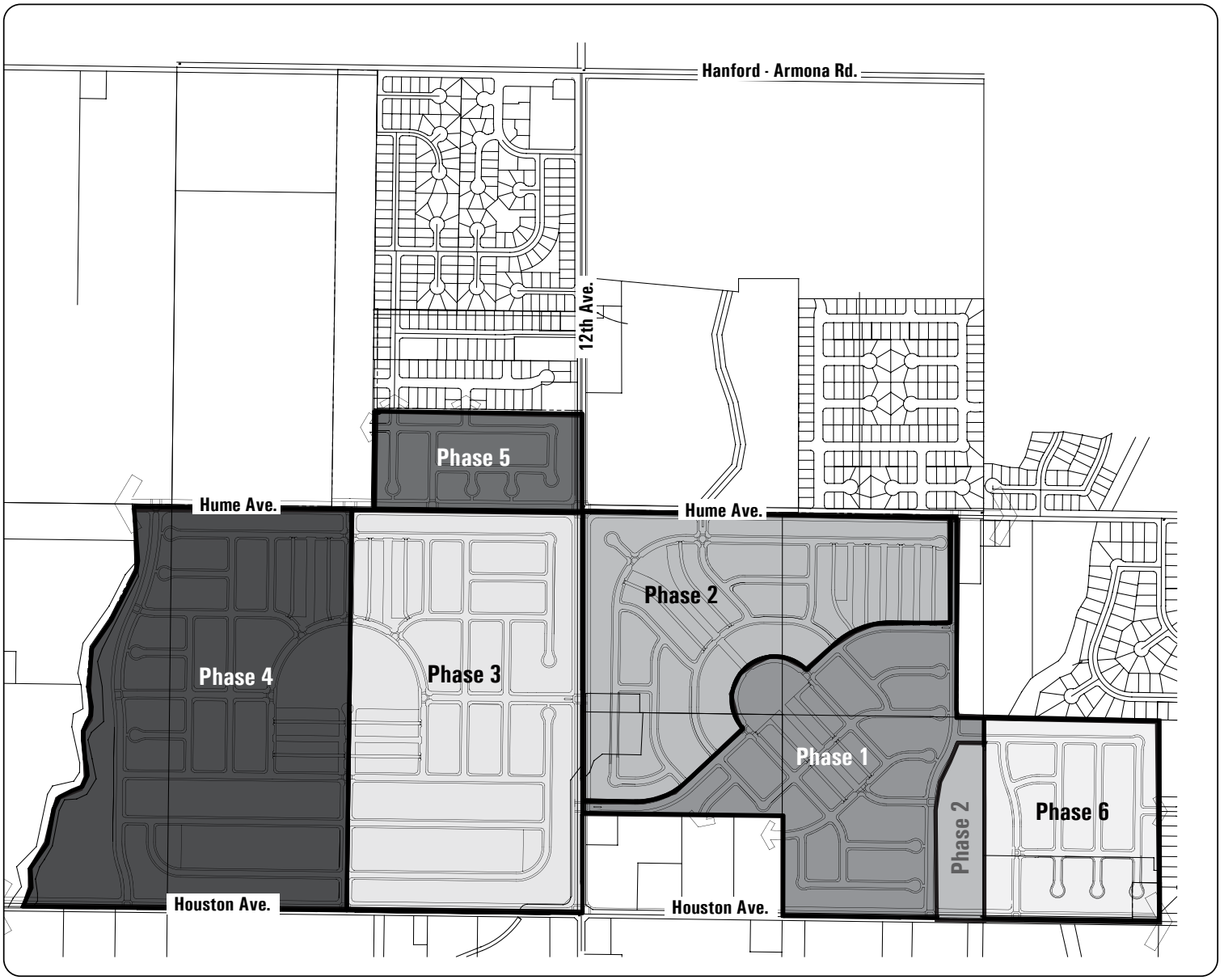
g. Ensure that emergency response times meet or exceed the minimum standards for both the Hanford Police and Fire Departments.

h. Ensure that adequate public school facilities are provided for residents within the Plan Area.

## 7.2 Public Infrastructure and Utilities

The conceptual public facilities illustrated in Figures 7-2 through 7-4, do not represent the complete improvements necessary to fully develop the Plan Area. Improvements to existing infrastructure shown in Figures 7-2 through 7-4 are considered the backbone and additional infrastructure will be required. The tentative subdivision map process will determine the exact sizing and location of ultimate infrastructure improvements. The tentative maps shall follow the design of the conceptual infrastructure improvements as illustrated in the conceptual water, wastewater, and stormwater plans. Revisions to size and general locations shall only be approved by the City of Hanford at the time of the filing of the tentative maps or building permit, whichever comes first.

Developers may be required, at the submittal of a tentative map, to submit an infrastructure analysis. This analysis will address any improvements necessary outside the interest of a tentative map required to be in place prior to acceptance of the subdivision. This analysis will also need to address any potential construction of off-site facilities.




# Figure 7-1

**Plan Area Infrastructure Phasing Plan**

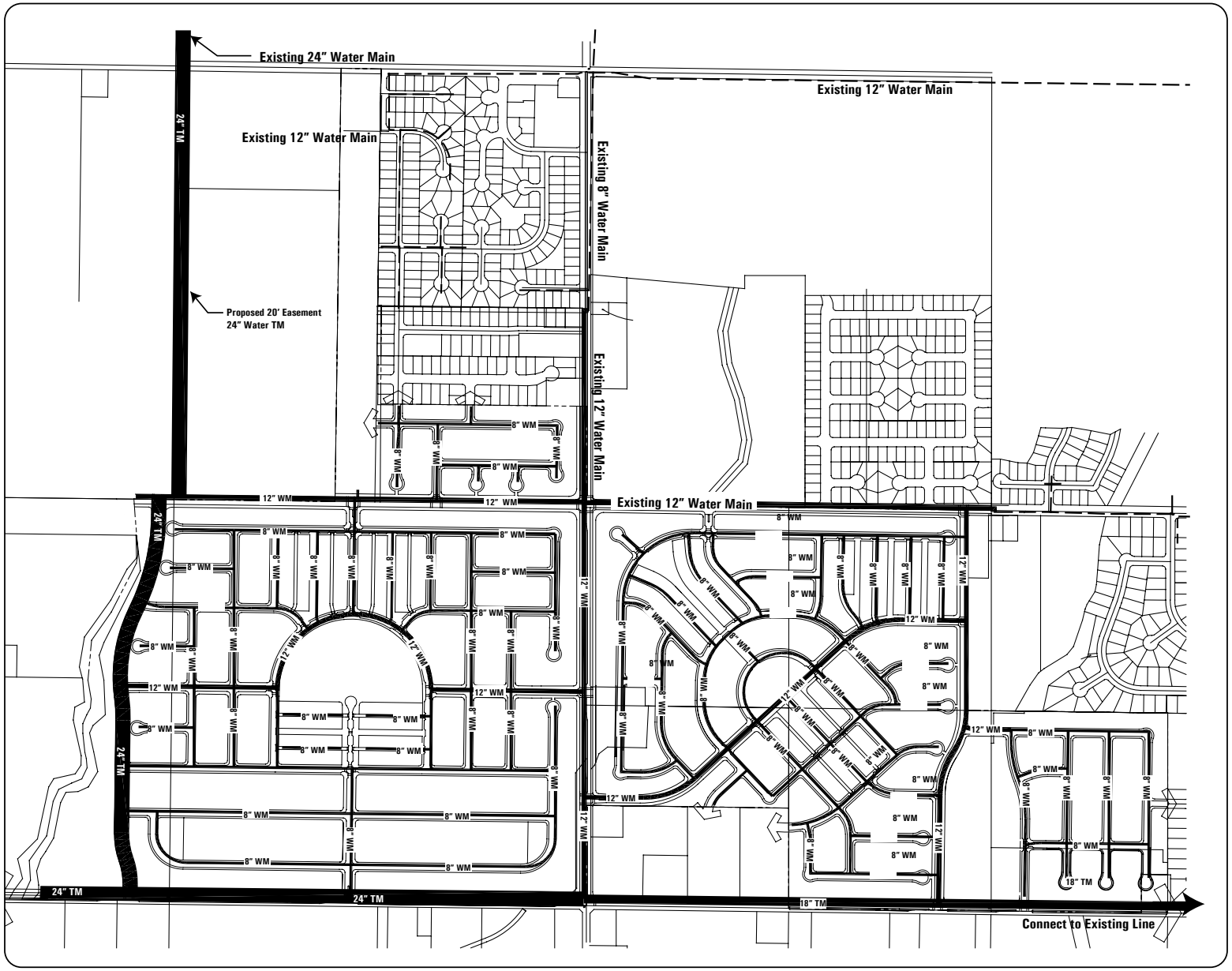
*Legend*

- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5
- Phase 6

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## Plan Area Infrastructure Phasing Plan




# Figure 7-2
## Conceptual Water Diagram

*Legend*

- Existing Water Main
- 24" Water Transmission Main
- 18" Water Transmission Main
- 12" Water Main
- 8" Water Main
- 6" Water Main

***Graphic for Illustrative Purposes Only***

Note: Actual sizing and alignments of utilities will be determined as part of the final improvement plans prior to Final Map approval.

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# Conceptual Water Diagram

### 7.2.1 Water

The City of Hanford will provide municipal water services. The water supply system uses a conveyance system of looped water lines that delivers potable water to residents and businesses in Hanford. The conceptual backbone will connect to the existing system as illustrated in Figure 7.2, Conceptual Water Diagram. Improvements will be completed in phases to allow for municipal water services delivery to residents, and the irrigation of parks and recreational areas (refer to Figure 7.1). Improvements to water infrastructure shall be completed in the following order to facilitate proper connections to the City's existing water system.

*Phase I*—The following improvements shall be implemented:

a. A 12-inch water main within the "Entry Minor Collector"/"Minor Collector Abutting Open Space" Right-Of-Way connecting to the existing 12-inch water main within the Hume Avenue Right-of-Way and connect to an 18" transmission main within the Houston Avenue Right-Of-Way. This line will connect with the existing 18-inch transmission main within the Houston Avenue Right-Of-Way east of the Plan Area Boundary.
b. A 12-inch water main within the Entry Minor Collector Right-Of-Way and through Neighborhood Park #1 connecting with two 8-inch water mains used for residential municipal water delivery west of Neighborhood Park #1.
c. Improvements for residential municipal water service as well as irrigation for parks, planting strips, and other vegetation.
d. An 18-inch transmission main within the Houston Avenue Right-Of-Way, connecting to 12th Avenue water main.
e. A 12-inch water main within the 12th Avenue Right-Of-Way connecting to the existing 12-inch water main within the Hume Avenue Right-Of-Way.

*Phase II*—The following improvements shall be implemented:

a. A 24-inch transmission main within an 20-foot easement, north of Hume Avenue, connecting with an existing 24-inch transmission main north of Hanford-Armona Road.
b. A 24-inch transmission main within the Minor Collector Abutting Open Space Right-Of-Way west of Neighborhood Park #3 connecting with the 24-inch transmission main north of Hume Avenue.
c. A 24-inch transmission main, east of Lone Oak Slough and within the Houston Avenue Right-Of-Way, connecting with an 18-inch transmission main at the 12th Avenue intersection.

d. Continuance of a 12-inch water main within the Entry Minor Collector, west of Neighborhood Park #1, connecting with the 12-inch water main within the 12th Avenue Right-Of-Way.
e. Improvements for residential municipal water service as well as irrigation for parks, planting strips, and other vegetation.

*Phase III*— The following improvements shall be implemented:

a. A 12-inch water main within the Hume Avenue Right-Of-Way west of 12th Avenue connecting with an 8-inch water main within the Entry Minor Collector.
b. A 12-inch water main from 12th Avenue within the Entry Minor Collector Right-Of-Way and Park Minor Collector Right-Of-Way of Phase III.
c. An 8-inch water main within the north / south Entry Minor Collectors connecting with the 24-inch transmission line at Houston Avenue and the 12-inch water main within the Hume Avenue Right-Of-Way.
d. Improvements for residential municipal water service as well as irrigation for parks, planting strips, and other vegetation.

*Phase IV*— The following improvements shall be implemented:

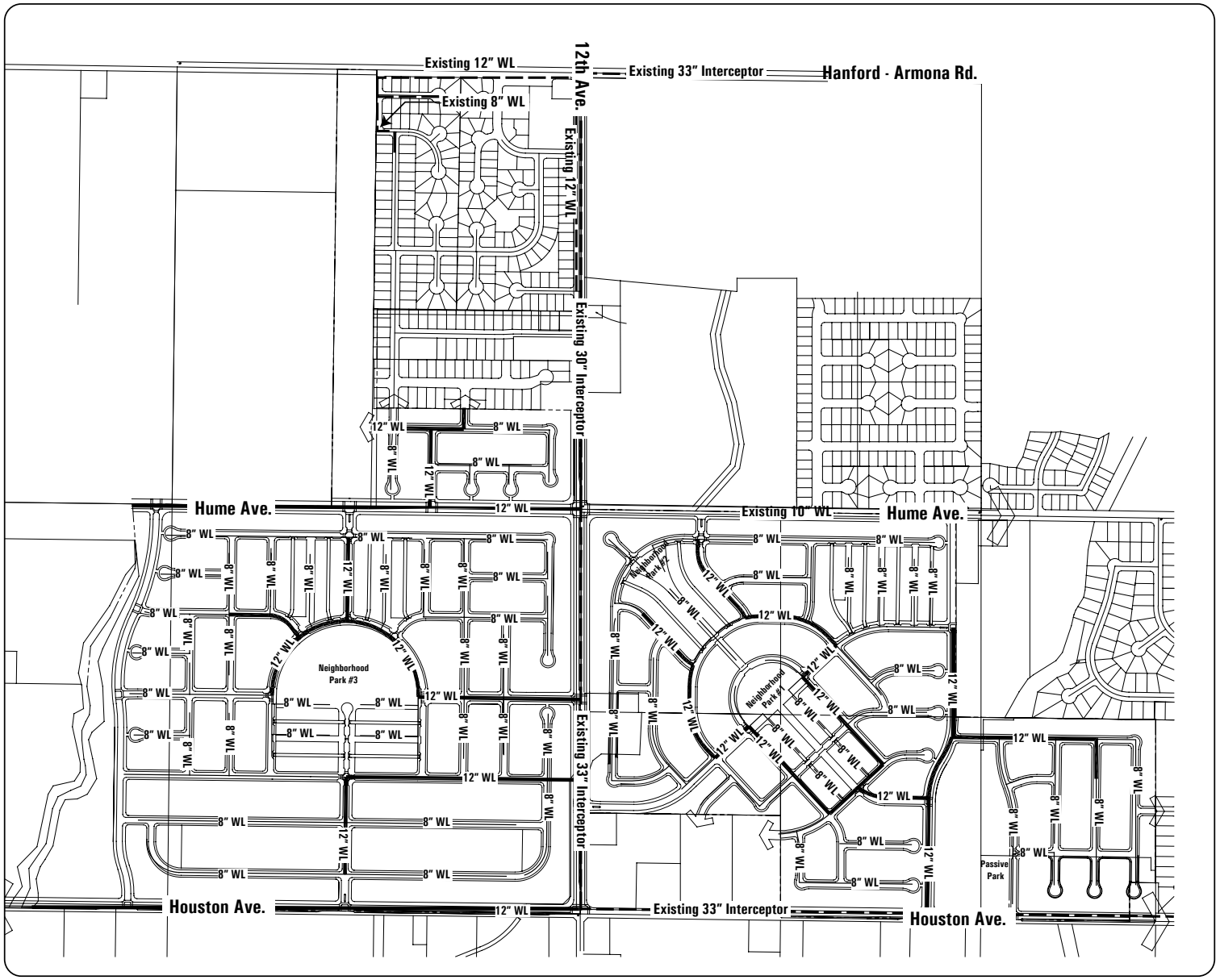
a. Continuance of a 12-inch water main within the Hume Avenue Right-Of-Way from Phase III connecting with the 24-inch transmission line within the Minor Collector Abutting Open Space Right-Of-Way.
b. Continuance of the 12-inch water main within the Park Minor Collector Right-Of-Way and Entry Minor Collector from Phase III. The 12-inch water main will connect with the 24-inch transmission line within the Minor Collector Abutting Open Space Right-Of-Way.
c. Improvements for residential municipal water service as well as irrigation for parks, planting strips, and other vegetation.

*Phase V*— The following improvements shall be implemented:

a. 8-inch water mains connecting with the 12-inch water main within the Hume Avenue Right-Of-Way from Phase III.
b. Improvements for residential municipal water service as well as irrigation for parks, planting strips, and other vegetation.

*Phase VI*— The following improvements shall be implemented:

a. An 8-inch water main connecting with the 18-inch transmission main within the Houston Avenue Right-Of-Way from Phase II.
b. A 12-inch water main connects with existing 12-inch water main along the west side of Sand Slough.
c. Improvements for residential municipal water service as well as irrigation for parks, planting strips, and other vegetation.




# Conceptual Wastewater Diagram

## Figure 7-3
### Conceptual Wastewater Diagram

*Legend*

- Existing Wastewater Trunk Line
- 12" WL — 12" Wastewater Trunk Line
- 8" WL — 8" Wastewater Line

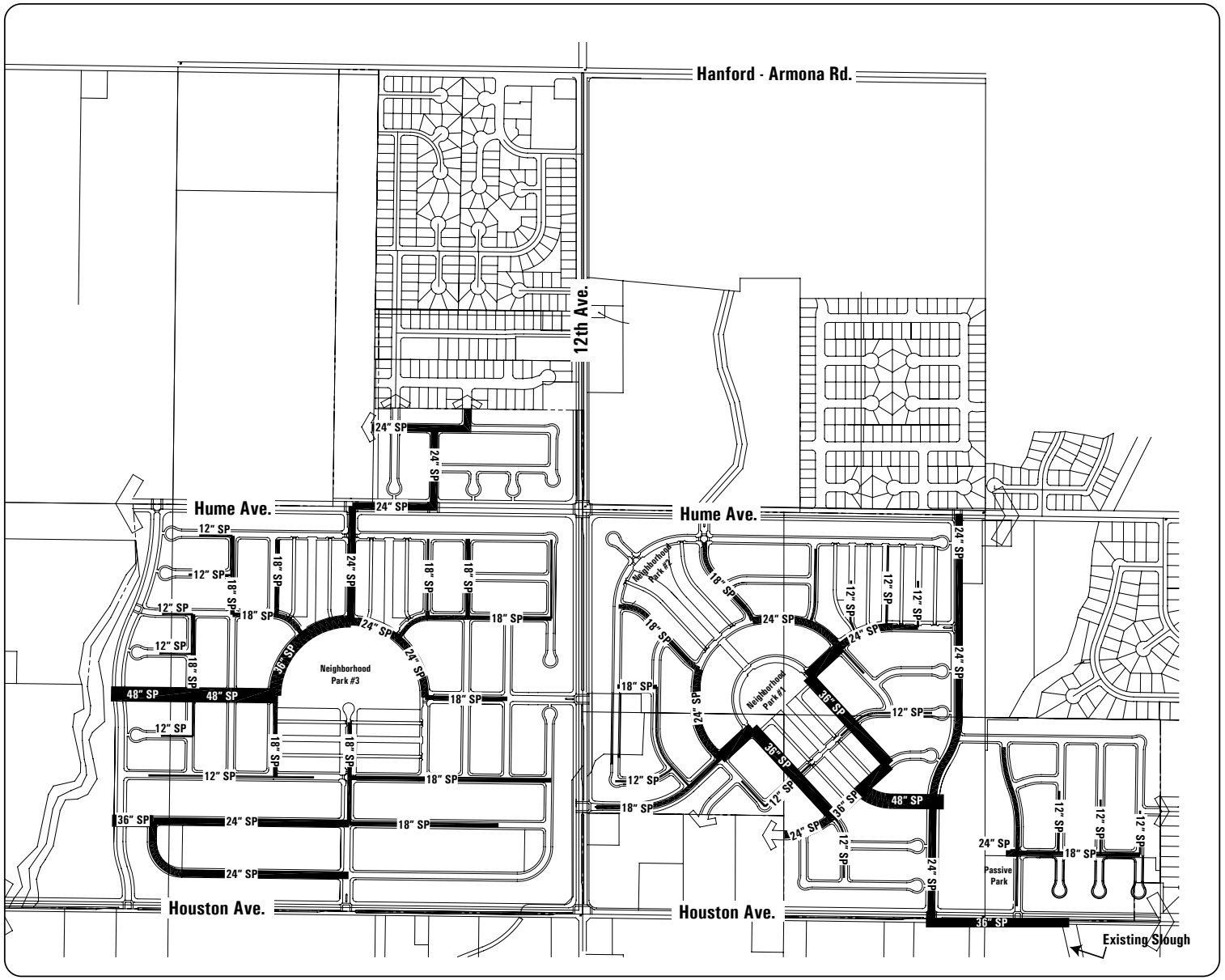
***Graphic for Illustrative Purposes Only***

Note: Actual sizing and alignments of utilities will be determined as part of the final improvement plans prior to Final Map approval.

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Live Oak master plan




# Figure 7-4

**Conceptual Storm Drainage Diagram**

## Legend

- 48" SP — 48" Storm drain Pipe
- 36" SP — 36" Storm drain Pipe
- 24" SP — 24" Storm drain Pipe
- 18" SP — 18" Storm drain Pipe
- 12" SP — 12" Storm drain Pipe

***Graphic for Authoritative Purposes Only***

Note: Actual sizing and alignments of utilities will be deterined as part of the final improment plans prior to Final Map approval.

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# Conceptual Storm Drainage Diagram

### 7.2.2 Wastewater

The City of Hanford will provide wastewater services including collection, transmission, and treatment of wastewater. The wastewater system will encompass a series of lines that will connect to the City's existing trunk main interceptor along 12th Avenue, Hanford-Armona Road, and Houston Avenue. The wastewater generated by the Plan Area will be delivered to the Hanford Wastewater Treatment Facility, located southeast of the Plan Area, via interceptor lines.

Wastewater lines of 8-18 inches in diameter will connect the wastewater system to the interceptor lines (refer to Figure 7.3 Conceptual Wastewater Diagram). As with municipal water services, the wastewater system will be completed in phases (refer to Figure 7.1). Each phase will complete wastewater improvements in order for residential development to occur. The following improvements will be necessary to allow for wastewater service to be connected to the City's existing infrastructure network.

*Phase I*—The following improvements shall be implemented:

a. A 12-inch wastewater trunk line within the Minor Collector Abutting Open Space Right-Of-Way connects with the existing 33-inch interceptor within the Houston Avenue Right-Of-Way.
b. 12-inch wastewater trunk lines looping phase I service and connecting with the 12-inch wastewater trunk line within the Minor Collector Abutting Open Space Right-Of-Way.
c. Extension of trunk sewer main in Houston and Hume Avenues to the limits of development Phase 1.
d. Improvements for residential wastewater service.

*Phase II*—The following improvements shall be implemented:

a. 12-inch wastewater trunk lines within Local Road Right-Of-Ways connecting with 12-inch wastewater trunk lines from Phase I, north of Neighborhood Park #1.
b. Extension of trunk sewer main in Houston and Hume Avenues to the limits of development Phase 2.
c. Improvements for residential wastewater service.

*Phase III*— The following improvements shall be implemented:

a. A 12-inch wastewater trunk line within the Entry Minor Collector Right-Of-Way and a 12-inch wastewater trunk line within the Emergency Vehicle Access (EVA) south of the Entry Minor Collector connecting with the existing 33-inch interceptor within the 12th Avenue Right-Of-Way.
b. 12-inch wastewater trunk lines looping phase III service and connecting with the 12-inch wastewater trunk lines within the Entry Minor Collector Right-Of-Way and the EVA south of the Entry Minor Collector.

c. Extension of trunk sewer main in Houston and Hume Avenues to the limits of development Phase 3.
d. Improvements for residential wastewater service.

*Phase IV*— The following improvements shall be implemented:

a. Two 12-inch wastewater trunk lines within Park Minor Collector and Local Street Right-Of-Way, northwest of Neighborhood Park #3 connecting with 12-inch wastewater trunk lines from Phase III.
b. Extension of trunk sewer main in Houston and Hume Avenues to the limits of development Phase 4.
c. Improvements for residential wastewater service.

*Phase V*— The following improvements shall be implemented:

a. A 12-inch wastewater trunk line within the Hume Avenue Right-Of-Way connecting with the existing 30-inch interceptor within the 12th Avenue Right-Of-Way.
b. Extension of trunk sewer main in Houston and Hume Avenues to the limits of development Phase 5.
c. 12-inch wastewater trunk lines looping Phase V service and connecting with the 12-inch wastewater trunk line within Hume Avenue Right-Of-Way.
d. Improvements for residential wastewater service.

*Phase VI*— The following improvements shall be implemented:

a. A 12-inch wastewater trunk line within the Local Street Right-Of-Way connecting with the 12-inch wastewater trunk line within the Minor Collector Abutting Open Space Right-Of-Way.
b. Extension of trunk sewer main in Houston and Hume Avenues to the limits of development Phase 6.
c. Improvements for residential wastewater service.

### 7.2.3 Stormwater Drainage

The stormwater drainage system is designed to support the Plan Area as a stand-alone system. The stormwater drainage system of the City of Hanford consists of storm-water collection and recharge basins with limited discharges into the Central Branch of the People's Ditch Company. The City of Hanford will provide stormwater services including collection, transmission and disposal of stormwater within the Plan Area.

Stormwater drainage in the Plan Area will consist of stormwater transmission pipes, stormwater drains, and retention basins. Lone Oak and Sand Sloughs will serve as retention basins for a 100 year, 10 day storm event per Hanford's Master Drainage Plan. The two sloughs will be enhanced and/or increased in size to accommodate drainage requirements within the Plan Area. The storm drainage areas for the Plan Area will be divided into sections. East of 12th Avenue, stormwater will be diverted to Sand Slough, and west of 12th Avenue, stormwater will be diverted to Lone Oak Slough (refer to Figure 7.4 Conceptual Storm Drainage Diagram).

The conceptual stormwater drainage system will need to be verified during the tentative subdivision map process and reviewed by the City of Hanford. The stormwater transmission system will consist of 12 to 48-inch pipes completed in phases (refer to Figure 7.1). The use of pump stations may be necessary to convey stormwater to the retention basins depending on the final design within the sloughs. The following improvements are needed to provide stormwater drainage to the Plan Area.

*Phase I*—The following improvements shall be implemented:

a. A 48-inch storm drain pipe within the Local Street Right-Of-Way draining to Sand Slough.
b. Three 36-inch storm drain pipes, three 24-inch pipes, and one 18-inch pipe looping phase I service and connecting with the 48-inch storm drain pipe.
c. A 36-inch storm drain pipe within the Houston Avenue Right-Of-Way connecting with the 24-inch storm drain pipe within the Minor Collector Abutting Open Space Right-Of-Way. This pipe shall connect with the City's existing slough storm drainage run-off south of the Plan Area Boundary.
d. Improvements to provide residential storm drainage.

*Phase II*—The following improvements shall be implemented:

a. Two 24-inch storm drain pipes and three 18-inch storm drain pipes within Local Street Right-Of-Ways connecting with 24-inch storm drain pipes east and west of Neighborhood Park #1.
b. Continuance of the 24-inch storm drain pipe in the Entry Minor Collector Right-Of-Way north of the Park Minor Collector.
c. Improvements to provide residential storm drainage.

*Phase III*— The following improvements shall be implemented:

a. A 48-inch storm drain pipe within the Entry Minor Collector / Minor Collector Abutting Open Space Right-Of-Way draining to Lone Oak Slough.
b. A 36-inch storm drain pipe within the Right-Of-Way of a Local Street draining to Lone Oak Slough, This pipe will connect with a 24-inch storm drain pipe within the local street Right-Of-Way to connect with 18-inch storm drain pipes in Phase III.
c. A 36-inch storm drain pipe within the Park Minor Collector Right-Of-Way connecting with the 48-inch storm drain pipe that drains to Lone Oak Slough.
d. A 24-inch storm drain pipe connecting with the 36-inch storm drain pipe within the Park Minor Collector Right-Of-Way.
e. Seven 18-inch storm drain pipes looping phase III service and connecting with 24-inch storm drain pipes.
f. Improvements to provide residential storm drainage.

*Phase IV*— The following improvements shall be implemented:

a. A 24-inch storm drain pipe within a Local Street Right-Of-Way connecting with the 36-inch storm drain pipe that drains to Lone Oak Slough.
b. Improvements to provide residential storm drainage.

*Phase V*— The following improvements shall be implemented:

a. A 24-inch storm drain pipe within The Hume Avenue Right-Of-Way connecting with the 24-inch storm drain pipe from Phase III.
b. Two 24-inch storm drain pipes and an 18-inch pipe looping phase V service and connecting with the 24-inch storm drain pipe in the Hume Avenue Right-Of-Way.
c. Improvements to provide residential storm drainage.

*Phase VI*— The following improvements shall be implemented:

a. A 24-inch storm drain pipe draining into Sand Slough.
b. Two 18-inch storm drain pipes looping phase VI service and connecting with the 24-inch storm drain pipe that drains into Sand Slough.
c. Improvements to provide residential storm drainage.

### 7.2.4 Garbage and Garden Refuse

The City of Hanford will provide weekly garbage and green waste pickup to the Plan Area. Garbage and green waste service from the City is sent to a transfer station that is operated by the Kings County Waste Management Authority (KCWMA). KCWMA does not operate a landfill facility. However, it has contracted with the Chemical Waste Management Landfill in Kettleman Hills for solid waste service.

### 7.2.5 Utilities

Utility infrastructure will be provided by service providers that are currently authorized to provide utility services within the City of Hanford. Electrical service to the Plan Area will be provided by Southern California Edison, and natural gas service will be provided by Southern California Gas Company. Additional providers who wish to serve the Plan Area with telecommunication services should contact the City in regards to policies and regulations to allow for additional services.

## 7.3 Public Services

The following are public services that will be provided within the Plan Area: police, fire protection, and public school services.

### 7.3.1 Police Services

The Hanford Police Department provides law enforcement services to the City and operates a police station in Downtown Hanford. The Hanford Police Department will provide police protection to the Plan Area. Assisting policing efforts to improve the safety of residents remains a major design consideration for the Live Oak Master Plan Area. Orienting residential units toward open space and parks, commonly referred to as "eyes on the street", is one safety measure designed into the Plan Area. Other measures include placement and height requirements of fences and vegetative screening along walkways to maintain a clear view of pedestrian areas (refer to Chapter 3 Land Use and Design Guidelines).

### 7.3.2 Fire Protection

The Hanford Fire Department provides fire suppression, medical and emergency rescue services to the City of Hanford. The nearest fire station is located to the east of the Plan Area near the intersection of Houston Avenue and 11th Avenue. Response time from this station to the Plan Area is estimated to be less than five minutes. There are no current plans to add any additional fire stations in the Plan Area.

The Master Plan Area has been designed facilitate fire protection by minimizing confusion of emergency response teams attempting to find their destination. Furthermore, daylighted cul-de-sacs are designed with 20 feet clearance for emergency vehicle access. That will also accommodate fire apparatus turning radii.

### 7.3.3 Public Schools

Public School services for the Plan Area will be provided by the following three school districts: Hanford Joint Union High School District (9-12), Hanford Elementary School District (K-8), and Armona Union Elementary School District (K-8). The school district boundaries are shown in Figure 7.5.

#### Hanford Joint Union High School District

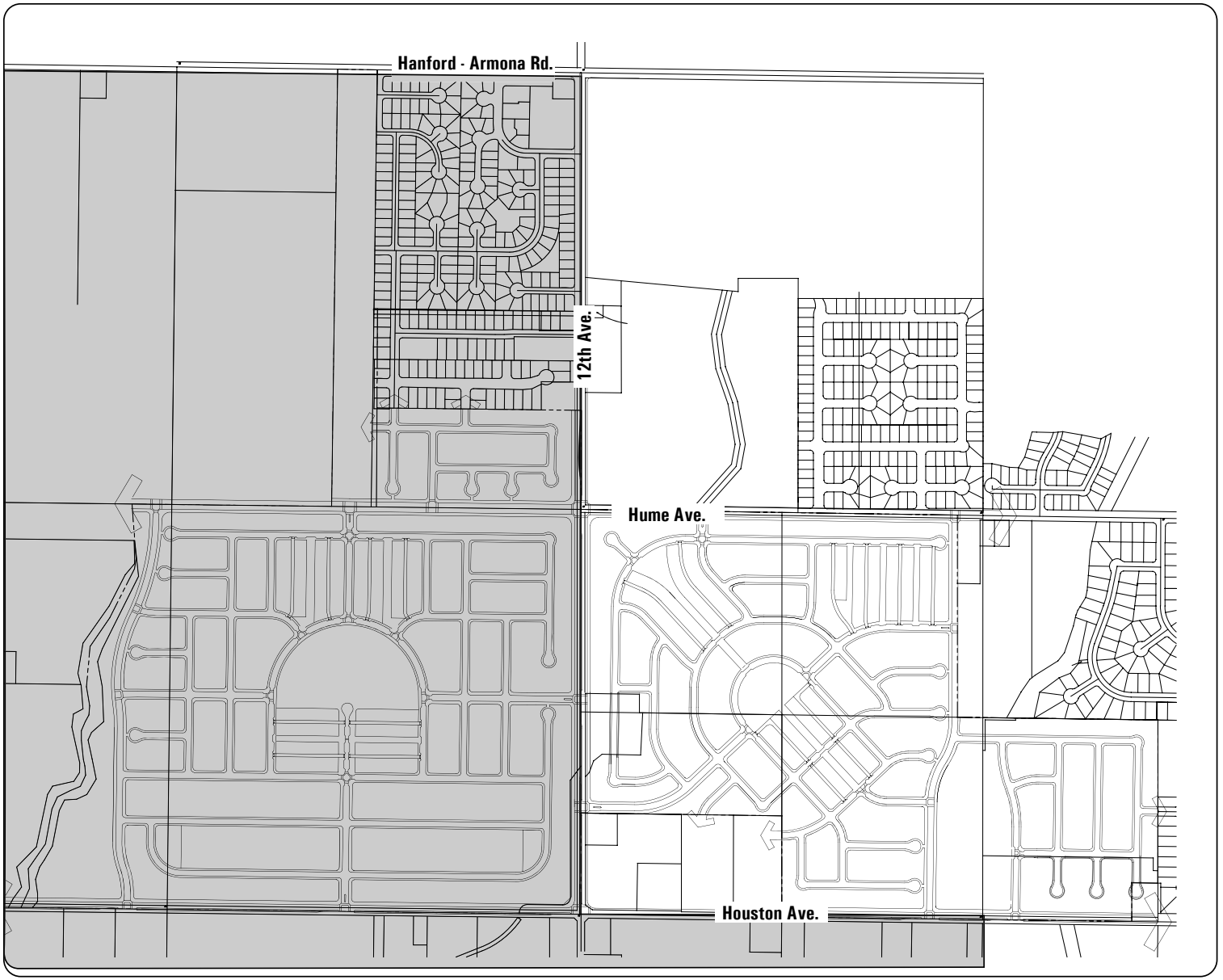
Hanford Joint Union High School district provides educational services for students in grades 9-12 throughout the Plan Area. Currently, students residing in the Plan Area would attend classes at Hanford West High School. The District has purchased a site along 13th Avenue, between Lacey Boulevard and Grangeville Boulevard northwest of the Plan Area, for a future high school campus set to open in 2009. Students generated within the Plan Area are assumed to attend this school when the facility opens.

#### Hanford Elementary School District

The Hanford Elementary School district provides K-8 education services for students in the Plan Area residing east of 12th Avenue, and north of Houston Avenue. The nearest elementary school district is located off of 11th Avenue, near Highway 198 (Roosevelt Elementary School). The Hanford Elementary School district has the option of building a 14-acre school site within the Plan Area (refer to Figure 8.2). This would be a K-6 facility, servicing students in and near the Plan Area Boundary.

#### Armona Elementary School District

The Armona Elementary School District provides K-8 educational services for students within the Plan Area residing west of 12th Avenue and north of Houston Avenue. The nearest elementary school site in the Armona School District is located off of 14th Avenue and Pimo Street, north of Highway 198 in Armona. The Armona Elementary school district has an option to build a 10-acre K-5 school just north of Hume Avenue (refer to Figure 8.3).




## Figure 7-5
## Public School District

*Legend*

Armona Elementary School District

Hanford Elementary School District

**Note:**
**Master Plan Area within the Hanford Joint Union High School District**

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# Public School District

# 8.0 Implementation

## 8.1. Introduction

To realize the vision of the Live Oak Master Plan, implementation must be carefully addressed. The Live Oak Master Plan will be implemented through the City of Hanford's development review process. This section addresses the development process, public facilities, and maintenance, challenges, and summarizes various techniques required for the implementation of the Master Plan. Techniques addressed in this section may be used singularly or in combination with other techniques deemed appropriate by the City of Hanford.

The Live Oak Master Plan is the primary tool in the review and approval process of specific development proposals, such as tentative subdivision maps, site plans, and improvement plans within the established Plan Area Boundary. The Plan includes a set of goals, policies, and standards that establish development regulations within the Plan Area. Responsibility for interpretation of the goals, policies, and standards of the Master Plan lies with the City of Hanford and the Community Development Department. The goals, policies, and standards shall be utilized in conjunction with the City's General Plan, Municipal Code, and Design Standards. Flexibility is permissible, if and only if, the overall goals and vision of the Master Plan are met.

## 8.2. Implementation Challenges

Urban development is occurring at an increasing rate in the southern Central Valley. Providing a well planned and organized environment for development to occur will remove some of the risks associated with urban development. While the Live Oak Master Plan removes many of these obstacles, resulting in a smoother and more predictable development process, there are a few implementation challenges that merit attention.

### 8.2.1. Williamson Act Contracts

Under the California Land Conservation Act of 1965 local governments could enter into contractual agreements with private landowners for the purposes of restricting land use on a property to agriculture or related open space use. Properties under Williamson Act Contracts are assessed at their consistent usage, rather than their potential market value, substantially reducing the amount of owed property taxes. Contracts are subject to a rolling 10-year term whereby agreements are automatically renewed on a yearly

basis, unless either party files a "notice of non-renewal." Once such a notice has been filed, a 9-year non-renewal process commences. At the end of the non-renewal process, the contract terminates. There is one Williamson Act Contract within the Plan Area. A notice of non-renewal as been filed against the contract, which consists of 3 parcels located east of Sand Slough. These parcels shall not be developed until the contract is terminated. Parcels subject to the Williamson Act provision are located in Figure 2.2.

### 8.2.2 Agriculture Interface

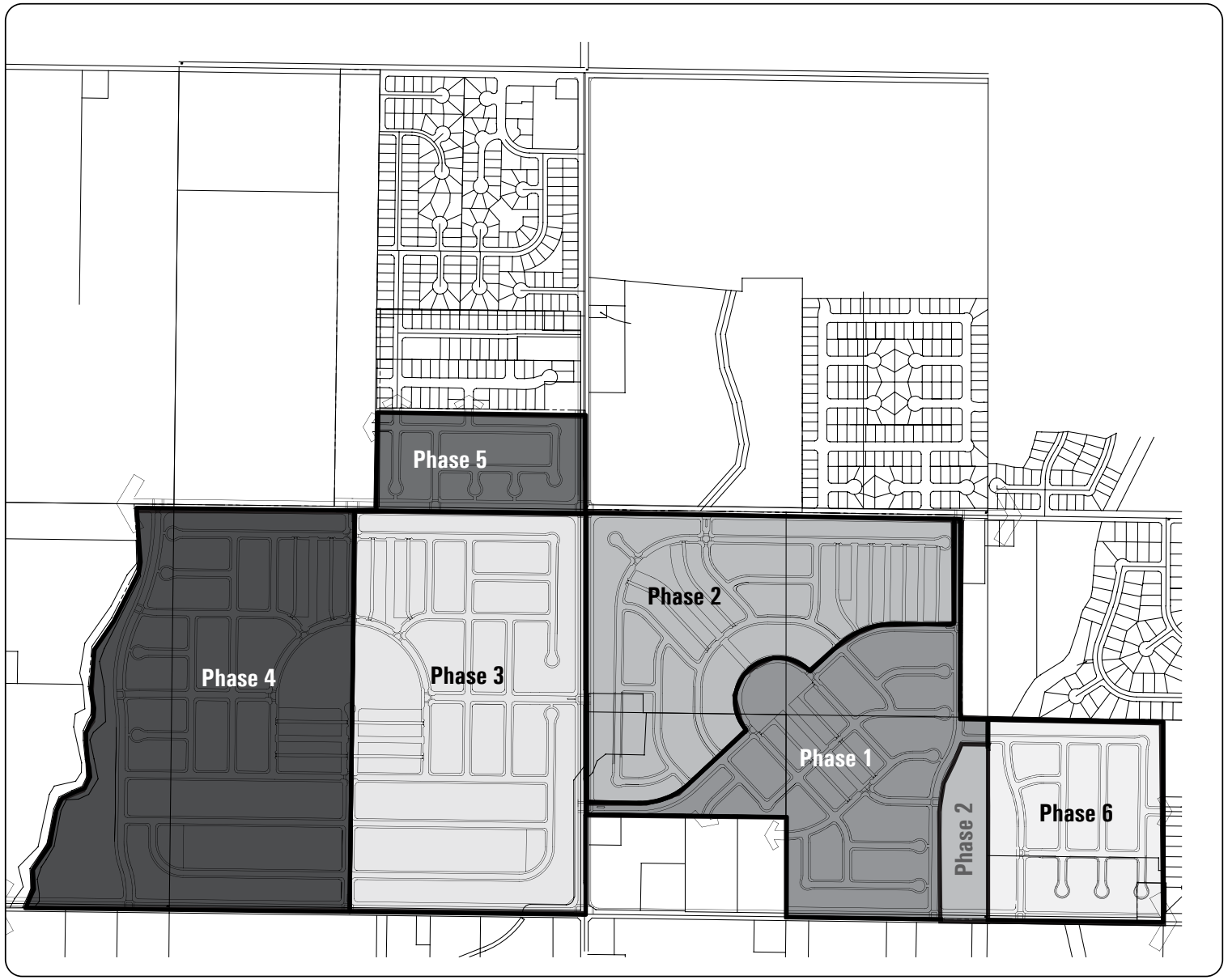
Residential units will abut existing agriculture on the southern and western ends of the Plan Area. Kings County, the governing jurisdiction of parcels outside of the proposed annexation area, and the City of Hanford recognizes that agricultural operations are authorized to exist under the "Right to Farm" Ordinance (No. 546 Kings County Ordinance Code and 16.40.110 of the Hanford Municipal Code). Under this ordinance, all persons purchasing lots within the boundaries of an approved map located near existing agricultural uses are informed that established agriculture, agricultural facilities, and operations are priority uses within Kings County and the City of Hanford, and residents and other occupants of property in the agricultural zone districts should be prepared to accept inconveniences or discomfort from normal, usual, and customary agricultural operations, facilities, and practices.

#### ~~VLD Transition~~

~~To mitigate the agriculture interface and possible conflicts south of the Plan Area, a buffer in the form of VLD (Very Low Density) takes place along Houston Avenue, west of 12th Avenue. This transition is consistent with a policy established in the Hanford General Plan, mandating 660 feet north of Houston Avenue to be designated VLD. Section 3.4 of Land Use and Design Guidelines directs development of more rural characteristics in this area.~~

#### Future Uses

An 88' Right-of-Way shall be established along Hume Avenue. This Right-of-Way, along with an 8-foot easement adjacent to residential units within the Plan Area gives existing agriculture a 96-foot buffer from developments. Currently, the area north of Hume Avenue is within the Sphere of Influence for the City of Hanford and is slated for predominately LD development. East of 12th Avenue, existing agriculture abuts residential units along Houston Avenue. This area is also within the City's Sphere of Influence, and is designated as future Light Industrial Uses by the General Plan. Currently, the road is set to be a Major Arterial, with a 110-foot Right-of-Way and an additional 10-foot landscaped easement, creating a 120-foot buffer from existing agriculture uses and any potential future light industrial uses.




# Figure 8-1

**Plan Area Infrastructure Phasing Plan**

*Legend*

- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5
- Phase 6

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## Plan Area Infrastructure Phasing Plan

Live Oak master plan

### 8.2.3 Roadway Improvements

Houston Avenue, 12th Avenue, and Hume Avenue are existing roadway facilities within the Plan Area, and all have modified Right-of-Ways that deviate from the City of Hanford Design Standards. These enhanced street sections have been approved by the Department of Public Works specifically for the Live Oak Master Plan. The cost associated with the improvements of these roads, including landscaping, placement of sidewalks, and upgrading lane capacity, will be born by developers of adjacent properties in conjunction with developers of the Plan Area, and maintained through a landscape and lighting assessment district, or other comparable maintenance district.

### 8.2.4 Existing Development

As outlined in Chapter 2 there are existing farm residences and other agriculture related facilities, such as livestock pens and barns within the Plan Area. The residential units that will remain have been provided for in the Land Use and Lotting Concept (Figure 3.1). The City of Hanford will make an effort to adjust street alignment, subdivision design and/or delay property occupation to accommodate property owners who wish to retain their residential unit, provided that the adjustment will not compromise the integrity of the Plan or otherwise adversely affect a critical public facility.

The People's Ditch Company operates the People's Ditch, which bisects the Plan Area. The irrigation Canal runs on the west side of 12th Avenue, eventually crosses 12th Avenue, and re-emerges on the east end of 12th Avenue. It is proposed that the irrigation canal be piped within the Plan Area. Existing irrigation canals west of 12th Avenue shall be placed underground by the description of the People's Ditch Company.

## 8.3 Development Process

The Live Oak Master Plan, adopted by resolution, establishes the land use classifications, pre-zoning, development policies, development standards, and design guidelines for the entire Plan Area, consistent with the Hanford General Plan. The Live Oak Master Plan establishes specific development standards, which may differ from those contained in the zoning ordinance. As provided by the Hanford Municipal Code, these alternative standards shall supersede those established by the zoning ordinance.

### 8.3.1. Land Use and Zoning Regulations

Where not otherwise specified by the Live Oak Master Plan, the use and development of property shall be governed by the zoning applicable to that property. Subject to a minor discretionary permit, the community development director may approve minor modifications, exceptions and waivers to the zoning ordinance to allow for orderly development in the Plan Area. Modifications or changes considered major

(e.g. significant changes in land use/zoning, circulation or public facilities, etc.) may be subject to the process and procedures for amending the Hanford Municipal Code (18.54 et seq.).

Although the Live Oak Master Plan stipulates residential densities in housing units per gross acre (see Table 3-1 Master Plan Area Land Use Table), the anticipated densities exclude exclusive Plan Area public facilities, such as open space, pathways, and neighborhood-serving city parks. Calculation of a project's required development density consists only of the developable portion of the subject property. Consistent with the General Plan, this shall include all local and collector streets, but excludes the following Plan Area public facilities; neighborhood parks, open space and conservation areas, pocket parks, and People's Ditch Irrigation Canal.

Residential densities in the Plan Area shall be as follows (dwelling units/gross acre):

~~Very Low Density Residential (VLD) – minimum 0 dwelling units/gross acre; maximum 3 dwelling units / gross acre.~~

Low Density Residential (LD) – minimum 2 dwelling units/gross acre; maximum ~~9 dwelling units / gross acre.~~ 10 dwelling units / gross acre.

Medium Density Residential (MD) - minimum 7 dwelling units/gross acre; maximum 15 dwelling units / gross acre.

### 8.3.2 Alternative Intersection Striping

The Hanford Public Works Department has developed a set of street section alternatives for Major Arterials, Minor Entrance Collectors, and Minor Collectors at Sloughs. The use of these alternative street sections shall be at the discretion of the Hanford Public Works Department. The diagrams of these stripings are found in Chapter 4.

### 8.3.3 Optional School Location

Both the Hanford Elementary and Armona Elementary School Districts have options to purchase land within the Live Oak Master Plan for use as school facilities. Currently the Land Use Diagram (Figure 3.1) shows the possible school sites as Low Density Residential with conceptual lots over the designated areas for schools. Chapter 7 shows the boundaries of both school districts within the Plan Area (Figure 7.5). Figures 8.2-8.3 exhibit how schools may interface with surrounding residences.

**Figure 8.2** Hanford Elementary School District Site with Conceptual Lotting

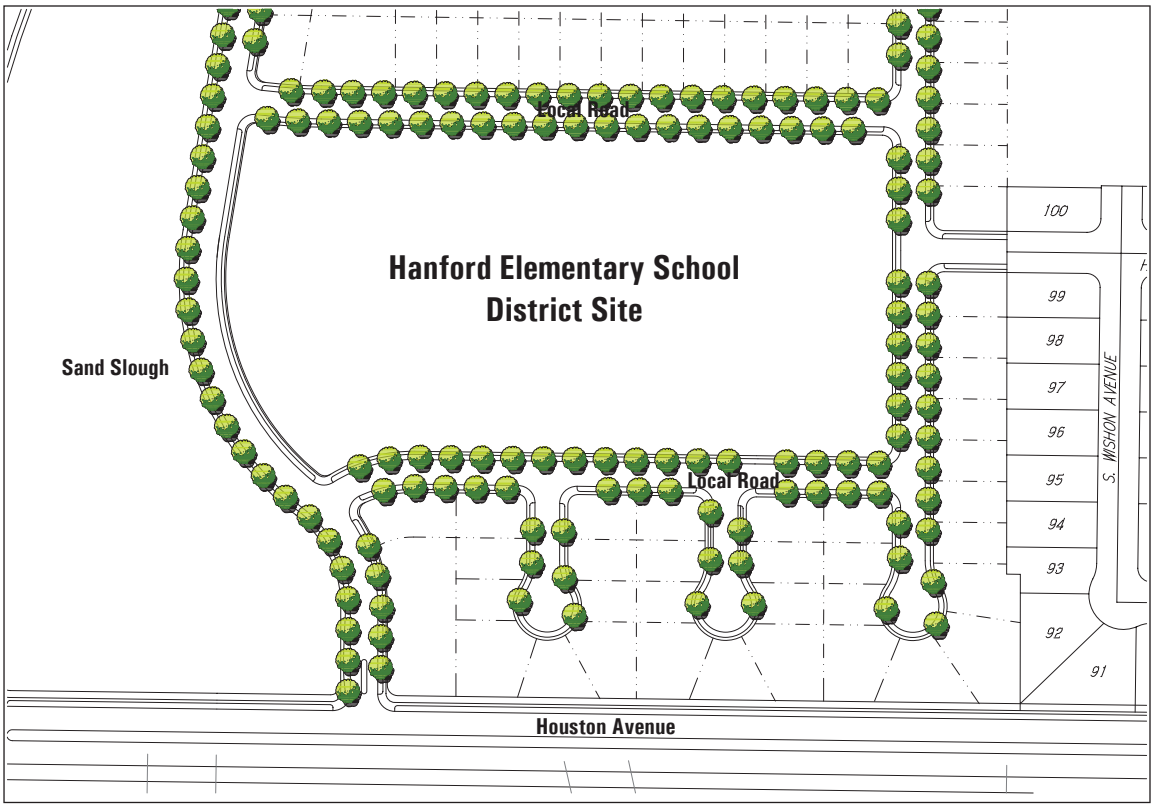
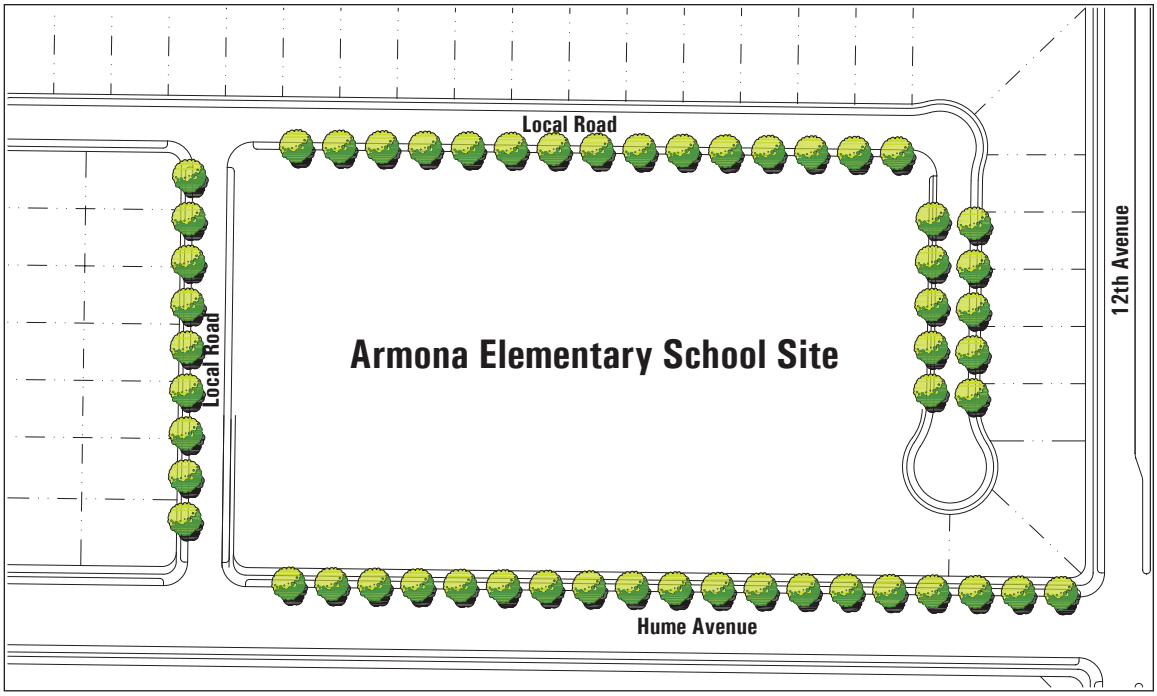



**Figure 8.3** Armona Elementary School District Site with Conceptual Lotting



### 8.3.4 Phasing

Precise development phasing that responds to market conditions as well as the needs of the community is critical for orderly development to occur. The Live Oak Master Plan addresses the full range of public facilities including streets, utilities, and parks. Backbone public facilities required for the development of the planning area are illustrated in Chapter 7.

The need for these facilities and the cost of improvement implementation will greatly affect the extent, location, and timing of new development. As a result, the development of non-contiguous property may be permitted if the appropriate public facilities are installed. Additional costs associated with the installation of "out of sequence" or oversized public facilities may be recovered either as a credit against development impact fees and/or as a reimbursement.

Development of the Live Oak Master Plan will occur over six phases, distributing environmental impacts as well as public facility and service requirements over a manageable time period. The following chart depicts the land use, number of units, and projected population growth for each phase. The chart also estimates figures for build out of the entire Plan Area.

# Table 8.1 Phasing Summary

| Phase 1 | Land Use Designation | Land Use Distribution | Total Units | Population[1] | Park Requirements |
|---|---|---|---|---|---|
| | **Residential[3]** | | | | |
| | *Very Low Density Residential (VLD)* | 0.0% | 0 | 0 | 0.0 |
| | *Low Density Residential (LD)* | 100.0% | 212 | 594 | 1.2 |
| | *Medium Density Residential (MD)* | 0.0% | 0 | 0 | 0.0 |
| | ***Total Phase 1*** | **100%** | **212** | **594** | **1.2** |
| **Phase 2** | **Residential[3]** | | | | |
| | *Very Low Density Residential (VLD)* | 0.0% | 0 | 0 | 0.0 |
| | *Low Density Residential (LD)* | 91.3% | 285 | 798 | 1.6 |
| | *Medium Density Residential (MD)* | 8.7% | 27 | 68 | 0.1 |
| | ***Total Phase 2*** | **100%** | **312** | **866** | **1.7** |
| **Phase 3** | **Residential[3]** | | | | |
| | *Very Low Density Residential (VLD)* | 0.0% | 0 | 0 | 0.0 |
| | *Low Density Residential (LD)* | 100.0% | 347 | 972 | 1.9 |
| | *Medium Density Residential (MD)* | 0.0% | 0 | 0 | 0.0 |
| | ***Total Phase 3*** | **100%** | **347** | **972** | **1.9** |
| **Phase 4** | **Residential[3]** | | | | |
| | *Very Low Density Residential (VLD)* | 0.0% | 0 | 0 | 0.0 |
| | *Low Density Residential (LD)* | 100.0% | 337 | 944 | 1.9 |
| | *Medium Density Residential (MD)* | 0.0% | 0 | 0 | 0.0 |
| | ***Total Phase 4*** | **100%** | **337** | **944** | **1.9** |
| **Phase 5** | **Residential[3]** | | | | |
| | *Very Low Density Residential (VLD)* | 0.0% | 0 | 0 | 0.0 |
| | *Low Density Residential (LD)* | 100.0% | 199 | 557 | 1.1 |
| | *Medium Density Residential (MD)* | 0.0% | 0 | 0 | 0.0 |
| | ***Total Phase 5*** | **100%** | **199** | **557** | **1.1** |
| **Phase 6** | **Residential[3]** | | | | |
| | *Very Low Density Residential (VLD)* | 0.0% | 0 | 0 | 0.0 |
| | *Low Density Residential (LD)* | 100.0% | 153 | 428 | 0.9 |
| | *Medium Density Residential (MD)* | 0.0% | 0 | 0 | 0.0 |
| | ***Total Phase 6*** | **100%** | **153** | **428** | **0.9** |
| | **Project Total** | | **1,560** | **4,360** | **8.7** |

1. Population is based on the Hanford General Plan indicating 2.8 persons per household except for medium density, which is 2.5 persons per household.

### 8.3.5. Subdivision Approval Process

With a few exceptions (e.g., Lone Oak and Sand Sloughs, parks), the Live Oak Master Plan Area will be developed through the process of subdividing land. It is through the subdivision approval process, governed by the Government Code and Hanford Municipal Code, that land is divided, developed with residential units, and sold to future residents. Within this process, streets, wastewater lines, potable water lines, and other public facilities improvements are installed, and parks and public open spaces are provided for the welfare and enjoyment of residents. The subdivision approval process is the principal means through which the City and private developers will implement the Live Oak Master Plan.

The subdivision process in the Plan Area is expected to be the same as anywhere else in the City with the following exceptions:

- The possible need for a developer to construct critical Plan Area infrastructure beyond the property being subdivided.

- The possible need to show how the proposed lots meet the Master Plan's design guidelines and development standards for the location and classification(s) of the property proposed for subdivision.

- A requirement to provide appropriate disclosure to future property owners of possible implication associated with the purchase of their property in an area with parks, public pathways, and open space (e.g., additional traffic, noise, after hours / weekend use, lights for safety use).

- A requirement to provide the appropriate disclosure to future property owners the implications of purchasing property adjacent to an agricultural or industrial area with all the associated affects (e.g., noise, odor, dust, flies, pesticides, smoke), and that the farmers in the area have the right-to-farm.

- A requirement to provide the appropriate disclosure to future property owners that they are purchasing property in a master planned area of the City of Hanford containing more dedicated park land than is standard, and that they will be assessed annually through a landscape and lighting district for its maintenance and up keep, as well as, the maintenance and upkeep of other public facilities that directly benefit the property owner.

### 8.3.6 Public Facilities and Infrastructure

Chapter 7 describes the backbone public facilities needed to accommodate the development of the Plan Area. Through the subdivision approval process, developers will be required to install the backbone services together with each subdivision's tract improvements. As discussed above, in connection with phasing, a developer's obligation to install public improvements will be based on the timing and location of the proposed development, which may place proportionately greater burdens on those who develop first.

### 8.3.7. Transportation System

The transportation system consists of Arterials, Collectors, and Local Streets. The Arterials are Houston Avenue, an east-west running facility that represents the southern Plan Area boundary; Hanford-Armona Road, an east-west facility that represents approximately 260 feet of the northern Plan Area Boundary; and 12th Avenue, a north-south running facility that bisects the Plan Area. These facilities will be upgraded with added lane capacities, sidewalks, and landscaping.

Hume Avenue, an east-west major collector, currently exists as a two lane rural roadway terminating at 12th Avenue. Improvements to Hume Avenue include the extension of the roadway approximately ½ mile to the west, landscaping improvements, and addition of sidewalks adjacent to residential development. The minor collectors in each phase shall have sidewalks, landscaping within planting strips, and other improvements prior to occupancy.

## 8.4 Maintenance

The City of Hanford has traditionally assigned the responsibility for maintenance of facilities that benefit the City as a whole (e.g. arterial and major collector streets) and those primarily benefiting the residents of an area (e.g., parks, local streets, landscaping and street lighting). Landscaping and Lighting Districts, established in conjunction with subdivision approval, have been the preferred means of funding the maintenance of facilities benefiting area residents.

Within the Plan Area, the Landscaping and Lighting District of each subdivision will be responsible for the maintenance costs of its internal facilities (e.g., parks, streets, street lights, landscaping, sound walls, storm drainage) as well as a share of maintenance costs of the neighborhood-serving city parks and common open space facilities, (e.g., pedestrian paths along sloughs). Assessment fees will be adjusted in the form of a credit or a refund to property owners in years when the assessment raises more revenue than is needed. Maintenance costs of the landscaped medians within the Right-of-Ways of Arterials located adjacent to the Plan Area will be the responsibility of the City, using other funds (e.g., General Fund, Local Transportation Fund).

Addendum No. 1 to
Live Oak Environmental Impact Report (SCH #2006091015)
For: Modifications to Live Oak Development Agreement (Amendment 2), Modifications to Planned Unit Development (PUD) No. 2005-04 (Amendment 1), and Modifications to Vesting Tentative Tract 865, 881, 909 and 912

Overview

On September 15, 2009, the City of Hanford City Council reviewed the Live Oak Development project, for which an Environmental Impact Report (SCH #2006091015) was prepared, and a Statement of Overriding Considerations was adopted for the impacts to Agricultural Resources, Air Quality, and Energy Conservation and Climate Change. A Notice of Determination was filed with Kings County on September 18, 2009. A request to modify the project, as described below, was received by the City of Hanford on September 30, 2019:

> Modifications to Live Oak Development Agreement: a request to modify the existing Development Agreement for the Live Oak Development.
>
> Modifications to Planned Unit Development (PUD) No. 2005-04: a request to modify the PUD to delete requirements for affordable housing units, amend the goals and policies of the Live Oak Master Plan, and allow for increased lot density within a portion of the development.
>
> Modifications to Vesting Tentative Tract 865, 881, and 912: a request to remove the requirement for affordable housing units from the resolution, consistent with the Live Oak Development Agreement.
>
> Modifications to Vesting Tentative Tract 909: a request to remove the requirement for affordable housing units from the resolution, consistent with the Live Oak Development Agreement; modify language regarding park improvements consistent with the Development Agreement; and increase the number of residential lots from 642 to 719 units.
>
> Location: The project is generally located in the southwest quadrant of the City of Hanford, east of 13th Avenue, west of 11th Avenue, north of Houston Avenue. APN (011-040-017 to -020; 011-110-016, -022, -029, and 030; 011-540-001 through -099).

Addendum to an EIR:

According to Section 15164 of the California Environmental Quality Act (CEQA) Guidelines, the lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162, calling for preparation of a subsequent EIR have occurred.

Section 15162: When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project, unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration

due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

   A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

   B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

   C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

   D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

The changes proposed to the Live Oak Development have been analyzed to verify that a subsequent EIR is not warranted, as none of the circumstances requiring a subsequent EIR, identified in Section 15162, have been met; therefore, in accordance with Section 15164 of the California Environmental Quality Act (CEQA) Guidelines, an addendum to the EIR (SCH #2006091015) would adequately address the amendments proposed under this project.

Purpose of an Addendum

The purpose of this addendum is to demonstrate that the changes proposed by the project would not result in any of the conditions under which a subsequent Environmental Impact Report (EIR) or Negative Declaration would be required pursuant to Public Resources Code Section 21166 or CEQA Guidelines Sections 15162 and 15164.

CEQA and the CEQA Guidelines establish the type of environmental documentation that is required when changes to a project occur or new information arises after an EIR is certified or a Negative Declaration adopted for a project. CEQA Guidelines Section 15162 establishes criteria for determining whether more detailed information, such as the preparation of a Subsequent or Supplemental EIR, is needed, and Section 15164 defines the appropriate use of addendums to previous EIRs and negative declarations.

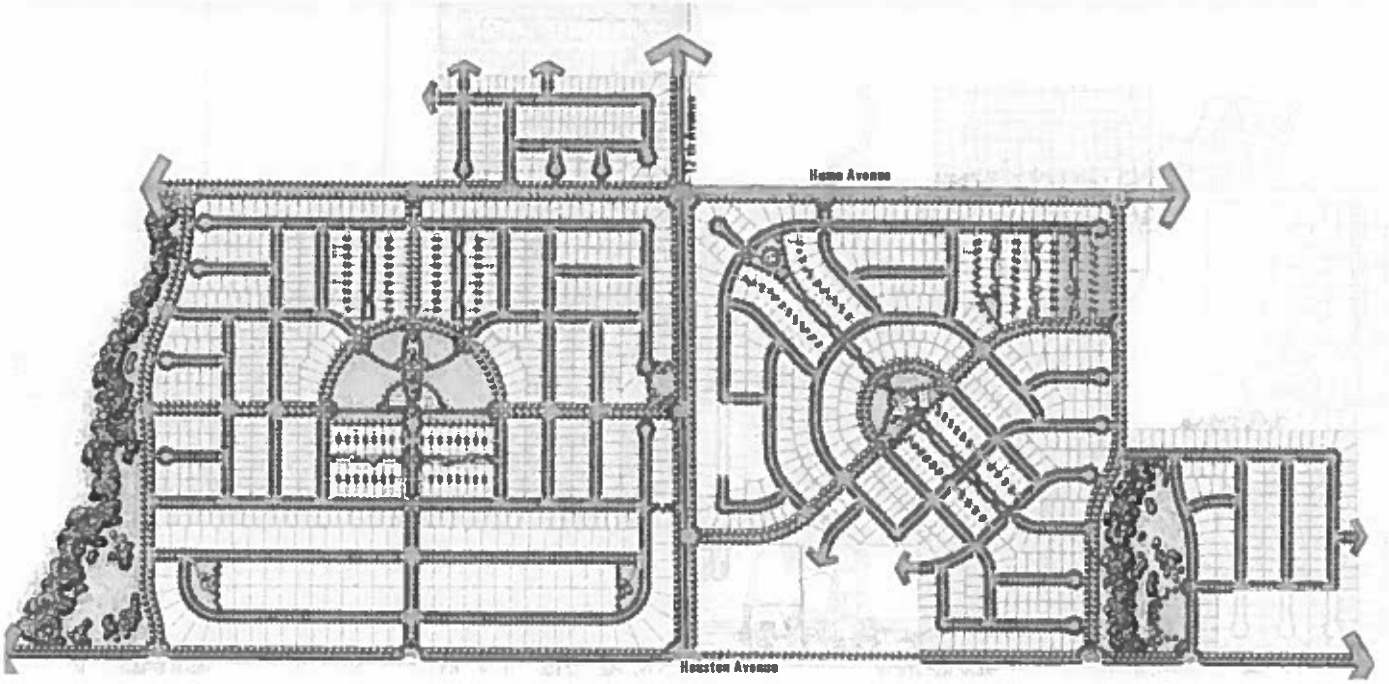
The following analysis demonstrates that the amendments proposed under the project described herein do not raise any new environmental issues and requires only minor changes or additions to the previous EIR/Notice of Determination to satisfy the requirements of CEQA.

Project Description

Live Oak Development – Original Project Summary: The Live Oak Residential Project proposal covered approximately 390 ± acres within the Hanford City Limits. The applicant (at the time MMV Development, LLC) sought approval of the City of Hanford for a Planned Unit Development proposal, Vesting Tentative Subdivision Maps, a Development Agreement, and construction o infrastructure improvements to support the full development of the Project.

The Project proposed to construct 1,560 dwelling units in a range of housing and lot types. The proposed units included single family and multi-family configurations, as well as, park facilities and open space. Single Family lot sizes were planned to range from a minimum of 12,000 square feet (sq. ft.) in the areas designated Very Low Density Residential to 3,200 sq. ft. in the areas designated Low Density Residential, and 4,000 sq. ft. for single family homes in the areas designated Medium Density Residential. In the areas designated Medium Density Residential, two units could be constructed on a minimum 6,000 square foot lot. The single-family residential design included small lot access lane (alley) loaded housing. The non-small lot medium, low, and very low density dwellings proposed to retain a traditional vehicle access, i.e. driveway access via a standard sized street. Parkland was proposed to be provided as part of the Project. The 21 acres of parkland and 31.6 acres of open space/conservation land use were proposed to be linked together via a system of connective linear park and pedestrian trails. The Project proposed to be developed over six phases and was expected to take 5 to 10 years to fully build-out in two phases. New streets were to be constructed, as well as improvements to existing streets and intersections in the Project vicinity. Water, sewer, and other public utilities were proposed to be extended to the Project site. Lone Oak and Sand Sloughs will transport storm drainage water to facilities adjacent to their banks and become part of the overall drainage facility consistent with the City General Plan and Master Drainage Plan. The City owns and/or has drainage easements in Sand Slough south of Houston Avenue where peak drainage water will be discharged. The Project proposed an option for the The Hanford Elementary School District to build a 14-acre school site within the Plan Area. This school facility would be a K-6 facility, and service students in and near the Plan Area Boundary. Also Armona Union School District had an option to build a school within the Plan Area.

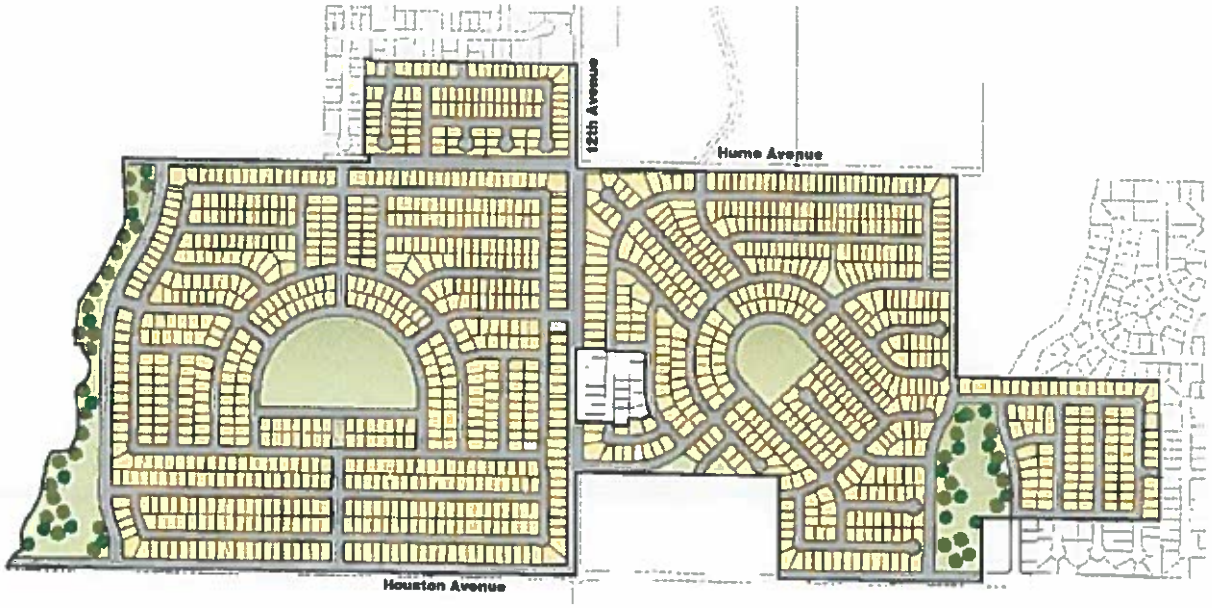
Master Plan



Revised Project Summary – Including Changes Requested:

The Live Oak Residential Project proposal covers approximately 390± acres of within the Hanford City Limits. The applicants are seeking approval of the City of Hanford for changes to the Master Plan, Planned Unit Development, Vesting Tentative Subdivision Map conditions of approval, Vesting Tentative Tract 909, and the Development Agreement.

The changes proposed to the project will result in the construction of 1,396 dwelling units in a range of housing and lot types. These units will include single family configurations, as well as park facilities and open space. Parkland is proposed to be provided as part of the Project. TNew streets will be constructed as well as improvements to existing streets and intersections in the Project vicinity. Water, sewer, and other public utilities will be extended to the Project site. Lone Oak and Sand Sloughs will transport storm drainage water to facilities adjacent to their banks and become part of the overall drainage facility consistent with the City General Plan and Master Drainage Plan. The City owns and/or has drainage easements in Sand Slough south of Houston Avenue where peak drainage water will be discharged.




## Impact Analysis

### Aesthetics

No greater Impact than identified in EIR – Less than significant with mitigation incorporation

1) Less than Significant Impact– The changes proposed to the Live Oak Development will not result in a further impact to aesthetics, obstruction of a scenic vista, or otherwise adversely impact the area aesthetically. While the overall development of the Live Oak Master Plan will represent a change in the viewscape from agricultural field to urban residential, the Live Oak Master Plan proposes design guidelines and standards for development that have been adopted as part of the Planned Unit Development approval. Changes to the project will not interfere with the proposed design guidelines.

   The proposed Project is adjacent to and incorporates two slough remnants (Lone Oak and Sand Sloughs). These slough remnants have been highly disturbed and are proposed to be

enhanced by the Project and become part of the Project's infrastructure and open space amenities consistent with the General Plan policies.

Live Oak Master Plan indicates that the sloughs are riparian woodland areas that should be enhanced by removal of debris and buffered from development. The sloughs can also provide trails for pedestrians and bicyclists along their edges. Within the Plan rea boundary, pedestrian paths are located on the east side of Lone Oak Slough and the west side of Sand Slough within a 50-foot easement. These paths shall have connections to surrounding residential neighborhoods by local streets and day-lighted cul-de-sacs. The use of dead end cul-de-sacs is prohibited along the slough. Material for pedestrian paths shall be of concrete material, or porous material that maintains the rural characteristic of the sloughs. It is important to keep these areas as natural as possible. Only open or rail fencing should be used along the sloughs.

Open Space Sloughs/Pedestrian Paths Standards proposed in the Live Oak Master Plan (Section 5.5.1) are a follows:

a) Pedestrian paths shall be located adjacent to streets parallel to open space sloughs.
b) Trails shall be composed of concrete or porous material.
c) Limited lighting and open rail fencing shall be used to maintain a rural characteristic.
d) Parkways shall be well lit; lights shall be consistent with the Community lighting Guidelines in Chapter 3 of the Live Oak Master Plan.

The Hanford General Plan EIR confirms that there are no scenic resources present on the site or adjacent to the site. However, the Loan Oak and Sand Slough remnants could be considered scenic resources by some members of the community. The conversion of the slough remnants into drainage facilities in a manner that the visual character of the slough is improved was evaluated in the Live Oak EIR and considered a less than significant impact provided that the Master Plan design standards are implemented.

2) Less than Significant Impact– Based on a site inspection of the Project area, there were no visually distinguishing resources on and/or adjacent to the Project site. There are no scenic highways in the vicinity. Topography is flat and has been leveled. Soils consist of light brown sandy silty loams. Vegetation within the Project area is predominately characterized by active agriculture operations with a mix of irrigated row crops, walnut orchard, and grazing land located east of the Hume Avenue and 12$^{th}$ Avenue intersection. Two slough remnants form portions of the eastern and western boundary (Lone Oak and sand Slough). These two slough remnants are planned to be converted to stormwater basis by the Hanford General Plan and Live Oak Master **Plan in a manner so that the visual character of the sloughs is improved.** The Master Plan proposes to incorporate the slough remnants into drainage basins that are surrounded by maintained and improved open space and recreational facilities. While this concept represents a change to the existing environment, in many ways it also represents a substantial improvement to the visual quality of the sloughs. The Project changes proposed herein do not propose a change to the slough remnant development as basins.

3) Less than Significant Impact: The site is agricultural land at the southwestern margin of the City. The site is bordered on the east by urban residential development. Construction of the proposed Project would result in the conversion of agricultural land to urban scale land use which would transform the existing character of the site. The General Plan anticipates the site being development to an urban setting.

The Hanford General Plan has designated the Project area for Low-Density Residential development and Open Space. The proposed Live Oak Master Plan is consistent with this

designation and the existing R-L-5 Low-Density Residential, PF Public Facility, and CO Conservation zoning with the adoption of a Planned Unit Development overlay. The Project changes proposed would not affect the existing land use character of the area. The Live Oak Master Plan provides for design standards to minimize the visual impact of urban scale development emphasize neighborhood design elements – changes to the Live Oak project will not impact design standards which minimize the visual impact of urban scale development and emphasize neighborhood design elements.

4) Less than Significant Impact: The changes proposed to the Live Oak Development will not further introduce new sources of urban nighttime lighting in the area, beyond the impact analyzed in the Live Oak EIR.

The City's development standard requires shielding of lighting to minimize spill over lighting on to neighboring parcels. The Live Oak Master Plan includes the following design standards to minimize the impact of night lighting:

3.8 Neighborhood Lighting:

Lighting standards respond to the need for safe, secure, and well lit streets, while encouraging pedestrian-scaled thematic lighting in key areas. Lighting is encouraged to contribute to the character of the Plan Area. Unobtrusive lighting, with its ability to provide soft, down-lit pockets of light, is required.

3.8.1 Neighborhood Lighting Design Guidelines

a. Efficient lighting patterns that minimize glare and avoid lighting pollution should be utilized.

b. Use of accent lighting to highlight features such as entries, trails, and accent landscaping is strongly encouraged.

c. Street lighting shall occur at all traffic intersections, and at regularly spaced intervals along public Rights-of-Way to provide safety for motorists and pedestrians.

d. Cobra style street lamps shall be limited to arterial streets and major collector streets (i.e. Hume Avenue).

e. Lighting performance standards shall meet those set forth by the Hanford Department of Public Works.

f. Lighting fixtures should be coordinated throughout the Plan Area and be consistent with architectural elements within neighborhoods.

g. Ornamental lighting of rural character within open space shall be placed at entrances of trails to help maintain an agricultural environment.

h. Ornamental street lighting shall utilize fixtures and poles available from Southern California Edison (SCE). e following combinations should be utilized:

• For park areas: Glendora Sidewalk Pole with Acorn Pole Top Fixture - 10 feet tall
• For residential and minor collector streets: Glendora Sidewalk Pole with Acorn Pole Top Fixture - 18 feet tall.

**Agriculture Resources**

No greater Impact than identified in EIR for which a Statement of Overriding Considerations wa adopted for the impacts to Agricultural Resources

Agriculture and Forestry Resources:

The General Plan EIR analyzed the impacts of the City's urban growth on agricultural land and includes mitigation measures to reduce those impacts, however, impacts to agricultural lands remain significant and unavoidable. A Statement of Overriding Considerations was adopted for the impacts to agricultural lands.

Environmental Setting

The City's climate, water availability and proximity to transcontinental transportation routes have made it a premier location for agricultural land development for over a century. Most of the land surrounding the urbanized area of Hanford was converted to agricultural uses over a century ago, leaving very little undisturbed natural landscape.

A majority of Prime Farmland is shown toward the northern and western portions of the study Area. Farmland of Statewide Importance is located on portions of land toward the southern edge of the Study Area. The acreage total for Prime Farmland, Farmland of Statewide Importance, and Unique Farmland within the Study and Planned Areas is categorized as follows:

**Table 4.2-1**
**Farmland Mapping and Monitoring Program**

| Area | Prime Farmland (Acres) | Farmland of Statewide Importance (Acres) | Unique Farmland (Acres) | Total (Acres) |
|---|---|---|---|---|
| Planned Area | 877 | 1,724 | 105 | 2,705 |
| Study Area (Excluding Planned Area) | 10,280 | 7,495 | 380 | 18,157 |
| **Total (Study Area)** | **11,157** | **9,219** | **485** | **20,862** |

There are 3,056 acres of land currently subject to a Williamson Act contract within the Planned Area and 16,299 acres of land currently subject to a Williamson Act contract within the Study Area. There are 335 acres currently under non-renewal and are scheduled to be removed from the provisions of the Williamson Act in the Planned Area.

There are no forest lands found within the Study Area, as defined by Public Resources Code Section 12220 (g), which defines such areas as "land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allow for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." There is also no "timberland" found in the Study Area, as defined by the Public Resources Code Section 4526, which defines such areas as "land...which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees."

Build-out of the General Plan would result in significant and unavoidable impacts to farmland conversion and conflicts with land under Williamson Act land use contracts. Thus, the overall impact of full-build out of the General Plan would be cumulatively significant and unavoidable.

Significance Criteria
The Project may result in significant impacts to agricultural resources since the project results in the removal of lands designated as prime farmland by the Department of Conservation.

**Checklist Discussion:**

a) Less than Significant Impact: A Statement of Overriding Considerations was adopted by the City Council on September 15, 2009 for the significant and unavoidable impacts to Agriculture from the Live Oak Master Plan/Residential Project. The proposed changes to the project will not further impact Agricultural Resources. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

   The project is located within an area listed as Prime Farmland and Farmland of Statewide Importance. The Live Oak Master Plan and Live Oak Residential Project will be constructed in phases. Such phasing will allow continued agricultural operations until such time as development occurs. In the mid 1990's the City acquired 1,600 acres south of the City that will remain in agricultural use. This land receives irrigation water from the City of Hanford and the City leases this land for agricultural use. Between the time this land was acquired and the annexation of the Project is a part approximately 1,400 acres of land has been added to the City and removed from agricultural production.

   The City is surrounded by Prime Farmland and Farmland of Statewide Importance. Any growth beyond the City Limits will involve the use of potentially prime farmland. Nevertheless, the loss of agricultural land is considered a significant impact and remains significant and unavoidable as recognized by the Hanford General Plan. If the Project is to be approved, it will require a statement of overriding considerations.

   The impact to farmland will remain significant and unavoidable. The City finds that there are no other feasible mitigation measures beyond those that have been implemented in the acquisition of agricultural land on the southwest side of the city and provided treated water for crop irrigation purposes.

   Mitigation Measure: That a right-to farm provision be recorded with the recording of the final subdivision map to insure that future residents of the homes in the project area are aware of the adjacent agricultural uses and their right to continue to operate.

b) Less than significant impact – The property is within the City limits and designated for urban development, in accordance with the General Plan. The project site is zoned R-L-5 Low-Density Residential, PF Public Facility, and CO Conservation. The property is not within a Williamson Act Contract.

c) No impact – the projects would not conflict with existing zoning for, or cause rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production, as these designations do not exist within the City. There would be no impact.

d) No Impact – There is no forest land within the City. The projects would not result in the loss of forest land or conversion of forest land to non-forest use, as these designations do not exist within the City. There would be no impact.

e) No Impact – The changes proposed to the Live Oak Development project do not 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.

Conclusion: No further impact is anticipated beyond the impact analyzed in the Live Oak EIR, for which a Statement of Overriding Considerations was adopted for the impact of the Live Oak Development project on Agricultural Resources.

Sources: 2035 General Plan, General Plan Update EIR, Hanford Subdivision Ordinance, California Department of Conservation Farmland Mapping and Monitoring Program – Kings County Map (2016); Live Oak Master Plan/Residential Project EIR (SCH #2006091015).

**Air Quality**

Conclusion: No further impact is anticipated beyond the impact analyzed in the Live Oak EIR, for which a Statement of Overriding Considerations was adopted for the impact of the Live Oak Development project on Air Quality.

See the Air Quality report attached – **Exhibit A.**

**Biological Resources**

Conclusion: Impacts of the changes proposed to the Live Oak Development on Biological Resources are anticipated to be less than significant. No further impact is anticipated beyond the impact analyzed in the Live Oak EIR, for which impacts to Biological Resources were determined to be less than significant with the incorporation of mitigation measures.

Environmental Setting

Natural Communities

The natural communities tracked by the California Natural Diversity Database in the Study Area and surrounding vicinity include Valley Sacaton Grassland and Valley Sink Scrub.

Valley Sacaton Grassland is mid-height to three feet tussock-forming grassland dominated by alkali sacaton. The community is fine textured and poorly drained on usually alkaline soils with generally a seasonally high water table or are overflowed during winter flooding. This community was formerly extensive in the Tulare Lake Basin.

There are two patches of riparian woodlands identified by the State Dept. of Conservation mapping program that are within the study area (City of Hanford). Riparian woodlands are one of the richest wildlife habitats in the State; however, much has been severely degraded. Less that 1% of the Central Valley's riparian vegetation is in a natural, high-quality condition. Riparian woodlands in the study area are located on the west side of 12$^{th}$ Avenue between Houston and Iona Avenues, and along the west side of 13$^{th}$ Avenue, north of Iona Avenue. They are 30 and 14 acres in size, respectively. Valley oak woodland provides habitat components such as food, cover, nesting sites, and dispersal habitat for a wide variety of wildlife. The large oak trees present in this vegetation community provide nesting opportunities for many birds of prey. Typical wildlife species in this vegetation community include California ground squirrel, western fence lizard, western scrub jay, California quail, northern flicker, northern mockingbird, mourning dove, American kestrel, and red-tailed hawk.

Vegetation within the City of Hanford consists primarily of agricultural crops with little remaining non-agricultural vegetation. Agricultural crops consist of orchard, vineyard, annual dryland and irrigated grain crops, irrigated row and field crops, and some rice production. A good portion of the study area consists of urban development, but an almost equal portion of the study area is agricultural development.

Waters/Wetlands

Queries of the National Wetland Inventory and National Hydrology Dataset reveal the presence of numerous wetlands and waters within the Study Area. The largest of the water bodies are holding ponds off of Iona Avenue and South 11th Avenue. The system is artificially flooded and manmade. Other wetland and water features are reported including emergent wetlands, freshwater wetlands, freshwater ponds, canals and ditches, and blue-line stream courses.

The only natural watercourse is Mussel Slough, remnants of which still exist on the City's western edge. The People's Ditch, an irrigation canal dug in the 1870s, traverses Hanford from north to south and portions of it still exist north of Grangeville Boulevard and west of the Santa Fe Railroad. The Sand and Lone Oak sloughs once traversed the city north and south, and remnants still remain in the southern half of the City south of SR 198. The Kings River is about 4 miles north of Hanford.

Wildlife Corridors

Wildlife corridors are areas of habitat that connect two or more habitat patches that would otherwise be fragmented or isolated from one another.

Isolated "islands" of wildlife habitat have been created by the fragmentation of open space areas due to urbanization and other anthropogenic disturbance. Certain wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas in the absence of habitat linkages due to the loss of gene flow required to maintain genetic diversity.

Within the urbanized areas of the Study Area, wildlife corridors are largely limited to linear water features, such as canals, water and flood control conveyance structures, and remnant natural ways. Surrounding the Study Area, agricultural fields and sparsely located and fragmented patches of lands containing non-agricultural vegetation located amongst the agricultural fields extend for many miles in all directions. Wildlife movement is largely uninhibited in this open space area of the Study Area outside of, and surrounding, the urbanized areas.

Setting

The Project area has been in a combination of dry farmed, walnut orchard and irrigated agricultural production for a number of years. Current development on the site consists of farm residences, various farm-related structures such as livestock pens and barns, and the Sanchez Feed and Seed store. The majority of the project site is vacant. Two slough remnants are present (Lone Oak and Sand Sloughs) that are proposed by the General Plan to be incorporated into a stormwater drainage system and developed in such a manner that the biological resources will not be significantly impacted.

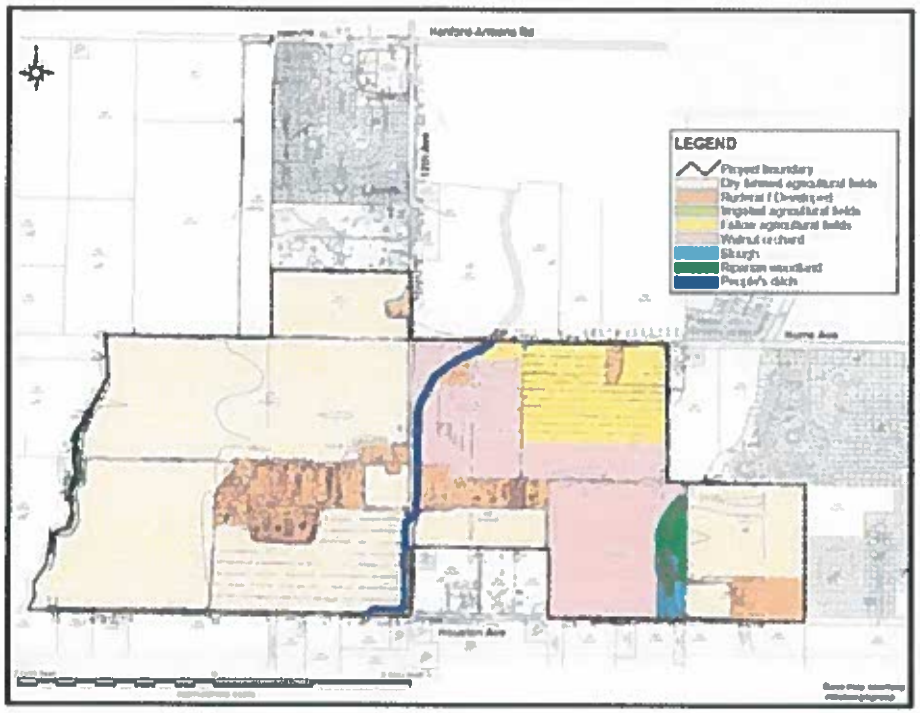
During early consultation from a biological habitat perspective, it was determined that there was a potential for the presence of the valley elderberry longhorn beetle (VELB) a federally threated species. An analysis was undertaken by Live Oak Associates, Inc. a qualified biologist consulting firm with experience in the San Joaquin Valley and the City of Hanford. The presence of the beetle

and the valley elderberry bush (habitat for the beetle) were assessed in a study prepared by Lone Oak Associates in February 2007.

Biotic Habitats

The majority of the site is vacant or devoted to agricultural uses. These agricultural uses include dry-farmed, irrigated, and fallow fields; walnut orchards; and rural/developed areas consisting of a commercial feed store (Sanchez Feed and Seed), farm residences, and other farm-related structures such as livestock pens and barns. In addition, to the agricultural lands, two sloughs with associated grassland and riparian vegetation occur on the property, and an earthen-banked trapezoidal ditch (People's Ditch0 bisects the parcel from north to south along 12th Avenue.

**Biotic Habitats in the Live Oak Master Plan Area**




## Amount of Biotic Habitat in the Live Oak Master Plan Project

| Biotic Habitat Definition | Acres in Project | Percent of Total |
|---|---|---|
| Dry farmed agriculture fields | 233 | 59.7% |
| Fallow Agricultural fields | 31 | 7.9% |
| Ruderal/Developed | 42 | 10.8% |
| Orchard (Walnut) | 71 | 18.2% |
| Slough and Riparian Woodland | 9 | 2.3% |
| Peoples Ditch | 4.5 | 1.2% |
| **Total** | **390.5** | **100%** |

Ruderal: Agriculture

Ruderal is a term that refers to areas that are heavily disturbed by human factors. The majority of the site consists of agricultural fields that are dry-farmed, irrigated or fallow. Crops observed on the site during the field survey include cotton, garlic and hay. These fields support little, if any, native vegetation due to their regular disturbance and typically only provide habitat for non-native grasses and forbs that are adapted to such disturbance. As a result, these fields would provide only marginal habitat for most native wildlife. Nonetheless, some native wildlife species may use the fields of the site and these are described in more detail below.

Common resident avian species likely to forage in the agricultural fields of the site include mourning doves (Zenaida macroura), yellow-billed magpies (Pica nuttalli), American crows (Corvus brachyrhynchos), and western meadowlarks (Sturnella neglecta), as well as mixed flocks of Brewer's blackbirds (Euphagus cyanocephalus), brown-headed cowbirds (Molothrus ater), and European starlings (Sturnus vulgaris).
A number of mammal species may also occur within the agricultural lands of the site. Small mammals such as deer mice (Peromyscus maniculatus), California voles (Microtus californicus), house mice (Mus musculus), and Botta's pocket gopher (Thomomys bottae) would occur in fluctuating numbers depending on the available cover in the individual fields. California ground squirrel's (Spermophilus beecheyi) have established burrow complexes at the margins of some of the fields and along some of the farm roads. Other small mammals likely to occur from time to time within these fields include black-tailed hares (Lepus californicus) and Audubon cottontail rabbits (Sylvilagus audubonii).

The presence of birds and small mammals is likely to attract both foraging raptors, such as hawks and owls, and mammalian predators. Because of the surrounding agricultural land uses, however, mammalian predators occurring on the site would most likely be limited to raccoons (Procyon lotor), coyotes (Canis latrans) and red foxes (Vulpes vulpes), as these species are tolerant of human disturbance. Various species of bat may also forage over the fields of the site for flying insects.

Ruderal: Developed

Ruderal/developed areas occur on the site in the form of agricultural, commercial, and residential structures and their immediate surroundings. Agricultural development consists of the M&M Dairy facility located in the southwestern portion of the site and various farm-related structures located throughout the site such as livestock pens and barns, while commercial development consists of Sanchez Feed & Seed located in the southeastern corner of the property. Residential development consists of single-family farm homes and surrounding landscaped areas and/or ruderal areas.

In general the developed/ruderal areas supported only non-native and/or horticultural plant species. Very few native plant species were observed in these areas. Non-native grass species observed in the ruderal areas of the site included annual bluegrass (Poa annua), Mediterranean barley (Hordeum marinum ssp. gussoneanum), ripgut brome (Bromus diandrus) and perennial ryegrass (Lolium perenne); while non-native forb species included white-stemmed filaree (Erodium moschatum), red-stemmed filaree (Erodium cicutarium), common groundsel (Senecio vulgare), common mallow (Malva neglecta), London rocket (Sisymbrium irio), prickly lettuce (Lactuca serriola), and shepherd's-purse (Capsella bursa-pastoris). Plant species common to landscaped areas surrounding residences of the site included oleander (Nerium oleander), firethorn (Pyracantha angustifolia), fan palm (Washingtonia sp.), and prickly pear cactus (Opuntia sp.); as well as cultivated trees such as olive (Olea europaea) and plum (Prunus sp.).
Avian species often associated with residential landscaping include northern mockingbirds (Mimus polyglottus), house finches (Carpodacus mexicanus), and house sparrows (Passer domesticus). Mammals typical of such areas would include house mice, Norway rats (Rattus

norvegicus), and feral cats (Felis cattus). A number of bat species may also use structures such as barns and sheds for roosting, particularly from March through September.

Walnut Orchard

Several English walnut (Juglans regia) orchards occur on the site. These orchards had a ruderal understory dominated by the same non-native grass and forb species associated with the developed/ruderal habitats of the site. Bird species observed within the orchards during the survey included mourning dove (Zenaida macroura), Nuttall's woodpecker (Picoides nuttallii), and northern flicker (Colaptes auratus). Other wildlife that would be expect ed to occur within the orchards would be similar to those occurring in adjacent ruderal habitats or agricultural fields.
Slough and Riparian Woodland

Two remnant sloughs occur on the site, both supporting riparian vegetation, non-native grassland vegetation and some herbaceous hydrophytic vegetation. Lone Oak Slough occurs along the western boundary of the site and has no inlet or outlet from the site. According to the USGS topographic map, this slough is a remnant slough that is no longer connected to any creek, river or natural drainage in the region. The slough supports relic riparian woodland habitat with a non-native grassland understory. Riparian trees and shrubs associated with the slough include California black walnut (Juglans hindsii), willow (Salix ssp.), blue elderberry (Sambucus mexicana), California blackberry (Rubus ursinus) and Himalayan blackberry (R. discolor). The herbaceous understory was dominated by non-native grasses such as Mediterranean barley and annual bluegrass. Other species observed to be associated with the slough included eucalyptus (Eucalyptus globulus) and giant reed (Arundo donax). Lone Oak Slough was completely dry during the January 2005 survey but there was evidence of algal mats and drift lines, indicating that the slough probably becomes inundated during heavy winter storm events.

Sand Slough occurs within the eastern portion of the site. This slough also is a remnant slough that is not connected to any creeks, rivers or other natural drainages in the region. It enters the site just inside the northern boundary through an underground culvert and exits the site at the southern boundary along Houston Avenue into another underground culvert. The northern portion of the slough within the site supports relic riparian woodland habitat with an herbaceous understory consisting of predominantly non-native grasses and forbs. Dominant riparian trees and shrubs associated with theslough include Fremont cottonwood (Populus fremontii), Goodding's willow (Salix gooddingii), blue elderberry, California black walnut, and Himalayan blackberry. Grass and forb species observed in the herbaceous understory included barnyard grass (Echinochloa crusgalli), Mediterranean barley, ripgut brome, creeping wildrye (Leymus triticoides), curly dock (Rumex crispus), white-stemmed filaree, henbit (Lamium amplexicaulis), common groundsel, and prickly lettuce. The southern portion of the slough consists of non-native grassland habitat supporting grasses and forbs similar to those in the riparian understory. Other species observed in the non-native grassland in the southern portion of the slough include shepherd's purse, common sunflower (Helianthus annuus), and cocklebur (Xanthium strumarium). Sand Slough was also dry during the January 2005 survey, except for a small amount of water that was ponded at a low point at its northern extreme where the slough enters the site through the underground culvert.

The riparian woodlands of the site, as a result of their structural diversity, may function as important islands of habitat for native resident and migratory wildlife species, providing both with foraging and shelter habitat in a regional landscape that is otherwise heavily disturbed by agricultural uses and where such woodland habitat is extremely limited. Ordinarily riparian woodlands can also serve as important dispersal corridors for native wildlife, however, in the case of both remnant sloughs whose riparian habitats are not continuous with other riparian habitat, dispersal within these woodlands would mainly be limited to resident species.

Resident amphibian and reptile species that may be expected to occur in the riparian woodlands of the site include the Pacific tree frog (Hyla regilla), western toad (Bufo boreas), western fence lizard (Sceloporus occidentalis), gopher snake (Pituophis melanoleucus), and common kingsnake (Lampropeltis getulus).
Many bird species, both residents and migrants, are likely to use the woodlands of the site. Resident species that may be found in this habitat include Hutton's vireo (Vireo huttoni), western scrub-jay (Aphelocoma californica), bushtit (Psaltriparus minimus), and Nuttall's woodpecker. Raptors such as Cooper's hawks (Accipiter cooperii) and redshouldered hawks (Buteo lineatus), may utilize trees within this habitat for nesting and may forage in this habitat on small birds and small mammals. A raptor stick nest was observed in a cottonwood tree within Sand Slough during the January 2005 survey. Although a raptor was observed perched nearby the nest, it flew away before it could be identified. Winter migrants that may forage in this habitat include the sharp-shinned hawk (Accipiter striatus) and ruby-crowned kinglet (Regulus calendula), while summer migrants may include the ash-throated flycatcher (Myiarchus cinerascens) and blackheaded grosbeak (Pheucticus melanocephalus).

Small mammal species likely to occur in the woodland habitats of the site include the deer mouse (Peromyscus maniculatus), and western gray squirrel (Sciurus griseus). Medium to large mammals that may forage in the woodlands include coyote and red fox. A large burrow with evidence of small canid tracks was observed in the southern portion of Sand Slough. Most likely this burrow belonged to a non-native red fox as this species is well-adapted to human disturbance and the location of the burrow was very close to Houston Avenue and to agricultural fields on the east side of the slough. Native fox species are unlikely to establish a den in such an area. Additionally, during the survey, a road-killed red fox was observed on Houston Avenue near Lone Oak Slough.

People's Ditch

People's Ditch flows north to south in the central portion of the property along 12th Avenue. The ditch consists of an earthen-banked trapezoidal channel that is completely barren of vegetation. The ditch was constructed to transport irrigation water into the area from the King's River via People's Levee. The upstream origin of People's Levee is along the river approximately 14 miles northeast of the site. From the study site, the ditch continues to flow in a generally southerly direction, eventually flowing into Jacobs Slough about eight miles southeast of the site via Lone Oak Canal and New Deal Canal. Jacobs Slough is a remnant slough that is not connected to any other streams or rivers. As the ditch supports no vegetation, it does not provide habitat for wildlife except possibly as a source of drinking water.

Special Status Plants and Animals

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. State and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened or endangered (CNPS 1994). Collectively, these plants and animals are referred to as "special status species".
A number of special status plant and animals occur or once occurred within a 10-mile radius of the project site. These species have been listed in Table One on the following pages. For each

species, the table identifies their listing status, the habitat in which they typically occur, and the likelihood of their occurrence in the study area. Sources of information for this table included California's Wildlife, Volumes I, II, and III (Zeiner et. al 1988), California Natural Diversity Data Base (CDFG 2002), Special Animals (CDFG 2002), and The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001).

## List of Special Status Species that Could Occur in the Vicinity of the Project Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

**PLANTS (adapted from CDFG, 2004 and CNPS, 2001)**
CNPS-listed Species (Lists 1A, 1B, 2, and 4)

| Species | Status | Habitat | *Occurrence in the Study Area |
|---|---|---|---|
| Heartscale (*Atriplex cordulata*) | CNPS 1B | Occurs on saline or alkaline soils in chenopod scrub, meadows, seeps, and grasslands. | **Absent.** Suitable habitat for this species in the form of saline or alkaline soils is absent from the study area. |
| Brittlescale (*Atriplex depressa*) | CNPS 1B | Occurs on alkaline clay soils in chenopod scrub, meadows, seeps, vernal pools, and grasslands. | **Absent.** Suitable habitat for this species in the form of alkaline clay soils is absent from the study area. |
| Earlimart Orache (*Atriplex erecticaulis*) | CNPS 1B | Occurs in valley and foothill grassland. | **Unlikely.** Although a small amount of marginally suitable habitat occurs in non-native grassland habitat within Sand Slough, the closest documented occurrence is about 8 miles southeast of site. |
| Subtle Orache (*Atriplex subtilis*) | CNPS 1B | Occurs in valley and foothill grassland. | **Unlikely.** Although a small amount of marginally suitable habitat occurs in non-native grassland habitat within Sand Slough, closest documented occurrence is about 8 miles southeast of site. |
| Recurved Larkspur (*Delphinium recurvatum*) | CNPS 1B | Occurs on alkaline soils in chenopod scrub, cismontane woodland, and grasslands. | **Absent.** Suitable habitat for this species in the form of saline or alkaline soils is absent from the study area. |
| Panoche Pepper-grass (*Lepidium jaredii* ssp *album*) | CNPS 1B | Occurs on alluvial fans and washes within valley and foothill grassland. | **Unlikely.** Although a small amount of margin-ally suitable habitat occurs in non-native grass-land within Sand Slough, there are no known occurrences within a 10-mile radius of the site. |

**ANIMALS (adapted from CDFG, 2004)**
Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts

| Species | Status | Habitat | *Occurrence in the Study Area |
|---|---|---|---|
| Conservancy Fairy Shrimp (*Branchinecta conservatio*) | FE | This species is endemic to grass-lands of the northern two-thirds of California's Central Valley, where it inhabits large turbid pools. | **Absent.** Suitable habitat in the form of vernal pools is absent from the study area. |
| Longhorn Fairy Shrimp (*Branchinecia longianienna*) | FE | Vernal pools clear to turbid water in grass-bottomed pools and clear water sandstone depression pools. | **Absent.** Suitable habitat in the form of vernal pools is absent from the study area. |
| Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) | FT | Vernal pools, clear to tea-colored water in grass or mud-bottomed swales, basalt depression pools, or sandstone rock outcrops. | **Absent.** Suitable habitat in the form of vernal pools is absent from the study area. |

## List of Special Status Species that Could Occur in the Vicinity of the Project

| Species | Status | Habitat | *Occurrence in the Study Area |
|---|---|---|---|
| Vernal Pool Tadpole Shrimp (*Lepidurus packardi*) | FE | Primarily found in vernal pools, but may use other seasonal wetlands in mesic valley and foothill grasslands. | **Absent.** Suitable habitat in the form of vernal pools is absent from the study area. |
| Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) | FT | Lives in mature elderberry shrubs of California's Central Valley and Sierra foothills. | **Possible.** Suitable habitat in the form of elderberry shrubs was observed in both Lone Oak and Sand Sloughs. Additionally, elderberry shrubs were observed in the northeast corner of the M&M Dairy facility near 12th Ave. |
| California Tiger Salamander (*Ambystoma californiense*) | FT, CSC | Found primarily in annual grass-lands; requires vernal pools for breeding and rodent burrows for refuge and estivation. | **Absent.** Minimal and no breeding habitat occurs on the site. There are no occurrences of this species within a 10-mile radius of the study area. |
| Blunt-nosed Leopard Lizard (*Gambelia sila*) | FE, CE | Inhabits sparsely vegetated alkali and desert scrub habitats. | **Absent.** Suitable habitat is absent from the study area. |
| Swainson's Hawk (*Buteo swainsonii*) | CT | Occurs in grasslands and agricul-tural lands of California's Central Valley during the spring and summer | **Possible.** Suitable nesting habitat is present within the riparian woodlands associated with both Lone Oak and Sand Sloughs. Marginally suitable foraging habitat occurs within the agricultural fields of the site. There are three documented occurrences within a 10-mile radius, with the closest being six miles east of the site. |
| Peregrine Falcon (*Falco peregrinus*) | CE | Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter. | **Possible.** This species would at most forage over the study area during migration. Breeding habitat is absent. |
| Willow Flycatcher (*Empidonax traillii*) | CT | Breeds in willows of montane meadows in the Sierra Nevada. | **Possible.** The site provides no nesting habitat for this species. Individuals may pass through the site and forage on the site during migration. |
| Tipton Kangaroo Rat (*Dipodomys nitratoides nitratoides*) | FE, CE | Saltbrush scrub and sink scrub with soft friable soils in the southern San Joaquin Valley. | **Absent.** Suitable habitat is absent from the study area. |
| San Joaquin Kit Fox (*Vulpes macrotis mutica*) | FE, CT | Desert alkali scrub, annual grasslands; may forage in adjacent agricultural habitats. | **Unlikely.** Because the site and surrounding lands are in agricultural use, they provide un-likely habitat for kit foxes. There are no known occurrences within a 3-mile radius of the site and the closest documented occurrence is approximately six miles southwest of the site. |

ANIMALS (adapted from CDFG, 2004) **State Species of Special Concern**

| Species | Status | Habitat | *Occurrence in the Study Area |
|---|---|---|---|
| Western Spadefoot (*Scaphiopus hammondii*) | CSC | Mainly occurs in grasslands of San Joaquin Valley. Vernal pools or other temporary wetlands are required for breeding. | **Absent.** No suitable habitat occurs on the study area. |
| Western Pond Turtle (*Clemmby marmorata*) | CSC | Open slow moving water of rivers and creeks of central California with rocks and logs for basking. | **Absent.** No suitable habitat occurs on the study area. |
| Northern Harrier (*Circus cyaneus*) | CSC | Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats. | **Possible.** Species may occasionally forage over the study area, however, this species is not expected to breed on-site due to the lack of marsh habitat. |
| Sharp-shinned Hawk (*Accipiter striatus*) | CSC | Breeds in mixed conifer forests of the northern Sierra Nevada; win-ters in a variety of habitats. | **Possible.** Wintering individuals may occasion-ally pass over the site, or even forage on the site. However, breeding habitat is absent. |
| Cooper's Hawk (*Accipiter cooperii*) | CSC | Breeds in oak woodlands, riparian forests and mixed conifer forest of the Sierra Nevada, but winters in a variety of lowland habitats. | **Possible.** Suitable nesting habitat is present within the riparian woodlands associated with both Lone Oak Slough and Sand Slough. Marginally suitable foraging habitat occurs within the agricultural fields of the site. |
| Ferruginous Hawk (*Buteo regalis*) | CSC | Breeds in the Pacific Northwest and Canada, but winters in a variety of California habitats. | **Possible.** Wintering individuals may occasion-ally pass over the site, or even forage on the site. However, this species does not breed in the region. |
| Golden Eagle (*Aquila chrysaetos*) | CSC, CP | Open grasslands, oak savannahs, agricultural fields, etc. of San Joaquin Valley and nearby foothills of Inner Coast Range. | **Unlikely.** The site constitutes poor foraging and breeding habitat for golden eagles due to its close proximity to human habitation and agricultural disturbance. |
| Merlin (*Falco columbarius*) | CSC | This falcon, which breeds in Ca-nada, winters in a variety of Calif. habitats, including grasslands, savannahs, wetlands, etc. | **Possible.** Wintering individuals may occasion-ally pass over the site, or even forage on the site. However, this species does not breed in the region. |
| Prairie Falcon (*Falco mexicanus*) | CSC | Distributed from annual grasslands to alpine meadows; requires cliffs or rock outcroppings for nesting. | **Possible.** Individuals may occasionally pass over the site, or even forage on the site. However, breeding habitat is absent. |
| Long-billed Curlew (*Numenius americanus*) | CSC | Winters in Central Valley farmlands and pastures. | **Possible.** Wintering individuals may occasion-ally pass over the site, or even forage on the site. This species would not, however, nest on the site. |
| Burrowing Owl (*Athene cunicularia*) | CSC | Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. | **Possible. No burrowing owls were observed during the January 2005 surveys, however, suitable habitat in the form of ground squirrel burrows occurs on the study area.** |
| Black Swift (*Cypseloides niger*) | CSC | Migrants and transients found throughout many habitats of state; nests in the Sierra, coastal cliffs, and regions of southern California. | **Possible.** Individuals may occasionally pass over the site during migration or while foraging. Breeding habitat is absent. |

| | | | |
|---|---|---|---|
| Vaux's Swift *(Chaetura vauxi)* | CSC | Migrants and transients move through the foothills of the western Sierra in spring and late summer. | Possible. Individuals may occasionally pass over the site during migration or while foraging. Breeding habitat is absent. |
| California Horned Lark *(Eremophila alpestris actia)* | CSC | Found in various open habitats lacking trees and shrubs; breeds in grasslands and fallow fields. | Possible. Suitable foraging and breeding habitat occurs on the study site. |
| Loggerhead Shrike *(Lanius ludovicianus)* | CSC | Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats. | Possible. Suitable foraging and breeding habitat occurs on the study site. |
| Tri-colored Blackbird *(Agelaius tricolor)* | CSC | Occurs near fresh water with dense cattails, or thickets of willows or shrubs. | Possible. Species may occasionally forage within the study area, however, breeding habitat is absent. |
| Yellow Warbler *(Dendroica petechia brewster)* | CSC | Breeds in riparian thickets of alder, willow and cottonwoods. Migrants move through many habitats of the state. | Possible. This species may pass through the area during migration, utilizing the riparian woodland habitat of the site for shelter and foraging, however, they would be unlikely to breed onsite due to a lack of thick, shrubby vegetation. |
| Spotted Bat *(Euderma maculatum)* | CSC | Occurs primarily in foothill and mountain habitats of the southern Sierra and Transverse Ranges. | Unlikely. This species is not often found in the Central Valley. The site may provide occasional foraging habitat. Roosting habitat is absent. |
| Pale Big-eared Bat *(Corynorhinus townsendii pallescens)* | CSC | Primarily a cave-dwelling bat, which may also roost in buildings. Occurs in a variety of habitats. | Possible. Suitable foraging habitat is present on-site. Suitable roosting habitat is also present in the various structures in the developed portions of the agricultural habitat. |
| Townsend's Western Big-eared Bat *(Corynorhinus townsendii townsendii)* | CSC | Found throughout California. | Possible. Suitable foraging habitat is present on-site. Suitable roosting habitat is also present in the various structures in the developed portions of the agricultural habitat. |
| Pallid Bat *(Antrozous pallida)* | CSC | Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas providing roosting opportunities. Also roosts in buildings. | Possible. Suitable foraging habitat is present on-site. Suitable roosting habitat is also present in the various structures in the developed portions of the agricultural habitat. |
| Western Mastiff Bat *(Eumops perotis)* | CSC | Found in open arid areas of the southern half of California. | Possible. Suitable foraging habitat is present on-site. Suitable roosting habitat is also present in the various structures in the developed portions of the agricultural habitat. |

*Present: Species observed on the site at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the site, but it could occur there from time to time.
Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the site, and precluded from occurring there because habitat requirements not met.

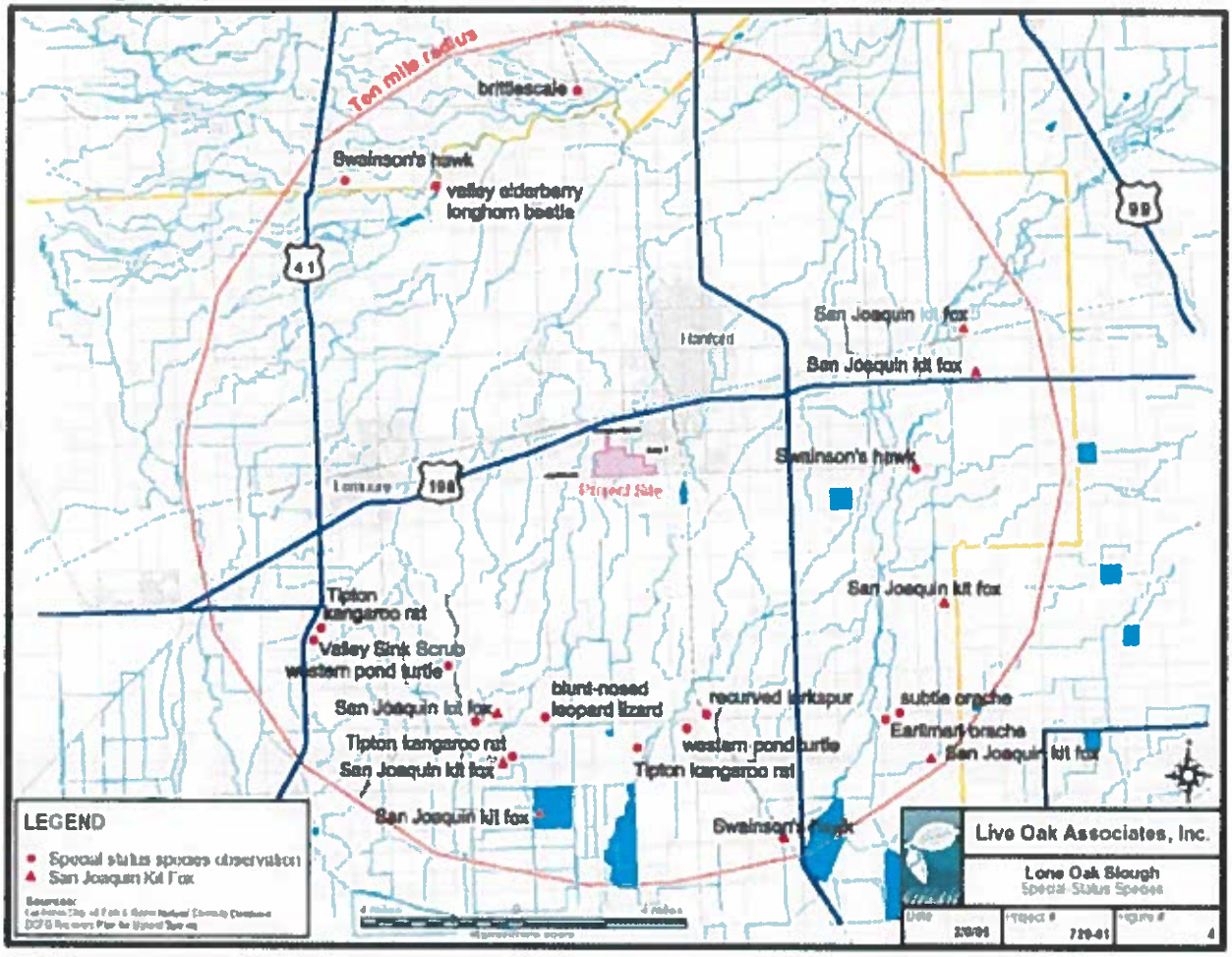
STATUS CODES

| | | | |
|---|---|---|---|
| FE | Federally Endangered | CE | California Endangered |
| FT | Federally Threatened | CT | California Threatened |
| FPE | Federally Endangered (Proposed) | CR | California Rare |
| FC | Federal Candidate | CSC | California Species of Special Concern |
| | | CNPS | California Native Plant Society Listing |

Further Discussion of Threatened, Endangered or Special Status Plants and Animals in the Project Area

This discussion is necessary either because the information related to their occurrence in the region is ambiguous, or because the U.S. Fish and Wildlife Service (USFWS) is likely to consider them present in the absence of additional surveys. The figure below presents a map that shows sightings of threatened, endangered, or special concern species within 10 miles of the proposed project.

**10 Mile Radius-California Natural Diversity Data Base Map**




Swainson's Hawk (Buteo swainsonii):

California Threatened. The Swainson's hawk was listed by CDFG as threatened in 1983 according to provisions of the California Endangered Species Act. In California's Central Valley this species can be found from northern Colusa County to southern Kern County. Nesting often occurs in tall riparian trees, but this is not necessarily the case. This species forages for small mammals in open grasslands and agricultural fields.

There are no documented occurrences of Swainson's hawks within a three-mile radius of the site, however, riparian woodlands associated with both Lone Oak Slough and Sand Slough, as well as scattered large trees associated with developed portions of the site, provide potential nesting habitat for this species. Additionally, agricultural fields of the site provide potential foraging habitat. Per the CNDDB (Figure 4.4 - 2), there are only three known occurrences of nesting Swainson's hawks within a ten-mile radius of the project site, with the closest being approximately six miles east of the site. Two of these occurrences were documented in 2000 and the third in

2003. It is possible that Swainson's hawks nest on the site and it is also likely that Swainson's hawks that nest in the vicinity of the site use the site from time to time for foraging.

Burrowing Owl (Athene cunicularia):

California Species of Special Concern. The burrowing owl is a California species of special concern, but is not currently protected according to provisions of either the State or Federal Endangered Species Acts. This owl is a small, terrestrial owl of open prairie and grassland habitats. These owls inhabit relatively flat dry open grasslands where tree and shrub canopies provide less than 30% cover.

The burrowing owl is the only owl that routinely lives and nests underground. In the western United States burrowing owls do not dig their own burrows, but take over burrows dug by animals such as ground squirrels (Spermophilus spp.), prairie dogs (Cynomys spp.), and badgers (Taxidea taxus). Pocket gopher burrows are too small. In California, this species is found in close association with California ground squirrels as they utilize the abandoned burrows of ground squirrels for shelter, roosting and nesting. Burrowing owls are colonially nesting raptors, and colony size is indicative of habitat quality. It is not uncommon to find burrowing owls in developed and cultivated areas where California ground squirrels are active.

Burrowing owl numbers have been in decline over the past 30 to 40 years, in California. The decline in numbers is due mainly to habitat destruction by way of development and agricultural practices. (BUOW Habitat Conservation Plan, 1998.)

According to the CNDDB, there are no known occurrences of burrowing owls within a 10-mile radius of the project site. However, ground squirrel burrows along the edges of fields and farm roads within the site provide potential habitat for this species.

San Joaquin Kit Fox (Vulpis macrotis mutica)

Federally Endangered, California Threatened. The San Joaquin kit fox (Vulpes macrotus mutica) was listed as endangered on March 11, 1967 by the U.S. Fish and Wildlife Service (32 FR 4001). Subsequently, the California Department of Fish and Game listed the San Joaquin kit fox as threatened in 1971. This species historically occurred extensively throughout California's Central Valley and parts of the Salinas and Santa Clara valleys. Kit foxes still inhabit some areas of the San Joaquin Valley and the Tulare Basin, but some of the most significant populations now occur in the foothills of the Inner Coast Range (western Fresno, Kings, Kern, and Merced Counties, and eastern San Luis Obispo County) (USFWS 1998).

Kit foxes prefer habitats of open or low vegetation with loose soils. In the northern portion of their range, they occupy grazed grasslands and, to a lesser extent, valley oak woodlands. In the southern and central portion of the Central Valley, kit foxes are found in Valley Sink Scrub, Valley Saltbrush Scrub, Upper Sonoran Subshrub Scrub and Annual Grassland (USFWS 1998). Kit foxes are also found in grazed grasslands, urban settings and in areas adjacent to tilled or fallow fields (see USFWS 1998).

Due to the site's proximity to an urban population and frequent disturbance from agricultural activities, the site and surrounding lands provide marginal to unsuitable habitat for the San Joaquin kit fox. A total of seven occurrences have been documented by the CNDDB within a ten-mile radius of the site (Figure 4.4 - 2), with the closest occurrence approximately seven miles southwest of the site. The majority of the site consists of crop fields that are disturbed on a regular basis. Very minimal denning habitat for this species is present on the site and would consist of less than three acres of grassland habitat within Sand Slough and a single fallow agricultural field located in the northern portion of the site. The non-native grassland habit of Sand Slough is

bordered to the west by walnut orchards; to the north by a small amount of riparian woodland and by suburban development at the southern outskirts of the City; to the east by crop fields; and to the south by Houston Avenue with extensive agricultural crop lands beyond. The fallow field is similarly surrounded by orchards and agricultural fields. Although a burrow of appropriate den size for this species was observed in the Sand Slough grassland habitat, the den most likely belonged to a red fox. This conclusion would be further supported by the observance of a road-killed red fox on Houston Avenue to the west of this area.

Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)

Federally Threatened; California Species of Special Concern. The USFWS listed the Valley elderberry longhorn beetle (VELB) as a threatened species under provisions of the Federal Endangered Species Act in 1980 (USFWS 1980) and published a recovery plan for the species in 1984 (USFWS 1984). This recovery plan summarized information regarding the VELB's biology, taxonomy, habitat, distribution, and population decline. Also identified were conservation measures intended to manage its populations and protect its habitat. In 1992, VELB was designated as a California Species of Special Concern by the CDFG.
The VELB is generally found along waterways and in floodplains within the Central Valley that support remnant stands of riparian vegetation. Specifically, blue elderberry shrubs must be present, as both larvae and adults feed only on this plant. Before metamorphosing into an adult, VELB larvae chew an exit hole in the trunk of the elderberry. It is through this hole that the adult beetle exits the elderberry bush. Even after the VELB has stopped using a specific elderberry plant, the exit holes remain. Hence, exit holes can be used as an indicator of past VELB usage. The adult VELB is not known to be a strong flier. Though, they can fly up to two miles, they are more likely to fly such distances when intact elderberry habitat is available. Thus, their dispersal capabilities are considered somewhat limited when compared to migratory insects. The dispersal capabilities of the VELB are little known, however, in the Central Valley it is likely they follow drainage courses where elderberries regularly grow.

Potential habitat for this species is present on the site in the form of numerous elderberry shrubs within the remnant riparian woodland habitat of Lone Oak and Sand Slough. Additionally, two elderberries were observed growing on the M&M Dairy property. No insect exit holes resembling those of the VELB were observed in any of the elderberry shrubs of the site examined during the field survey.

The riparian woodlands of the site, because they occur as small patches completely isolated from more extensive riparian habitat 10-15 miles to the north by large expanses of agricultural lands and the urban area of the City of Hanford, represent marginal habitat for the VELB, especially considering the limited dispersal abilities of this species. It would be even more unlikely that the species would utilize the elderberry shrubs occurring on the M&M Dairy property because these shrubs are growing by themselves in an upland ruderal setting isolated from other elderberries and from other riparian vegetation. Only one occurrence of VELB is documented within a 10-mile radius of the site and this is approximately seven miles northwest of the site (Figure 4.4 - 2).

The absence of exit holes, the paucity of VELB sightings in the region, and the isolation of the elderberry bushes on site from other elderberry bushes in which the VELB have been documented all constitute evidence that the VELB does not occur in elderberry bushes of the site.

Jurisdictional Waters

Jurisdictional waters include rivers, creeks, drainages with a defined bed and bank that may carry at most ephemeral flows, lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U. S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG) and the California Regional Water Quality Control Board (RWQCB).

In January of 2001 the U.S. Supreme Court ruled in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (the SWANCC decision) that "nonnavigable, isolated, intrastate" waters could not be claimed as jurisdictional by the USACE on the basis of their use by migratory birds (Guzy 2001). Although the Court did not specifically address the meaning of the word "isolated", it upheld the jurisdictional status of "adjacent" wetlands (and other waters), which are by definition wetlands that are "bordering, contiguous, or neighboring" other jurisdictional waters. Therefore, the term "isolated wetland" has implicitly been defined as 'wetlands that are not bordering, contiguous, or neighboring' other jurisdictional waters. This definition does not, however, address the degree of proximity necessary to establish that one wetland (or other water) is "adjacent" to a known jurisdictional water. As established by the Supreme Court in the United States v. Riverside Bayview Homes, Inc. in 1985 "wetlands separated from other waters by man-made dikes or barriers, natural river berms, beach dunes, and the like are 'adjacent wetlands'" (Guzy 2001). Other situations are not so clear.

In June of 2006, however, the U.S. Supreme Court ruled in the consolidated cases of June Carabell v. U.S. Army Corps of Engineers and John Rapanos v. United States that wetlands must possess the requisite nexus to come within the statutory phrase "navigable waters" and thus be considered Waters of the United States. Such a nexus is established when the wetlands, alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters understood as navigable in the traditional sense.

The USACE is unlikely to assert jurisdiction over Sand and Lone Oak Sloughs. Both are isolated from other jurisdictional waters. The requisite nexus to other navigable waters appears not to be met. Furthermore, because it is isolated from other jurisdictional waters, the USACE has disclaimed jurisdiction over a channel fragment of Mussel Slough, which is located just west of Hanford and approximately 2 miles to the northwest of the project site. As a result of the SWANCC and Carabell/Rapanos rulings, as well as its decision to disclaim jurisdiction over the nearby Mussel Slough, the USACE would likely disclaim jurisdiction over Sand and Lone Oak Sloughs.

As a constructed ditch that does not replace the function of any natural historic drainage, that does not support wetland vegetation, and that is not connected to other Waters of the U.S., it is unlikely that People's Ditch would be claimed as a jurisdictional water by USACE, the CDFG or RWQCB.

Threatened and Endangered Species

State and federal "endangered species" legislation has provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status". Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the "take" of a listed species. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

Standards of Significance

The project would have a significant effect on biological resources if it would:

1. Interfere substantially with the movement of any resident or migratory fish or wildlife species.
2. Substantially diminish habitat for fish, wildlife or plants.
3. Substantially affect a rare, threatened, or endangered species of animal or plant or the habitat of a rare, threatened or endangered species.

Checklist Discussion

a) Less than significant impact – impacts to biological resources were evaluated in the Live Oak Master Plan/Residential Development EIR. The Live Oak project was determined to have a less than significant substantial effect on 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 Game or U.S. Fish and Wildlife Service, with the incorporation of mitigation measures. Mitigation measures cited and required by the EIR would reduce impacts to special status species to a less than significant level.

The proposed changes to the project will not further impact special status species. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

b) Less than Significant Impact – The Live Oak Master Plan/Residential Development EIR evaluated the impacts to any riparian habitat caused by the project. The impact was determined to be less than significant with the incorporation of mitigation measures cited in the EIR, and required in the Development Agreement and conditions of approval for the project.

Changes to the project proposed herein would not 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 Game or US Fish and Wildlife Service. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project. Regulations pertaining to the modification of the slough remnants are not changed.

c) No Impact – although a formal wetland delineation has not been conducted on the site, the only potentially jurisdictional waters occurring on the site identified during the field survey were restricted to Lone Oak Slough and Sand Slough. Both sloughs support woody and herbaceous hydrophytic vegetation and, therefore, may also meet the technical criteria for jurisdictional wetlands. However, these sloughs are isolated remnants that are not hydrologically connected to other Waters of the U.S and USACE has recently disclaimed jurisdiction over a similar remnant slough occurring in the project region (Mussel Slough) under the SWANCC and Carabell/Rapanos rulings, as well as its decision to disclaim jurisdiction over the nearby Mussel Slough, the USACE would likely disclaim jurisdiction over Sand and Lone Sloughs. Nonetheless, a final determination as to jurisdiction can only be made by USACE. Although USACE would be likely to disclaim jurisdiction over these features, CDFG and/or RWQCB may assert jurisdiction over them. Therefore, the project will have no impact.

d) Less than significant impact – the project will have no impact nor 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.

   Based on the biological analysis conducted for the Live Oak Master Plan/Residential Development, the site does not appear to constitute a "movement corridor" for native wildlife, although many species potentially move within it and through it. Site development will have an adverse effect on the home ranges and dispersal movements of native wildlife now using areas of the site where site development will occur. However, similar lands are regionally abundant for these species. Many migratory species that now pass through the study area are neo-tropical migrant birds that are likely to pass through and over the site even when it is eventually developed. The riparian woodlands of the site that may provide important foraging and shelter habitat for such migrant bird species will not be developed under the project, and the agricultural lands that will be developed under the project are of less value to species and are regionally locally abundant. Therefore, this project is expected to result in a less than significant impact on regional wildlife movements.

e) No Impacts - The project would not conflict with any local policies or ordinances protecting biological resources such as a tree preservation ordinance or policy; there is not an adopted ordinance protecting biological resources.

f) Less than Significant Impact –, the plan does not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, as one is not adopted for the area.

Conclusion: The proposed changes to the project will not further impact Cultural Resources, with the incorporation of mitigation measures. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source(s): Hanford General Plan (2017), General Plan Environmental Impact Report (2017), http://www.arb.ca.ags; Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Cultural Resources**

No greater Impact than identified in EIR. Less than significant impact with mitigation incorporation– the effect of the project and proposed changes/additions to the project is anticipated to be less than significant, as culturally sensitive resources have not been identified within the area of the projects' boundaries. As a standard condition on all projects, the City requires, "In the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98." All projects requiring an initial study are required to enter into a Burial Treatment Plan prior to any earth disturbing activities.

Ethnographic Setting

Hanford is situated between the former "delta" formed by the Kaweah River to the south and the Kings River to the north. Yokuts lived in villages consisting of wood frame huts covered with large tule mats. The Hanford-Lemoore region on the south side of the Kings River was home to the Nutunutu Yokuts. Across the Kings River and north of the Nutunutu, were the Wimilche people. Only one village for the Wimilche and two for the Nutunutu have been described. The Wimilche village of Ugona was located north of the Kings River, 7 miles below Laton. The Nutunutu village of Cheou was across the reiver and directly west of Ugona. Kadistin, the other Nutunutu village of Cheou was across the river and directly west of Ugona. Kadistin, the other Nutunutu village, was at old Kingston on the south bank of the Kings River downstream from Laton. The better known Tachi Yokuts occupied the north and west shores of Tulare Lake.

The Yokuts subsistence economy emphasized fishing; hunting waterfowl; and collecting shellfish, roots, and seeds. Tules were abundant in the sloughs and their prodigious use in constructing shelters, boats, and as a food source reflected their significance in Yokuts life.

The dead were buried in a cemetery separate from the village with head facing west or northwest. Cremation was most common for the occasional individual who died away from home or in the event that the deceased was a shaman or medicine man. Among the Tachi, anyone of higher social status was cremated.

The 1833 epidemic, brought south from Oregon by a party of trappers, decimated an estimated 75% of California's native people. Entire communities were wiped out, leaving few native people to consult during the early 1900s when anthropologists were recording the recollections of elderly survivors of what has been billed as a last attempt to reconstruct the lifeways of the native people before White contact.

In 1851, the tribes gave up their lands for reservations. However, such a treaty was never ratified by Congress. The remnant of native people in the southern San Joaquin Valley was placed at the Tejon

Reservation at the foot of the Tehachapis and at the Fresno reservation at Madera. However, Tejon was later abandoned in favor of a reservation on the Tule River. Many of the Tule river residents were Tachi for whom a settlement was established near Lemoore.

By 1970, some 325 people identifying themselves as Yokuts lived on the 54,000-acre Tule River Reservation. Many of the residents were employed in the lumber industry or as laborers on farms. About one-third of the population of the Tule River Reservation lived on the much smaller Santa Rosa Reservation. Santa Rosa families would follow seasonal agricultural work.

Pioneer Settlement Period

Early development and success of the community was dictated by the railroad. Southern Pacific established a depot early in 1877 in what would become Hanford. In 1877, when the Southern Pacific Railway laid lines from Goshen to Coalinga, their path crossed through a Chinese sheepherder's camp. This camp reportedly was the beginning of the City of Hanford. Hanford was named for James Madison Hanford, an auditor of the railroad, who also took a lively interest in the sale of town lots which began on January 17, 1877. Within a short time the settlement grew to a town, and, with the powerful backing of the railway interests, Hanford ultimately became the center of trade for the region.

In McKenney's Pacific Coast Directory, San Francisco, 1886-1887, Hanford was described as having a post, express and telegraph office, located along the Southern Pacific Railroad Company's Goshen Division, 254 miles from San Francisco, and 22 miles from Visalia. At the time, the community numbered 1,000 inhabitants and was located in the heart of the "famous Mussel Slough country," a region of rich top soils and important agricultural zone. Hanford was the principal depot for the local wheat industry and had several flouring mills along with schools, churches, and hotels.

Through the early pioneer years, a series of devastating fires dampened the growth of Hanford. On July 12, 1887, a fire destroyed most of the downtown business district. On June 19, 1891, another fire destroyed portions of the downtown business district. The fires of early 1890s spurred new development using fireproof materials.

National Register of Historic Places

Hanford has three buildings listed on the NRHP. They are the Hanford Carnegie Library, the Kings County Courthouse, and the Taoist Temple. All three buildings are also listed on the California Register of Historic Places.

Hanford Carnegie Library

The Hanford Carnegie Library, now the Hanford Carnegie Museum, was built in 1905 as one of the many Carnegie libraries that were funded by steel magnate, Andrew Carnegie. The library was replaced by a new structure at a different location in 1968. The old library was subsequently renovated and reopened as the Hanford Carnegie Museum in 1974. The building is of Romanesque Revival architecture, with displays of furniture and photos describing the history of the Hanford area.

Kings County Courthouse

The 1986 Kings County Courthouse was erected after Kings County was formed. The building served as the county's courthouse until 1976 when it was replaced by the new Kings County Government Center on West Lacey Boulevard. The building was listed on the National Register of Historic Places in 1978.

Taoist Temple

The Taoist Temple at 12 China Alley dates from 1893. It was listed on the NRHP in 1972. It is historically significant as a surviving authentic structure from Hanford's Chinatown. China Alley served the second largest population of Chinese in the U.S., behind San Francisco.

While many urban Chinatowns continue to thrive, most rural Chinatowns have declined; Hanford's China Alley is unique for its retention of many original features. China Alley's survival is largely because many of its buildings are owned by a single third-generation family corporation that has, through the years, exhibited concern for the site's future.

National Register of Historic Places – Eligible Resources

There are a number of resources within Hanford that contribute to its unique culture, yet are not officially listed as historic resources, including the following:

a) Clark Center for Japanese and Art and Culture, 15770 10th Avenue
b) Temple Theater, 514 Visalia Street
c) Fox Theater
d) Kings Art Center, 605 N. Douty Street
e) Hanford Civic Auditorium, 400 N. Douty Street
f) Hanford Veteran's Memorial Building

Paleontological Resources

A paleontological resources report was not prepared for the General Plan, as there are recent paleontological resources reports for areas within the vicinity. The geology of the area includes the Modesto Formation, Tulare Lakebeds, and Quanternary alluvium. Between overlies sediments of the late-Pleistocene to early-Holocene Modesto Formation. From Hanford south to approximately Delano, Tulare Lakebed deposits are exposed at or near the surface.

Consultation Meeting

On January 10, 2017, the City of Hanford met with the Tachi Yokut Tribe, on a different project in order to establish conditions, which would apply to all projects in the City of Hanford, which required an initial study.

In order to address the concerns of the Tachi Yokut Tribe, the City is requiring the following as mitigation measures:

That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. (This condition applies as a mitigation measure to all projects that require an initial study).

Thresholds of significance

The project would have a significant impact on cultural resources if it would:

a) Cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5
b) Cause a substantial adverse change in the significance of an archeological resource, pursuant to Section 15064.5;
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature; or
d) Disturb any human remains, including those interred outside of formal cemeteries

e) That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities.

Significance Criteria
The project may have a significant impact on cultural resources if it causes substantial adverse changes in the significance of a historical or archaeological resource as set forth by the California Register of Historic Places and Section 106 of the National Historic Preservation Act; directly or indirectly destroys a unique paleontological resource or site.

Checklist Discussion

a) Less than Significant Impact – The Live Oak Master Plan/Residential Development EIR evaluated the effect of the project on cultural resources and determined the effect to be less than significant. Based on preliminary reconnaissance by a qualified historical resource professional, it was determined that there did not appear to be any substantial historic resource located in the project area. The Live Oak development project does not appear to have the potential to cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5.

   The proposed changes to the project will not further impact Cultural Resources. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

b) Less than Significant Impact with Mitigation Measures – Existing Federal, State, and local regulations require studies to identify archeological and paleontological resources; application review for new development that would involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements of site-specific mitigation measures if resources are encountered.

   Due to the prior meeting with the Tachi Yokut Tribe on January 10, 2017, the lead agency is requiring that:

   That a Burial Treatment Plan be entered to by the applicant/property owner prior to any

earth disturbing activities. (Mitigation Measure CR 1)

In accordance with General Plan Policy O48, construction shall be halted at a development site if cultural resources are encountered unexpectedly during construction. (Mitigation Measure CR 2).

c) Less than Significant Impact with Mitigation Measures – See B.

d) Less than Significant Impact with Mitigation Measures – throughout the City of Hanford area, prehistoric peoples have used the area for thousands of years due to its proximity to water sources such as the Tulare Lake and other waterways that drained into it. Therefore, human remains could be buried in soils. Excavation during construction activities of new development have the potential to disturb human burial grounds, including Native American burials. Human burials have specific provisions for treatment in Section 5097 of the California Public Resources Code, which authorizes the NAHC to resolve any disputes related to the disposition of Native American burials. Public Resources Code Section 5097.98 mandates the process to be followed in the event of a discovery of any human remains and would mitigate all potential impacts. The California Health and Safety Code (Section 7050.5, 7051, and 7054) also have provisions protecting human burial remains from disturbance, vandalism, or destruction. California Health and Safety Code Section 7050.5 requires that if human remains are discovered, disturbance of the site would halt and remain halted until the coroner has conducted an investigation and made recommendations to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the corner recognizes or has reason to believe the human remains to be those of a Native American, he or she would contact, by telephone within 24 hours, the NAHC. Therefore, compliance with these regulations would result in proper handling, excavation, and re-burial of any human remains, including those interred outside of formal cemeteries.

Mitigation Measure CR 3: If human remains are discovered, disturbance of the site would halt and remain halted until the coroner has conducted an investigation and made recommendations to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the corner recognizes or has reason to believe the human remains to be those of a Native American, he or she would contact, by telephone within 24 hours, the NAHC.

Mitigation Measures

MM Cultural Resources 1: That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities.

MM Cultural Resources 2: Construction shall be halted at a development site if cultural resources are encountered unexpectedly during construction.

MM Cultural Resources 3: If human remains are discovered, disturbance of the site would halt and remain halted until the coroner has conducted an investigation and made recommendations to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the corner recognizes or has reason to believe the human remains to be those of a Native American, he or she would contact, by telephone within 24 hours, the NAHC.

Conclusion:
The proposed changes to the project will not further impact Cultural Resources, with the incorporation of mitigation measures. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source(s): Hanford General Plan (2017), California Health and Safety Code, Public Resources Code, consultation letter sent in accordance with Public Resources Code, Section 21080.3.1(b); meeting with the Tachi Yokut Tribe on January 10, 2017; Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Geology and Soils**

Impacts to Geology and Soils were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant. The proposed changes to the project will not further impact Geology and Soils. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

**Environmental Setting**

Geology

The topography of the City is relatively flat with a gradual slope generally from east to west. The City is located at 249 feet above mean sea level (msl).

The soil is defined as alluvial fan surfaces that are mantled with very deep, well-drained, saline-alkali soils. An alluvial fan is a fan-shaped alluvial deposit formed by a stream where its velocity is abruptly decreased.

Soil

The City of Hanford consists of the following soil types: 1) Cajon sandy loam, 2) Excelsior sandy loam, 3) Garces loam, 4) Kimberlina fine sandy loam, saline alkali 5) Kimberlina fine sand loam, sandy substratum, 6) Kimberlina salie alkali-Garces complex 7) Nord fine sandy loam, 8) Nord fine sandy loam, saline alkali, 9) Nord complex, 10) Wasco sandy loam (0-5% slopes), and 11) Whitewolf coarse sandy loam. Each of these soil types is not subject to annual flooding or poinding, and for the most part has a very low to medium surface runoff class, and is well drained. A runoff class indicates the potential for a soil to become saturated when excess storm water begins to flow at the ground surface.

Seismicity

The greatest potential for seismic activity in the City is posed by the San Andreas Fault, which is located approximately 46.5 miles southwest of the western boundary of the Study Area. The White Wolf Fault, located near Arvin and Bakersfield to the southwest in Kern County, which has the potential to cause seismic hazards for the County to a much lesser degree than the San Andreas Fault.

Fault Rapture

Kings County doesn't have any major fault system within its boundaries.

Strong Seismic Ground Shaking

Kings County has not experienced any damaging earthquake equal or greater than Richter Magnitude 6.0 over the last 200 years. The Uniform Building Code has four seismic zones in the US ranging from I to IV, the higher the number, the higher the earthquake danger. All of California lies within Seismic Zone III or IV, Kings County is within Zone III, which equates to the potential

to experience 0.3 meters/second squared ground acceleration, which would result in very strong to sever perceived shaking and moderate to heavy potential.

Liquefaction

Liquefaction occurs when saturated, loose materials are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. For liquefaction to occur, surface and near-surface soil must be saturated and be relatively loose. Liquefaction more often occurs in areas underlain by young alluvium where the groundwater table is higher than 50 ft. below ground surface. In the City, the range is generally between 120 ft to 160 feet below ground surface, therefore, the potential for liquefaction is not very probable.

Soil Erosion

Soil erosion, which can be caused by wind and water runoff, is a type of soil degradation. The potential for erosion to occur is affected by the soil's properties. The soil in the City and surrounding study area is generally sandy loams, fine sandy loams, and loams. The area's erodibility factor ranges from 0.19 to 0.38 depending on the soil type and percentage of organic matter. Based on this range, the soils in the study area have medium susceptibility to sheet and rill erosion by rainfall.

Lateral Spreading (Landslides)

Lateral spreading is large horizontal ground displacements due to earthquake-induced liquefaction. Lateral spreading also refers to landslides that commonly form on gentle slopes that have rapid, fluid-like movement. Lateral reading generally occurs on 0.3 to 5% slopes underlain by loose sand and shallow groundwater.

Subsidence

Land subsidence is the gradual settling or sudden sinking of the ground surface due to movement of the ground materials. It is generally caused my three distinct water-related causes: 1) compression of layers of clay and slit within an aquifer, 2) oxidation and drainage of organic soils, 3) dissolution and collapse of susceptible rocks. Subsidence is occurring within the San Joaquin Valley. The primary causes for subsidence in the SJV are groundwater-level decline (due to overdraft) and subsequent aquifer compaction and hydrocompaction of moisture-deficient deposits above the water table.

Collapsible Soil

Collapsible soils consist of loose, dry, low-density materials that collapse and compact under the addition of water or excessive loading. These soils are found in areas of young alluvial fans, debris flow sediments, and loess deposits. Since the City and surrounding area includes soils that are derived from alluvial fans, there is the potential for collapsible soils.

Expansive Soil

Expansive soils are fine-grained soils that can undergo a significant increase in volume with an increase in water content, as well as a significant decrease in volume with a decrease in water content. The City and surrounding area's soils contain percentages of clay that generally range between 7-27%. When a soil has 35% or more clay content, it is considered a clayey soil. Since the soil types in the Study Area generally do not contain 35% clay content, the potential for expansive soils within the City and surrounding is low.

Septic Systems

The City does not have septic requirements for septic systems within the City.

Significance Criteria

The project may result in significant earth impacts if it causes substantial erosion or siltation, exposes people to geologic hazards or risk from faults, landslides or unstable soil conditions. Grading that disturbs large amounts of land or sensitive grading areas (such as slopes in excess of 20%) may cause substantial erosion or siltation.

Checklist Discussion

a) Less than Significant Impact – the changes proposed herein to the Live Oak Development project will not have an increased effect on the following categories.

i. No Impact - No portion of the project area is located within an earthquake fault zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act and therefore, development would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known earthquake fault.

ii. Less than Significant Impact– Compliance with applicable City General Plan policies, as well as the California Building Code would reduce the potential to expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving strong seismic ground shaking to a less-than-significant level.

iii. Less than Significant Impact– The potential for liquefaction in the project area is low. There is a minute possibility that a rain event coupled with a concurrent seismic event may create a condition where liquefaction could occur. Compliance with applicable City General Plan policies, as well as the California Building Code would reduce the potential to expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving strong seismic ground shaking to a less-than-significant level.

iv. Less than Significant– the entire City is located within an area of low landslide incidence, but, there is still a possibility that landslides could occur within the City, as a result of erosion, slope weakening through saturation, or stresses by earthquakes that make slopes fail. Geotechnical and soil studies that identify potential hazards, including landslides, would be required prior to grading activities as part of the plan check and development review process for the physical development of the area. Such technical studies would provide structural design, as needed, pursuant to the California Building Code requirements to reduce hazards to people and structures as a result of landslides.

b) Less than Significant Impact– development would result in construction-related ground disturbance, as a result of grading and excavation where topsoil is exposed, moved, and/or stockpiled. Such construction-related ground disturbance could loosen soil and remove vegetation, which could lead to exposed or stockpiled soils made susceptible to peak storm water runoff flows and wind forces. Such disturbances could result in substantial soil erosion or topsoil, which is a potentially significant impact. Adherence to the Hanford Municipal Code Chapter 15.52 Flood Damage Prevention Regulation, and the California Building Code, along with the plan check and development review process, would assist the development of property erosion controls during operation of future development to a less than significant impact.

c) Less than Significant Impact: See a.

d) Less than Significant Impact – Expansive soils are fine-grained soils that can undergo a significant increase in volume with an increase in water content, as well as a significant decrease in volume with a decrease in water content. The City and surrounding area's soils contain percentages of clay that generally range between 7-27%. When a soil has 35% or more clay content, it is considered a clayey soil. Since the soil types in the Study Area generally do not contain 35% clay content, the potential for expansive soils within the City and surrounding is low.

e) No impact- The City does not have septic requirements for septic systems within the City. Septic is not proposed.

Conclusion

Impacts to Geology and Soils were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant. The proposed changes to the project will not further impact Geology and Soils. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source(s): General Plan and General Plan EIR (2017); Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Greenhouse Gas Emissions**

See Air Quality Section.

**Hazards and Hazardous Materials**

Impacts to Hazards and Hazardous Materials were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures. The proposed changes to the project will not further impact Hazards and Hazardous Materials. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Environmental Setting

Hazardous material are substances that, because of physical or chemical properties, quantity, concentration, or other characteristics may either cause an increase in mortality or an increase in serious, irreversible, or incapacitating illness or pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous materials have been and are commonly used in commercial, agricultural, and industrial applications and, to a limited extent, in residential areas.

Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. Large quantities of hazardous materials are transported along State Route 198, 43, and freight rail lines that pass through Hanford, making it susceptible to hazardous spills, releases, or accidents.

Pursuant to AB 2948, Kings County adopted the *County Hazardous Waste Management Plan.* Under state law, all industries and agricultural operations that store or handle specific quantities of hazardous materials must provide the County with a hazardous materials business plan detailing the location and quantities of their hazardous materials.

Brownfields

A brownfield site is land previously used for industrial purposes or some commercial uses that may be contaminated by low concentrations of hazardous waste or pollution, and has the potential to be reused once it is cleaned up. the City has one brownfield site, located south of Third Street, north of Davis Street, west of the BNSF railroad tracks, and east of 11th Avenue.

Airport Hazards

Hanford Municipal Airport – a general aviation facility serving Kings County and the surrounding communities of Hanford, Armona, and Lemoore in south-central CA.

Emergency Response

Kings County's Office of Emergency Management (OEM) is the County's emergency management agency, responsible for coordinating multi-agency responses to complex, large-scale emergencies and disasters within Kings County. OEM develops and maintain the Emergency Operations Plan (EOP), which serves as a guideline for who will do what, as well as when, with what resources, and by what authority- before, during, and immediately after an emergency.

Significance Criteria

The project may result in significant hazards if it does any one of the following:

1. Create a public health hazard
2. Involve the use or production, disposal or upset of materials which pose a hazard to people in the area or interferes with an emergency response plan
3. Violates applicable laws intended to protect human health and safety or would expose workers to conditions that do not meet health standards.

Checklist Discussion

a) Less than Significant – The changes proposed to the project will not result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The changes to the Live Oak development project will result in less residences. No expansion or intensity increases in the project are proposed.

   There are no known hazardous materials that would be generated by the Live Oak Development project that would expose sensitive receptors to substantial risk. The proposed use of residential, recreation, and public facilities are not land uses associated with substantial transportation, use or disposal of hazardous materials.

b) Less than Significant - The changes proposed to the project will not result in 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. No expansion or intensity increases in the project are proposed.

   There are no known hazardous materials that would be generated by the Live Oak Development project that would expose sensitive receptors to substantial risk. The proposed use of residential, recreation, and public facilities are not land uses associated with substantial transportation, use or disposal of hazardous materials. Residential uses may contain small quantities of hazardous materials that are otherwise governed by local, state, or federal regulations.

c) Less than Significant Impact – The changes proposed to the project will not result emit hazardous emission or handle hazardous or acutely hazardous material, substance, or waste within one quarter mile of an existing or proposed school. No expansion or intensity

increases in the project are proposed.

There is not a school within a ¼ mile of the project site, currently. A future school site is planned by the General Plan west of the project site. The General Plan restricts land uses around schools, such as industrials uses, that could result in emitted hazardous emissions or handled hazardous or acutely hazardous materials, substances, or wastes within ¼ mile of an existing or proposed school that would result in significant adverse impacts to school sites. The routine use of a residence does not involve the hazardous materials.

d) Less than Significant Impact - the project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5

e) No Impact -The project site is not located within two miles of a private airport/airstrip therefore there is no impact.

f) Less than Significant Impact – the project is located one-mile south of the State Highway 198, which is an adopted emergency transportation corridor. The proposed project and changes to the project would not interfere with emergency transportation on this route.

g) Less than Significant Impact– The City of Hanford is located within a zone considered by CAL FIRE to have low to no potential for wildland fires. The proposed Project site is located on the western boundary of the City. This area has historically been used for agricultural production and is currently in transition to urban use, primarily residential development. East of the Project site is land developed as low density residential and agricultural land. To the north is a vacant land and land developed as low density residential. To the south of the proposed site, beyond Houston Avenue, is active agricultural land. West of the proposed site is Lone Oak Slough, beyond the slough are existing agricultural uses and large rural residential lots. No native or non-native grasslands, forests, or combustible sources that would lead to the potential of wildfire exist near the site; therefore, the impact is considered less than significant.

Conclusion

Impacts to Hazards and Hazardous Materials were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures. The proposed changes to the project will not further impact Hazards and Hazardous Materials. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source: 2017 General Plan and General Plan EIR, State of California Hazardous Waste and Substance List; Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Hydrology/Water Quality**

Conclusion: Impacts to Hydrology and Water Quality were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures and conditions of approval for the development project. The proposed changes to the project will not further impact Hydrology and Water Quality. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Environmental Setting

Climate

The City is located in the southwest portion of the Central Valley of CA and the City's climate is semi-arid. Semi-arid climates in CA tend to have precipitation patters closer to Mediterranean climates with wet winters. The Central Valley has greater temperature extremes than coastal areas because it is less affected by the moderating influence of the Pacific Ocean. Most of the

rainfall in Hanford occurs in the winter months as the Gulf Stream shifts southward from northern latitudes in the wintertime. However, because of the inland location and "rainshadow effect" caused by the coastal mountain ranges, Hanford typically gets less rainfall during the winter than coastal areas to the west. The rainshadow effect refers to a reduction of precipitation commonly found on the leeward side of a mountain. Average precipitation is about 8 inches.

Surface Water Resources

Tulare Lake Basin

The City and surrounding area is located in the Central Valley's Tulare Lake Basin. This Basin covers 10.5 million acres and encompasses the drainage area of the Central Valley south of the San Joaquin River. Surface water from this basin only drains into the San Joaquin River in years of extreme rainfall. The Tulare Lake Basin is within the jurisdiction of the Central Valley Regional Water Quality Control Board.

South Valley Floor Watershed

The Study Area is located in the South Valley Floor Watershed, which is the largest watershed in the Tulare Lake Basin at about 8,235 square miles (5.3 million acres). A large portion of the surface water supply in the watershed comes from imported water, including water supplied through the San Luis Canal/CA Aqueduct System, Friant-Kern Canal, and Delta-Mendota Canal. Agriculture is the primary land use type in the watershed, encompassing approximately 67% of the total land area. Open space is secondary at 25% of the total land area and urban land uses represents about 6%.

Local

Most of the water surface features in the City and surrounding nearby areas are manmade conveyance structures for stormwater control. The only natural watercourse is Mussel Slough, remnants of which still exist on the City's western edge. The People's Ditch, an irrigation canal dug in the 1870s, traverses Hanford from north to south and portions of it still exist north of Grangeville Boulevard and east of the Santa Fe Railroad. The Sand and Lone Oak sloughs once traversed the city north and south, and remnants still remain in the southern half of the City south of State Route 198. The Kings River is about 4 miles north of Hanford.

Surface Water Quality

There are no surface water bodies within the vicinity of the City that are listed as impaired per the US Environmental Protection Agency 2010 CA List of Water Quality Limited Segments.

Groundwater Resources

Regional

The City and surrounding area is located in the Tulare Lake Hydrologic Region, San Joaquin Valley Groundwater Basin, Tulare Lake Subbasin.

Local

The City exclusively uses groundwater for its potable water supply. The City's municipal water system extracts its water supply from underground aquifers via 14 active groundwater wells with depths that range from 1300 to 1700 feet below ground surface (bgs). In cooperation with the Peoples Ditch Company and the Kings County Water District, excess Kings River water and

stormwater flows are conveyed to 125 acres of drainage and slough basins located throughout the City to help replenish groundwater. The basins account for approximately 568 acre-feet of available water retention and the City is planning to add approximately 317 acre feet of additional basins located along major drainage channels within the City for groundwater recharge as well as flood protection.

Groundwater Quality

Groundwater quality in the Tulare Lake Subbasin ranges from calcium bicarbonate in type in the northern portion to a sodium bicarbonate type in the lakebed. Total dissolved solids in the Subbasin typically range from 200 to 600 milligrams per liter and can be as high as 40,000 mg/L in shallow groundwater with drainage problems. the City reports electrical conductivity in 14 wells ranging from 560 micromhos per centimeter to 1,100 microhos per centimeter. There are also areas of shallow, saline groundwater in the southern portion of the Subbasin, localized areas of high arsenic and the City reports odors caused by the presence of hydrogen sulfide.

The EPA and State Water Resource Control Board have set the arsenic standard for drinking water at 0.01 parts per million and, in order to meet these standards, the City now drills wells up to 1,500 feet deep.

Floodplains

Only 48.6 acres are located within the 100-year floodplain. This accounts for 0.003% of the total area in the Planned Area of the City.

Methodology

Wastewater production is estimated based on the City's accepted formula that each person generates approximately 100 gallons of wastewater per day and the Project's estimate of an average household population of 2.8 person per dwelling unit. Domestic water demand for urban commercial uses is forecasted in the 2005 Urban Water Management Plan for the City of Hanford. The Hanford 2005 UWMP references the proposed Live Oak Master Plan Project in the water demand forecast of new development in the City. The WSA uses water demand rate for single family dwellings and parks as opposed to the calculated population driven demand in the UWMP that includes all uses divided by population. The WSA prepared by Carrollo Engineers for this Project estimates the amount of water per year consumed daily is 0.61 MGD (425 gpm) which includes parks and other open space water demands. The WSA more narrowly focuses on the water demand of the specific project. The estimated total annual water demand from the proposed Project is 681.3 acre feet per year (approximately 1.7 acre feet per acre). An acre foot of water is approximately 325,830 gallons. Agricultural water demand in the Hanford area is estimated at 2.4 acre-feet/year. The design basin will accommodate the design storm.

| | |
|---|---|
| R= 3.3 | inches l00 year-2 day storm |
| C= 0.5 | runoff coefficient for Multi family 3000 sq.ft. minimum |
| Area | 240 Acre Feet - this acreage includes Greenbrier Gardens |

33.0 Acre Feet required storage

In the case of the eastern watershed (Sand Slough), the storm runoff will be a retention basin (retain water for percolation). Given the retention basin characteristic of this water shed the design storm is a 100-year 5 day storm (a 5.7 inch rainfall). The runoff coefficient is 0.5; and the area is 191 acres. The storm water runoff is calculated at 45.4 acre feet of storage required.

| | |
|---|---|
| R= 5.7 | inches l00 year-2 day storm |
| C= 0.5 | runoff coefficient for Multi family 3000 sq.ft. minimum |
| Area =191 | Acre Feet - this acreage includes Greenbrier Gardens |

45.4 Acre Feet required storage

Sand Slough has a calculated capacity of 65.1 acre feet based on calculations provided by the project engineer. The applicant's engineer surveyed the reach of Sand Slough that would receive storm runoff and calculated the capacity of the facility.

Improvement to overall water surface and ground water quality is anticipated with the cessation of the existing dairy operation.

The Project area is not designated within the area of a sole source aquifer according to the Environmental Protection Agency, Office of Water National Summary of Sole Source Aquifer Designation, February 1998.

Changes in the land use from Very-Low Density, Low-Density, and Medium Density to all Low-Density Residential would have a lesser effect on hydrology. Less residential units and lesser density overall, will reduce the water run off.

Significance

Storm water runoff estimates are based on topographical maps prepared for the Project site and discussions with project engineers. Storm water runoff is estimated based on the assumption that the Project will be fully built-out including paved surfaces and landscape areas consistent with the City of Hanford development standards and the Standards contained in the Live Oak Master Plan. All on-site storm drainage will be collected in storm drainage systems approved by the City of Hanford. The accepted formula for calculating stormwater runoff is:

The design storm runoff was calculated using a formula provided by the City of Hanford for projects in the City of Hanford. The project applicant's engineer (Northstar Engineering) provided the calculations. In the case of he western watershed (Lone Oak Slough), the storm runoff will be metered into Lone Oak Slough and the basin constructed with the project will be a detention basin (detain water for metering into Lone Oak Slough). Given the detention basin characteristic of this water shed the design storm is a 100-year 2 day storm (a 3.3 inch rainfall). The runoff coefficient is 0.5; and the area is 240 acres. The storm water runoff is calculated at 33 acre feet of storage required. The design of the basin/open space area is almost 36 acre feet of capacity at 91% full.

Significance Criteria

The project may result in significant impacts if it would violate any water quality standards or waste discharge requirements, substantially deplete groundwater supplies or interfere with groundwater recharge; substantially alter the existing drainage pattern of the site or substantially increase the rate of surface runoff; exceed the existing drainage system.

Checklist Discussion

a) Less than Significant Impact – Proposed changes to the Live Oak Development proposed herein will not result in the violation of any water quality standards or waste discharge requirements, beyond the effect analyzed in the EIR.

   The proposed Live Oak Master Plan project will produce typical residential wastewater discharged to the City's existing wastewater treatment facility. The City's wastewater discharged to the city's existing wastewater treatment facility is permitted to by the State of California and is designated to treat 8.0 million gallons per day.

   The amount of wastewater generated by the Live Oak project is within the existing capacity of the wastewater treatment facility. Development impact fees for wastewater will offset

the costs of providing capacity in the wastewater treatment facility for the new development. With the payment of development impact fees reduce the impact of the development to a less than significant level.

b) Less than Significant Impact – Proposed changes to the Live Oak Development proposed herein will not result in a the substantial depletion of 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 which would not support existing land uses or planned uses for which permits have been granted) beyond the effect analyzed in the EIR.

The current and future efforts of the City and Kings County Water District coupled with the requirement to comply with the Sustainable groundwater management act through the Groundwater Sustainability Plan process ensures that future development as an implementation of the General Plan would not 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.

c) Less than Significant Impact – Proposed changes to the Live Oak Development will not 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 which would result in substantial erosion or siltation on- or off-site beyond that effect analyzed in the EIR.

The EIR identified mitigation measures that would reduce the projects impact on drainage to a less than significant level. The mitigation measures cited in the EIR and the conditions of approval in the project resolutions and development agreement still apply and will not be altered by the project changes.

d) Less than Significant Impact– Proposed changes to the Live Oak Development proposed herein will not 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 which would result in flooding on- or off-site.

The Live Oak Master Plan proposes to utilize the Lone Oak and Sand Slough remnants as locations for disposal of stormwater. According to the USGS topographic map, both slough remnants are no longer connected to any creek, river or natural drainage in the area. With the construction of the project the amount of groundwater recharge is anticipated to increase within the confines of the slough and basin locations above the existing state of the land. Improvements planned of the collection and disposal of storm water are within the capacities of the planned improvements and the existing slough remnants.

e) Less than Significant Impact – Proposed changes to the Live Oak Development project, proposed herein, will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, beyond the effect analyzed in the Live Oak EIR.

The EIR identified mitigation measures that would reduce the projects impact on drainage to a less than significant level. The mitigation measures cited in the EIR and the conditions of approval in the project resolutions and development agreement still apply and will not be altered by the project changes.

f) Less than significant impact – The changes proposed to the project will not otherwise

substantially degrade water quality. See A.

g) No Impact. – the project site is not located within a flood zone as shown in the Flood Insurance Rate Map for Hanford (Panel 06031C 0185C, June 16, 2009) therefore there is no impact.

h) See g.

i) Less than significant – the significant risk of damn inundation to the City of Hanford is low. While there is a remote reisk of upstream dam failure, there is no more risk in this Project location than any other location in the City of Hanford to such catastrophic flood occurrence. The City considers this acceptable and a less than significant impact.

j) No impact – the project site is not located by the ocean. Therefore, there is no risk that new development would be inundated by tsunami. A mudflow is a flow of soil or fine-grained sediment mixed with water down a steep unstable slope. The project area is relatively flat and does not contain slopes steep enough to cause mudflow. The project would not be downgrade from aboveground water storage tanks.

Conclusion: Impacts to Hydrology and Water Quality were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures and conditions of approval for the development project. The proposed changes to the project will not further impact Hydrology and Water Quality. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source: 2017 General Plan, 2017 General Plan Update, Hanford Storm Water Master Plan, State of California Department of Water Resources; Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Land Use Planning and Population**

**Conclusion:** Impacts to Land Use and Planning were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant. The proposed changes to the project will not further impact Land Use and Planning. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project. The changes proposed are consistent with the current General Plan and the R-L-5 Low-Density Residential zoning with the planned unit development overlay.

Environmental Setting

The City is predominantly surrounded by agricultural land uses and is characterized as a low rise community dominated by low-density, single-family housing along with some limited pockets of multi-family housing, low-intensity commercial uses, and several industrial areas. The City's older urban development lies north of the Union Pacific railroad tracks and south of Grangeville Boulevard, while the newly urbanized areas are north of Grangeville Boulevard. The majority of land within the City's planned area consists of agricultural, open space, and single-family residential uses.

Setting

The Project is located in the south-western portion of Hanford, California. The proposed site consists of approximately 340 acres and is bisected by 12th Avenue, a north-south arterial of Hanford. The northern boundary is north of Hume Avenue (west of 12th Avenue) and Hume

Avenue (east of 12th). The southern boundary is Houston Avenue. Lone Oak Slough forms western Project boundary, and the eastern boundary is Sand Slough.

The Live Oak Master Plan guides the development of the project site, approved under Planned Unit Development No. 2005-04. Changes to the Live Oak Development project are proposed by this project, including:

Modifications to Live Oak Development Agreement: a request to modify the existing Development Agreement for the Live Oak Development.

Modifications to Planned Unit Development (PUD) No. 2005-04: a request to modify the PUD to delete requirements for affordable housing units, amend the goals and policies of the Live Oak Master Plan, and allow for increased lot density within a portion of the development.

Modifications to Vesting Tentative Tract 865, 881, and 912: a request to remove the requirement for affordable housing units from the resolution, consistent with the Live Oak Development Agreement.

Modifications to Vesting Tentative Tract 909: a request to remove the requirement for affordable housing units from the resolution, consistent with the Live Oak Development Agreement; modify language regarding park improvements consistent with the Development Agreement; and increase the number of residential lots from 642 to 719 units.

The General Plan designates the project site as Low-Density Residential and the zoning on the property is R-L-5 Low-Density Residential.

Significance Criteria
The project may result in significant impacts if it physically divides an established community, conflicts with existing off-site land uses, causes substantial adverse change in the types or intensity of land use patterns or conflicts with any applicable land use plan, policy or regulation.

Checklist Discussion

a) Less than significant impact – The proposed changes to the Live Oak Development will not result in physically dividing an established community.

   The proposed Project site is designated in the Hanford General Plan as Low-Density residential. The site is zoned R-L-5 for Low-Density Residential. The applicant has prepared a Master Plan for the Live Oak Development, under Planned Unit Development No. 2005-04. The Project site is served by major streets including 12th Avenue, Hume Avenue, and Houston Avenue. The proposed Project is contiguous with urban residential development on the east, to the northeast and northwest. To the southeast are industrial uses, to the south and west are agricultural uses. The area has been planned for residential development since the City's 1994 General Plan Update and is within the adopted service area of the City's west side sewer interceptor. The land use to be implemented by the Live Oak Development project is consistent with the General Plan policies and Zoning requirements.

   The existing community on the Project site and near the Project site can be described as rural agricultural. The agricultural uses are diverse including irrigated crops, dry land farming, and a walnut orchard. To the west and south larger agricultural parcels exist, some with more intensive agricultural programs. To the south and east is the City's industrial park area. Houston Avenue is the established dividing line between urban residential uses and industrial uses and this demarcation line has been in place before

the 1994 General Plan Update. The Live Oak Development does not constitute a land use that would physically divide an established community. This Project represents the implementation of the Hanford General Plan and would have a less than significant impact.

b) Less than significant impact – The changes proposed to the Live Oak Development project will not 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 changes to the Live Oak Development include the following:

   Modifications to Live Oak Development Agreement: a request to modify the existing Development Agreement for the Live Oak Development.

   Modifications to Planned Unit Development (PUD) No. 2005-04: a request to modify the PUD to delete requirements for affordable housing units, amend the goals and policies of the Live Oak Master Plan, and allow for increased lot density within a portion of the development.

   Modifications to Vesting Tentative Tract 865, 881, and 912: a request to remove the requirement for affordable housing units from the resolution, consistent with the Live Oak Development Agreement.

   Modifications to Vesting Tentative Tract 909: a request to remove the requirement for affordable housing units from the resolution, consistent with the Live Oak Development Agreement; modify language regarding park improvements consistent with the Development Agreement; and increase the number of residential lots from 642 to 719 units.

   The changes proposed to the Live Oak Development will not conflict with the current land use – Low-Density Residential, nor the zoning, R-L-5 Low-Density Residential, with the planned unit development overlay. The changes sought to the project are consistent with the General Plan.

c) No Impact – The City is not included in any habitat conservation plan or natural community conservation plan, nor are there plans to be involved.

Conclusion: Impacts to Land Use and Planning were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant. The proposed changes to the project will not further impact Land Use and Planning. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project. The changes proposed are consistent with the current General Plan and the R-L-5 Low-Density Residential zoning with the planned unit development overlay.
Sources: Live Oak Master Plan, 2017 General Plan, 2017 General Plan Update, Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Mineral Resources**

No Impact.

Oil and Gas

The planning area is not found within a Division of Oil, Gas, and Geothermal Resources recognized oil field and does not contain any areas that have been designated for mineral recovery by the Kings County General Plan.

Sand and Gravel

The only mineral resources that could occur within the vicinity of the City are sand and gravel operations for road and building construction, but there are currently no significant deposits and no active mines.

Significance Criteria

The project would create significant impacts to mineral resources if there was a loss of availability of a known mineral resource.

Checklist Discussion

a) No Impact – No portion of the vicinity of the City is located within the boundaries of a DOGGR-recognized oil field. There are currently no identified MRZ designated areas, no known significant sand and gravel deposits and no active mines within the vicinity of the City.

b) No Impact – no portion of the City or nearby vicinity is designated for mineral resources or zoned for mineral resources. Therefore, the project would not result in the loss of availability of a locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan.

Conclusion

There will be no impact to mineral resources.

**Noise**

Conclusion: Impacts to Noise were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with the incorporation of mitigation measures, cited in the EIR, development agreement, and the project's conditions of approval. The proposed changes to the project will not further impact Noise. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Environmental Setting

Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and has been cited as being a health problem, not just in terms of actual physiological damages such as hearing impairment, but also in terms of inhibiting general wellbeing and contributing to stress and annoyance. Vehicular traffic noise is the dominant source in most areas, but aircraft and rail activities are also significant sources of environmental noise in the local areas surrounding these operations. Sources of noise within the City include mobile and stationary sources.

Highways and Roadways

Existing noise levels in the City are primarily generated by transportation noise sources. Highway and roadway traffic noise levels are generally dependent upon three primary factors, which include the traffic volume, traffic speed, and percent of heavy vehicles on the roadway.

Railroad

Local railroad lines include an east-west Union Pacific Railroad (UP) line and a north-south Burlington Northern Santa Fe (BNSF) line. The east-west UP tracks are currently used by the San Joaquin Valley Railroad (SJVR), which operates two trains of approximately 5 to 10 cars per day, five days per week, at approximately 10 to 20 miles per hour. The BNSF is located in the central portion of the City in a heavy commercial/industrial area. The BNSF line carries eight Amtrak passenger trains and 18 to 22 freight trans per day. Most north-south rail traffic moves through the county at approximately 50 mph.

As of early 2014, the CA High Speed Rail Authority has been moving forward on an alignment for the HST that would run through the far easterly portion of the planning area.

Airport
Hanford Municipal Airport is a general aviation facility serving Kings County and the surrounding Communities of Hanford, Armona, and Lemoore in south-central CA. The Hanford Municipal Airport Master Plan identified existing and future year noise contours as a result of airport operations.

Stationary Noise Sources

Stationary noise sources include commercial operations, agricultural production, school playgrounds, generators, and lawn maintenance equipment.

The following operations have been identified as major stationary noise sources in and around Hanford

a) Del Monte Foods
b) Penny-Newman Milling Company
c) Kings Waste and Recycling Authority Solid Waste Disposal Site
d) Agricultural production
e) Kings Speedway

Setting

State Highway 198, State Highway 43 and 10th Avenue have been identified as the existing major traffic noise sources within the City of Hanford. The General Plan EIR contains an estimate of noise based on forecasted roadway volume. As growth continues in the City, arterial streets and some collector streets will require noise attenuation to meet City standards for sensitive noise receptors. In most circumstances traffic noise along arterial streets require noise attenuation walls and requiring houses to "back" onto to the major street as a means of reducing noise impacts to acceptable levels for these sensitive receptors. 12th Avenue, Houston Avenue and Hume Avenue are major streets in the Project area and will require noise attenuation walls to be constructed.

Existing and Future Noise and Sensitive Receptors

The Live Oak Master Plan consists of residences, parks, open space and conservation areas. The residential densities will vary from very low density to medium density residences. Residential land uses are considered sensitive receptors to noise impacts.

Currently, there are existing single family residences located to the north and east of the Project site, and at the 12th Avenue and Houston Avenue intersection. New residential development is

located north of Hume Avenue. The Viking Ready-Mix Company is located 1,000 feet to the southeast of the Project site. It should be noted that the Mountain View Estates subdivision, which is located 100 feet to the north of the Viking Ready-Mix plant, has an existing 8-foot noise barrier along the residential property line adjacent to Houston Avenue. The residences in the subdivision are primarily single story buildings.

A noise study was prepared by j.c. Brennan & Associates that evaluated existing and future conditions with the proposed Live Oak Project. Their study documented the average 24 hour Leq for the Project site is 62.7 dB in the daytime and 58.9 dB at nighttime. Future predicted transportation related noise has the potential to exceed the City's exterior noise standard at the property line of 60 dB daytime and 45 dB at nighttime. The industrial facility will effect residential development along Houston Avenue. The existing industrial noise ranged from 48.7 dB to 74.4 dB. Noise from the industrial uses will exceed the City's daytime and nighttime standards for non-transportation related noise.

Railroad Noise

Both the Burlington Northern and Santa Fe and San Joaquin Valley Railroads (SJVR) serve Hanford. The mainline of the BN&SF Railway passes through the City of Hanford generally in a north-south direction at 11th Avenue approximately 1 miles east of the proposed Project. The BN&SF railroad currently operates between 40 and 50 trains per day on the system. Approximately 30 percent of the freight train movements occur during the nighttime hours (10:00 p.m.- 7:00 a.m.). There is presently one passenger train (AMTRAK) operation that occurs during the nighttime hours. Over time, it is expected that the number of trains using the system will increase as demand for rail service increases.
SJVR operates rail service using track approximately 2 miles north of the proposed Project site. SJVR's current schedule is limited to one train per day. Development of new industry along the SJVR right-of-way has prompted renewed investment in the east/west service. SJVR anticipates an increase to 3 round trips per week and in the speed of trains using this route. The track between Visalia and Huron has recently been upgraded to accommodate additional train traffic.

Manufacturing Noise

An industrial area lies to the south and east with the Viking Ready-Mix Company located about 1,000 feet to the southeast of the proposed Live Oak Master Plan Project being the closest industrial use. Based on the data in j.c. brennan & associates, Inc. report, the overall noise levels of Viking Ready-Mix Batch Plant exceed the City of Hanford General Plan Hazards Management Element exterior noise level standard daytime and nighttime of 50 dB Leq and 45 dB Leq, respectively, at the nearest boundary line of the residential Project site.

Land Use Compatibility

Land use compatibility with noise is an important consideration in the planning and design process. Some land uses are more susceptible to noise intrusion than others, depending on the nature of activities expected with that use. For instance, at educational facilities it is important to concentrate and to communicate. An interior noise level in excess of 50 dBA may interfere with these activities. Similarly, interference with sleep may occur at 45 dBA, so residential land use standards must reflect this noise level.
Some land uses are more tolerant of noise than others. These uses typically include activities that generate loud noise levels or those that do not require verbal interaction, concentration, or sleep. Commercial and retail facilities require very little speech communication, and therefore, are generally allowed a noisier environment. Some industrial areas generate loud noises that would interfere more with communication than all but the highest exterior noise levels.

Methodology

For highway impacts the Federal Highway Administration (FHWA) Highway Traffic Noise Model (FHWA-TNM) that was used to develop Ldn contours for selected roadways at various ADT's in the year 2025. As a means of quantifying existing background noise levels, on November 22-23, 2005 j.c. brennan & associates, Inc. conducted a continuous 24-hour noise level measurement on the Project site. j.c. brennan & associates, Inc. complete report is included as Appendix 4.8-A in Volume II of this EIR.

j.c. brennan & associates, Inc. employs the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108) for the prediction of traffic noise levels. The FHWA model is the analytical method currently favored for traffic noise prediction by most state and local agencies, including the California Department of Transportation (Caltrans). The model is based upon the CALVENO noise emission factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

j.c. brennan & associates, Inc., conducted noise level measurements and concurrent traffic counts of Hanford-Armona Road, 12th Avenue, Hume Avenue, and Houston Avenue traffic within the Project site. Hume Avenue was under resurfacing construction during the site visit and noise level measurements could not be conducted. The purpose of the short-term traffic noise level measurements is to determine the accuracy of the FHWA model in describing the existing noise environment on the Project site, accounting for shielding from local topography, actual travel speeds, and roadway grade. Noise measurement results were compared to the FHWA model results by entering the observed traffic volume, speed and distance to the roadway centerline from the receiver as inputs to the FHWA model.

Instrumentation used for the measurements was a Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter which was calibrated in the field before use with an LDL CA-200 acoustical calibrator. Appendix B (Calibration Worksheet) in j.c. brennan & associates report shows the complete inputs to the FHWA Model. The FHWA Model was employed to determine future traffic noise impacts on the Project site. Future Average Daily Traffic (ADT) volumes were provided by Ken Anderson, Principal Engineer, kdAnderson Transportation Engineers. Viking Ready-Mix Company Inc., truck volumes were provided by Charlie Wensley, General Manager, Viking Ready- Mix Company, Inc. To evaluate future traffic noise levels along Houston Avenue, including batch plant truck traffic noise levels on the Project site, j.c. brennan & associates Inc., predicted future traffic and truck noise levels utilizing information provided by Viking Ready-Mix Company Inc., kdAnderson Transportation Engineers, and discussions with John Buada of Buada Associates. To accurately predict future traffic noise levels on Houston Avenue, it is necessary to determine the cumulative percentage of heavy trucks from both Viking Ready-Mix and typical traffic volumes. Assuming a 15% growth in future heavy truck operations associated with the batch plant, the cumulative average daily truck trips and peak daily truck trips were included in the traffic noise analysis. Based on discussions with Buada Associates regarding heavy truck traffic due to Viking Ready Mix batch plant operations, 60% of cement mixer trucks and 100% of aggregate trucks travel west along Houston Avenue. Cement trailer trucks do not travel west along Houston Avenue. During the 24-hour long term noise monitoring, 164 heavy trucks traveled west on Houston Avenue along the Project site. The batch plant operated at 130% of average daily truck trips and at 42% of peak daily truck trips.

Based on the percentages reported by Buada Associates, the calculated peak daily truck trips operating at 100% would generate 390 truck trips on Houston Ave along the Project site.

On November 22-23, 2005, j.c. brennan & associates, Inc. staff conducted short term noise level measurements and continuous hourly noise measurements at the cement batch plant. The

continuous hourly measurement of the Viking Ready-Mix plant was synchronized with the 24-hour continuous noise measurement being conducted at the Project site. The purpose of the noise level measurements was to collect single event and hourly noise level data, in order to quantify typical noise levels associated with batch plant activities. Instrumentation used for the measurements was a Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter which was calibrated in the field before use with an LDL CA-200 acoustical calibrator.

j.c. brennan & associates, Inc., conducted a noise barrier performance analysis to determine the insertion loss and resulting cumulative noise levels provided by varying barrier heights at the nearest outdoor activity areas.

Significance Criteria

Impacts from the project would be considered significant if they would result in significant noise or exposure of persons to or generation of noise levels in excess of standards established in the Hanford General Plan.

Checklist Discussion

a) Less than Significant – Proposed changes to the Live Oak Development project, proposed herein, will not cause exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, beyond the effect analyzed in the Live Oak EIR.

   The EIR identified mitigation measures that would reduce the projects impact on noise generation to a less than significant level. The mitigation measures cited in the EIR and the conditions of approval in the project resolutions and development agreement still apply and will not be altered by the project changes.

b) Less than Significant – Proposed changes to the Live Oak Development project, proposed herein, will not cause exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels, beyond the effect analyzed in the Live Oak EIR.

   The EIR identified mitigation measures that would reduce the projects impact on noise generation to a less than significant level. The mitigation measures cited in the EIR and the conditions of approval in the project resolutions and development agreement still apply and will not be altered by the project changes.

c) Less than Significant – Proposed changes to the Live Oak Development project would not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project beyond those impacts analyzed by the Live Oak EIR.

   The EIR identified mitigation measures that would reduce the projects impact on noise generation to a less than significant level. The mitigation measures cited in the EIR and the conditions of approval in the project resolutions and development agreement still apply and will not be altered by the project changes.

d) Less than Significant Impact - The project is approximately 2 miles southwest from airport and will not be impacted by the public airport.

e) No Impact - The project is not located within the vicinity of a private airstrip, there is no impact.

Conclusion

Impacts to Noise were evaluated in the Live Oak Master Plan/Residential Project EIR and

determined to be less than significant with the incorporation of mitigation measures, cited in the EIR, development agreement, and the project's conditions of approval. The proposed changes to the project will not further impact Noise. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Sources: Live Oak Master Plan, 2017 General Plan, 2017 General Plan Update, Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Public Services**

Conclusion: Impacts to Public Facilities and Services were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures cited in the EIR, Development Agreement, and conditions of approval for the development project. The proposed changes to the project will not further impact Public Facilities. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Environmental Setting

The City of Hanford currently has three fire stations. Hanford Fire Department provides fires, rescue, hazardous materials response, and serves as a first responder for emergency medical service calls in the City. the HFD is also capable of responding to other situations such as high and low angle rescues, confined space emergencies, vehicle accidents, public assists, state-wide mutual aid responses and disaster management.

Police Protection

City residents receive police protection services from the Hanford Police Department, which currently operates out of a single station located at 425 N. Irwin Street. The City's recent growing problem that requires the need of police services includes gag and drug issues. The HPD's actual average response times are 6:30 minutes for Priority I incidents with an average of 32 Priority I incidents per day and a response time of 17:19 minutes for all other incidents with an average of 144 incidents per day. However, a response time of less than 2:30 minutes is a goal for the HPD to maintain in the future.

Schools

The City currently includes six elementary school districts and one high school district within the Study Area. These districts do not include the religiously affiliated private schools or charter schools located in the study area. The Hanford Elementary School District consists of 11 elementary and junior high schools that are all located in the study area.

Pioneer Union Elementary School District consists of two elementary schools and one junior high school that are all located in the study area.

The Hanford Joint Union High School District consists of four comprehensive high schools.

Parks

See Environmental Setting for Recreation.

Other Public Services

Library Services

The current library is a branch of the Kings County Library.

Significance Criteria

The project may result in significant public service impacts if it substantially and adversely alters the delivery or provision of fire protection, police protection, schools, facilitates maintenance and other government services.

Checklist Discussion

a) Less than Significant: The changes proposed to the Live Oak Development will not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new of physically altered government facilities, in order to maintain acceptable service ratios, response times, or other performance objectives for any public service beyond the impact analyzed in the Live Oak EIR, for which impacts were determined to be less than significant with the incorporation of mitigation measures and payment of impact fees.

Conclusion

Impacts to Public Facilities and Services were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures cited in the EIR, Development Agreement, and conditions of approval for the development project. The proposed changes to the project will not further impact Public Facilities. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source: 2017 General Plan, 2017 General Plan Update, Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Recreation**

**Conclusion:** Impacts to Recreation were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures cited in the EIR, Development Agreement, and conditions of approval for the development project. The proposed changes to the project will not further impact Recreation. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Environmental Setting

School Parks

All school sites have limited public access since their primary purpose is to support the educational mission of the school districts that control their use. There are 16 school sites within the City. The school facilities include athletic fields, conference rooms, gymnasiums, auditoriums, and swimming pools, which are open to the public after hours, during the summer, and on weekends for recreational use.

Indoor facilities

The Hanford Parks and Recreation Department also provides a wide array of programs for City residents. The Recreation Department is responsible for coordinating activities for the entire family including special classes, youth programs, and older adult activities, sports for youth and adults, as well as community events. These activities are conducted in a variety of indoor rec. facilities.

City of Hanford Parkland Standard

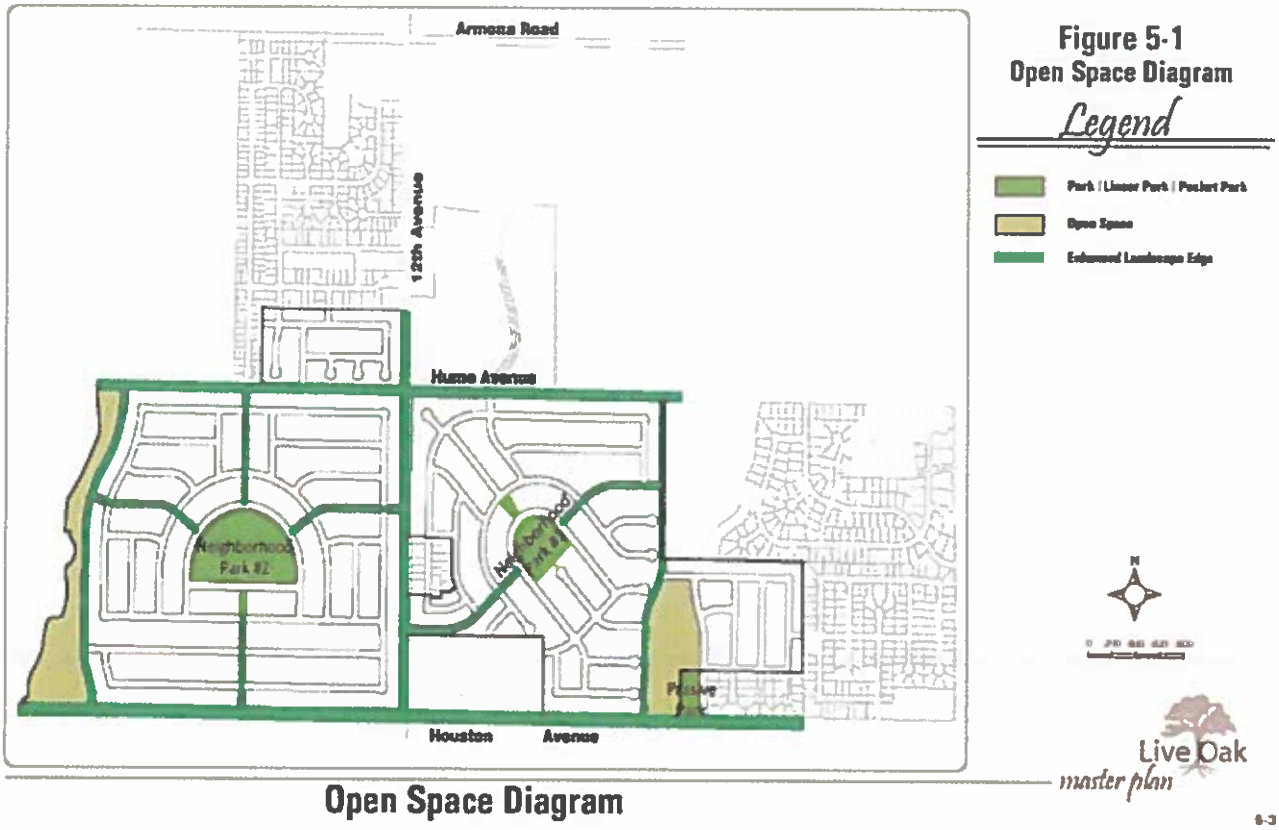
Combining the City's 188 acres of parkland and 100 acres of school parks, the City has a total of 288 acres of developed parkland that go toward meeting the parkland standard. This does not include regional parks outside the planning area, greenways, private parks, or indoor recreation facilities. Based on the 2013 estimated population of 55,860 for the City of Hanford, the Study Area has approximately 5.2 acres of parkland for every 1,000 residents in the City.

Project

The Live Oak Master Plan provides a variety of passive and active recreational opportunities for residents within and outside of the Plan Area. Three neighborhood parks are provided and interconnected via linear parks and a series of sidewalks (totaling 21 acres) that lead to open space trails. The parks create a central focal point within neighborhoods. Three areas of open space totaling 31.6 acres are located along Lone Oak and Sand Sloughs, as well as adjacent to

the west side of 12th Avenue, along the Minor Park Collector. The biological analysis completed for the Live Oak Master Plan indicate that the sloughs are riparian woodland areas that should be enhanced by removal of debris and buffered from development. The sloughs can also provide trails for pedestrians and bicyclists along their edges.

Parks (P) and Open Space (OS) are located within the Plan Area. There are three planned neighborhood parks totaling 21.0 gross acres, and smaller pocket parks located in various neighborhoods. Designated Open Space, totaling 31.6 acres, is located within Lone Oak and Sand Sloughs, as well as directly adjacent to the west side of 12th Avenue, along the minor park entry collector. The Open Space corridors preserve riparian woodland areas and will be accessible through pedestrian paths that are linked to adjacent streets and accessible to neighborhoods. Design Standards for parks and trails are located in Chapter 5 of the Live Oak Master Plan.




Neighborhood Parks

There are two neighborhood parks within the Plan Area. These parks are located on the east and west sides of 12th Avenue and just south of Hume Avenue. All neighborhood parks are accessible by streets and linear parks. The neighborhood parks, intended to be focal points with active recreational areas, will service new residents as well as existing neighborhoods.

Neighborhood Park #1 is approximately 2.6 gross acres, with centralized access to the eastern half of the Plan Area. The park is connected to residents through sidewalks and linear parks emanating from the northwest and southeast. Passive recreational amenities such as a tot lot, turf play areas, and picnicking facilities are envisioned. A local street, which terminates at the linear park, enables pedestrian access to the open space path located along Sand Slough and the neighborhoods across from Sand Slough.

Neighborhood Park #2 is approximately 9.6 gross acres, centrally located between Hume Avenue and Houston Avenue in the western portion of the Plan Area. The larger of the neighborhood parks, it is envisioned to contain large turf areas for active recreation, surface courts, picnicking,

seating facilities, tot lots, and pedestrian paths for passive recreation. Neighborhoods connect to the park through series of sidewalks and multiple linear parks.

A 2.0-acre passive park will be provided on the southeastern corner of Sand Slough, where the riparian woodland area will be especially enhanced with recreational opportunities, such as an open field, a trail, and / or park benches.

Open Space Sloughs

There are two remnant sloughs located within the Plan Area: Lone Oak and Sand Slough. Sand Slough is located in the eastern area of the Plan Area between Hume Avenue and Houston Avenue. Lone Oak Slough stretches from Houston Avenue to the Hume Avenue extension in the western portion of the Plan Area. Both sloughs will be maintained as conservation/open space for the riparian habitat and occasional seasonal drainage it provides the Plan Area. These sloughs have been treated as the backyard of development within existing neighborhoods. However, it is the intention of the Master Plan to embrace these sloughs as an integral part of the overall community design scheme for every resident to enjoy.

Within the Plan Area boundary, pedestrian paths are located on the east side of Lone Oak Slough and the west side of Sand Slough within a 50-foot easement. These paths shall have connections to surrounding residential neighborhoods by local streets and daylighted cul-de-sacs. The use of dead end cul-de-sacs is prohibited along the sloughs. Material for pedestrian paths shall be of a concrete material, or porous material that maintains the rural characteristic of the sloughs. It is important to keep these areas as natural as possible. Only open or rail fencing should be used along the sloughs.

Significance Criteria

The project may create impacts if it creates demand for new expanded parks and recreation facilities or substantially alters existing facilities.

Checklist Criteria

a) Less than Significant Impact – The changes proposed to the Live Oak Development would not cause an 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 beyond the effect analyzed in the Live Oak EIR, for which mitigation measures were required to reduce the impact to a less than significant level.

b) Less than Significant Impact– Changes to the Live Oak Development Master Plan and Development Agreement include changes to the proposed recreational facilities. The changes do not result in a loss of open space. The changes proposed will not have a greater impact than the impact analyzed in the Live Oak EIR, for which impacts were determined to have a less than significant impact with the incorporation of mitigation measures. The Live Oak Development project does include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The effect of which can be mitigated to a less than significant level.

Conclusion

Impacts to Recreation were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures cited in the EIR, Development Agreement, and conditions of approval for the development project. The proposed changes to the project will not further impact Recreation. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source: 2017 General Plan, 2017 General Plan Update, Live Oak Master Plan/Residential Project EIR (SCH #2006091015)

**Transportation/Circulation**

Conclusion: Impacts to Transportation and Traffic were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures cited in the EIR, Development Agreement, and conditions of approval for the development project. The proposed changes to the project will not further impact Transportation and Traffic. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Environmental Setting

Existing Functional Roadway Classification System

State Freeways and Highways
There are two State Facilities serving the Study Area, namely SR-198 and -43.

Arterial Roads
Hanford's arterial street pattern is generally one-mile spacing between the existing arterials.

Collector Streets
Similar to some arterials, collector streets have evolved from heavy use as opposed to formal development standards.

Local Streets
Local street provide access to individual homes and businesses. Local streets have on lane in each direction. Local streets connect single-family homes and other uses not appropriate adjacent to major roadways, to the arterial-collector network.

Existing Intersections
All of the study intersections are operating at acceptable levels of LOS.

Existing Roadway Segments
Results of the analysis of existing roadway segments show that all of the study roadway segments are currently operating at acceptable LOS.

Bicycle Facilities
The 2011 Kings County Regional Bicycle Plan contains the specific "Bicycle Plan for the City of Hanford." The General Plan and the Bicycle Plan promote the establishment of a shared use roadway system, but encourages newly developing areas to provide for bicycle facilities along major roadways and off-road systems as part of open space and recreation amenities. The 2011 Regional Bicycle Master Plan then goes on to state Policy CI 8.4 of the 2002 General Plan: Bicycle lanes should be established where feasible along Major and Minor Collectors in newly developing areas. A bicycle route system should be identified which serves the existing developed City. This route system may not utilize Arterials or Collectors where travel ways are constrained, but rather parallel streets with less traffic. Where bicycle lanes are proposed they should be considered a shared facility with vehicular traffic on the street.

Mass Transit

Kings Area Rural Transit
Kings County Area Public Transit Agency (KCAPTA) is an intra-governmental agency with representatives from Avenal, Kings County, Hanford and Lemoore, and is responsible for the operation of the Kings Area Rural Transit (KART). KART offers scheduled daily bus service from

Hanford to Armona, Lemoore, the Lemoore Naval Air Station, Visalia, Corcoran, Stratford, Kettlemen City and Avenal.

KART Dial-A-Ride Service
Dial-A-Ride is an origin-to-destination service available to eligible residents of Hanford, Lemoore, Armona and Avenal.

Park-and-Ride lots
Park-and-Ride lots provide a meeting place where drivers can safely park and join carpools or vanpools or utilize existing public transit. Park-and-Ride lots are generally located near community entrances, near major highways or local arterial where conveniently scheduled transit service is provided. Hanford has one Park-and-Ride facility located at the northeastern entrance of the City at 10th Avenue and SR 43.

KART-Vanpool Program
KART defines vanpooling as 7 to 15 persons who commute together in a van-type vehicle and who share the operating expenses. The KART Vanpool Program provides passengers with reliable transportation to and from work. The vanpool program is not only to provide safe travel to work but to provide alternative transportation options, which would ultimately reduce the amount of vehicles on the road.

Rail Service

Amtrak Passenger Service
Amtrak provides passenger rail service from Hanford station to the San Francisco Bay Area and Sacramento, and service to Southern CA by a combination of rail and bus. Freight service is available from both the BNSF Railway and the San Joaquin Valley Railroad. The Amtrak San Joaquin passenger train provides regularly scheduled intercity passenger rail service to Kings County. Stops are made daily at the Hanford and Corcoran stations for each northbound and southbound trains. Stops along the San Joaquin line also include Bakersfield, Wasco, Fresno, Madera, Merced, Turlock, Modesto, Stockton, Antioch, Martinez, Richmond, Emeryville, and Oakland, with connecting bus service to LA, Sacramento, SF, and many other points in Northern and Southern CA. Passengers can transfer to Amtrak Coast Starlight, which continues north to Portland and Seattle.

High Speed Rail
In November 2008, Proposition 1A, a High Speed Rail bond, was passed by California voters. In 2009, the US Department of Transportation through the American Recovery and Reinvestment Act program, announced the allocation of $8 billion to high speed rail projects throughout the US. Of that amount, $2.24 billion was allocated to California High Speed Rail. In November 2013, the California High Speed Rail Commission identified the preferred route through the Planning Area. The selected route, which runs along the eastern edge of Hanford, roughly follows a north-south route near the hgi voltage power lines between 7th and 8th Avenues.

Freight Service
Almost 87% of the total freight tonnage is moved out of the Valley by truck, while rail account for 11%. BNSF and SJVR railroads provide freight service to the Hanford Area. The BNSF mainline is double-tracked through the entire Planning Area. Over time, it is expected that the number of trains using the system will increase as demand for rail service increases. The BNSF railroad currently operates between 50 and 60 trains per day on the system.

Project

Development of the Live Oak Master Plan may change traffic patterns in the area of the Project as new traffic is generated and new roads are constructed. Regional access to the Live Oak Master Plan Project is provided by several major roads.

Twelfth Avenue is a major north-south route serving western Hanford. The street is designated an arterial in the Hanford General Plan. Twelfth Avenue originates in the rural area south of the Hanford City limits and continues northerly through the Project area across SR 198 through western Hanford beyond the northern City limits into unincorporated territory of Kings County. Today 12th Avenue is a two lane street in the vicinity of the Project and a four lane street north of SR 198. Traffic counts completed in May 2005 for this study suggest that 12th Avenue carries an Average Daily Traffic (ADT) volume of about 2,970 vehicles per day in the area between Hume Avenue and Houston Avenue, 4,720 ADT north of Hume Avenue. Twelfth Avenue carries 18,044 vehicles per day north of SR 198 in the vicinity of the Hanford Mall.

Houston Avenue is an east-west arterial street serving southern Hanford. Houston Avenue originates in Lemoore and continues easterly across SR 198 for about four miles to the Project site. Houston Avenue then extends for another four miles to State Route 43. Today Houston Avenue is a two lane rural road in the vicinity of the Project, although the Hanford General Plan envisions the eventual improvement of Houston Avenue to a four lane arterial street. New traffic counts conducted in May 2005 for this study indicated that 12th Avenue carries 2,630 ADT between 13th Avenue and 12th Avenue and 3,030 ADT east of 12th Avenue.

Hume Avenue is an east-west collector street that lies midway between HanfordArmona Road and Houston Avenue. Today this two lane road only extends east from 12th Avenue, but a portion of the road west of 12th Avenue will be constructed with development of the proposed Project. Traffic counts conducted for this study in May 2005 indicated that Hume Avenue carries 1,580 ADT east of 12th Avenue.

Hanford-Armona Road is an arterial street that links the communities of Lemoore and Hanford. Hanford-Armona Road exits the City of Lemoore (Blake Street) and continues easterly across and roughly parallel to SR 198. The road continues through Armona and Hanford to Tenth Avenue and east of Ninth Avenue across State Route 43 to 6th Avenue. In the area of the proposed Project Hanford Armona Road lies roughly ½ mile south of SR 198. Today Hanford Armona Road is a two lane facility, although the General Plan suggests the road may eventually be widened to four lanes. The most recent traffic counts available from the City of Hanford indicate that Hanford Armona Road carries 5,670 ADT and 8,687 ADT west and east of 12th Avenue, respectively.

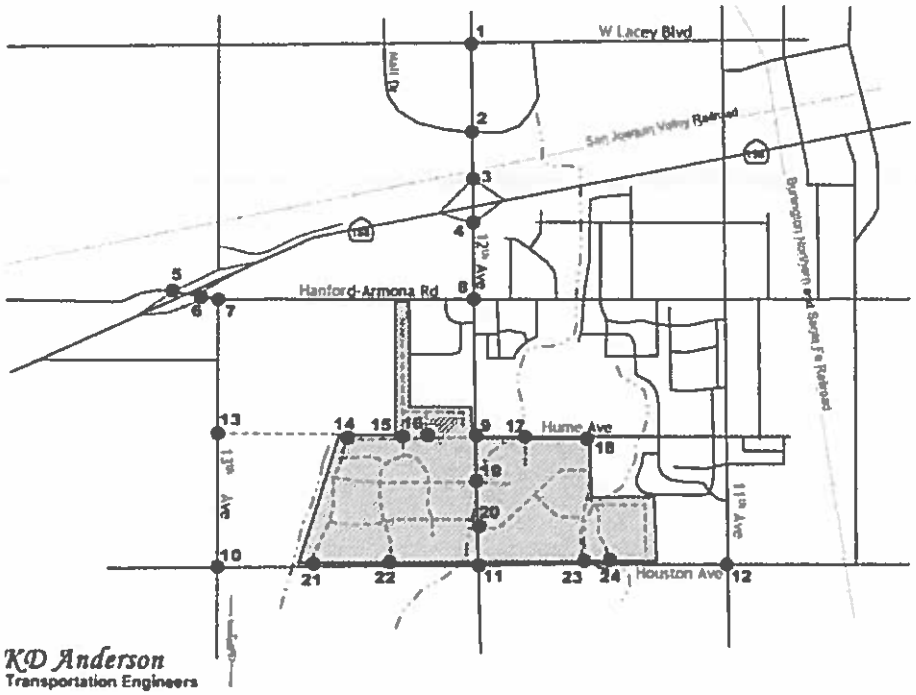
Thirteenth Avenue is a north-south arterial street that connects western Hanford with SR 198. Thirteenth Avenue extends north from an intersection on Iona Avenue along the western Hanford City limits for about eight miles to Excelsior Avenue north of Hanford. Today, 13th Avenue is a two lane rural road in the area of the proposed Project, and traffic counts conducted for this study indicated that the road carries 710 ADT in the area between Hanford Armona Road and Houston Avenue.

Lacey Blvd is the major east-west route through Hanford. This designated arterial extends from the rural area of Kings County north of Lemoore through the 12th Avenue intersection to a downtown intersection at Irwin Street. East Lacey Blvd then begins at 10th Avenue and continues easterly to an intersection on SR 43. In the area of the 12th Avenue intersection Lacey Blvd is a four lane street. The road narrows to a two lane section west of the 12th Avenue intersection near the western City limits. The most current traffic counts available from the City of Hanford for the year 2003 indicate that Lacey Blvd carries about 18,091 ADT west of 12th Avenue and 21,502 ADT east of 12th Avenue.

State Route 198 is an important regional route serving Kings County. This east-west route originates at US 101 in Monterey County and continues easterly across the Sierra Madre mountain range through Coalinga to an intersection on Interstate 5. From that point SR 198 extends easterly through Kings County into Hanford and on to an interchange on State Route 99. The route then continues to Visalia before terminating at Sequoia National Park in Tulare County. In the vicinity of the proposed Project SR 198 is a four lane controlled access facility with access limited to grade separated interchanges. Recent traffic volume published by Caltrans reveal that the highway carries 30,500 ADT west of the 12th Avenue interchange (2004) and 28,500 ADT east of the interchange.

Mall Drive is a collector street serving western Hanford in the area of the Hanford Mall at the 12th Avenue/Lacey Blvd intersection. This two lane street extends from an intersection on 12th Avenue northeasterly to an intersection on Lacey Blvd. Recent traffic counts from the City of Hanford indicate that this road carried about 7,479 vehicles per day in 2005.
Centennial Drive is a collector street that is planned to provide access to the area west of 12th Avenue. The route will originate at the 12th Avenue/Mall Drive intersection and continue northwesterly to an intersection on Lacey Blvd. From that point Centennial Drive will continue northerly to an intersection on Grangeville Blvd. The portion of this route immediately north of Lacey Blvd exists today. Centennial Drive is planned to be a four lane facility. The approved Target Shopping Center is located on the north side of Centennial Drive and the Super Wal-Mart store is on the south.
Glendale Avenue is an east-west local street that extends easterly and westerly from 12th Avenue in the area immediately north of the SR 198 interchange. This two lane road provides access to the area between the San Joaquin Valley railroad and SR 198 and is estimated to carry fewer than 500 vehicles per day.

Figure 4.12 - 1 Vicinity Map and Study Intersections




Existing Traffic Volumes

This analysis focuses on the operation of key intersections on the streets providing access to Hanford Station. The following intersections were identified for evaluation in consultation with City of Hanford and Caltrans staff as part of the early consultation process:

11th Avenue/Houston Avenue 12th Avenue/Lacey Blvd 12th Avenue/Mall Drive/Centennial Drive 12th Avenue/WB State Route 198 ramps 12th Avenue/EB SR 198 ramps 12th Avenue/Hanford – Armona Road 12th Avenue/Hume Avenue 12th Avenue/Houston Avenue 13th Avenue/WB SR 198 ramps 13th Avenue/EB SR 198 ramps 13th Avenue/Hanford Armona Road 13th Avenue/Houston Avenue

To quantify existing traffic conditions at these locations, a base of current peak hour traffic volume information was assembled from recent traffic studies. New traffic counts were made in May 2005 at intersections near the Project site to supplement data from other traffic studies collected in March 2005 at locations north of SR 198. This traffic volume data, as well as current intersection traffic controls and lane geometry are presented in Figure 4.12 - 2.

Level of Service Calculation

To quantitatively evaluate traffic conditions and to provide a basis for comparison of operating conditions with and without Project generated traffic, Levels of Service were determined at study area intersections.

"Level of Service" (LOS) is a quantitative measure of traffic operating conditions whereby a letter grade "A" through "F" is assigned to an intersection. LOS "A" through "F" represents progressively worsening traffic conditions. The characteristics associated with the various LOS for intersections are presented in Table 4.12 - 1. The City of Hanford General Plan has established LOS "C" as the standard for City streets, although the General Plan permits the City to accept LOS "D" during the peak hour in locations where physical constraints to providing additional capacity exist. Caltrans has suggested that LOS "C" is the standard for intersections providing access to state highways.

## Table 4.12 - 2
## Existing Peak Hour Intersection Levels of Service

| Intersection | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Average Delay | LOS | Average Delay | LOS |
| 1. 12th Avenue/Lacey Blvd | Signal | 27.7 sec | C | 29.4 sec | C |
| 2. 12th Avenue/Mall Drive/Centennial Dr | Signal | 10.7 sec | B | 18.0 sec | B |
| 3. 12th Avenue/WB SR 198 ramps | Signal | 8.1 sec | A | 8.2 sec | A |
| 4. 12th Avenue/EB SR 198 ramps | Signal | 18.0 sec | B | 19.5 sec | B |
| 5. Hanford–Armona Road/WB SR 198 ramps<br>(overall)<br>WB left+thru+right | WB Stop | (7.0 sec)<br>19.4 sec | (A)<br>C | (6.7 sec)<br>17.4 sec | (A)<br>C |
| 6. Hanford–Armona Road/EB SR 198 ramps<br>(overall)<br>EB left+thru+right | WB Stop | (3.4 sec)<br>11.8 sec | (A)<br>B | (4.4 sec)<br>12.7 sec | (A)<br>B |
| 7. 13th Avenue/Hanford-Armona Road<br>overall)<br>NB left+right tunr | NB Stop | (0.6 sec)<br>10.6 sec | (A)<br>B | (0.3 sec)<br>11.6 sec | (A)<br>B |
| 8. 12th Avenue/Hanford-Armona Road | Signal | 19.4 sec | B | 20.8 sec | C |
| 9. 12th Avenue/Hume Avenue<br>(overall)<br>WB left+right turn | WB Stop | (4.0 sec)<br>9.5 sec | (A)<br>A | (2.7 sec)<br>9.9 sec | (A)<br>A |
| 10. 13th Avenue/Houston Avenue<br>(overall)<br>NB left+through+right turn<br>SB left+through+right turn | NB/SB Stop | (2.7 sec)<br>9.8 sec<br>9.7 sec | (A)<br>A<br>A | (6.4 sec)<br>11.8 sec<br>12.0 sec | (A)<br>B<br>B |
| 11. 12th Avenue/Houston Avenue | All-Way Stop | 7.9 sec | A | 8.5 sec | A |
| 12. 11th Avenue/Houston Avenue | All-Way Stop | 8.9 sec | A | 9.3 sec | A |

Methodology
The EIR summarizes kdANDERSON Transportation Engineers' analysis of the potential traffic issues associated with development of the Live Oak Master Plan and Live Oak Residential Project in the City of Hanford.

The purpose of this analysis is to identify the potential impacts of Project development within the context of current and future traffic conditions in southwestern Hanford. The analysis includes evaluation of existing circulation conditions in the area based on current a.m. and p.m. peak hour traffic volumes. The extent to which improvements are already needed has been determined through this evaluation. Project impacts were identified by superimposing Project traffic onto background conditions. Towards this end, the characteristics of the proposed Project have been determined based on probable peak hour and daily trip generation, regional trip distribution and local trip assignment.

To quantify existing traffic conditions at these locations, a base of current peak hour traffic volume information was assembled from recent traffic studies and traffic counts conducted in the Year 2005.

Levels of Service were calculated for this study using the methodology contained in the 2000 Highway Capacity Manual using SYNCHRO analysis software. The overall Level of Service for signalized intersections was determined based on the average length of delays for all motorists.

At unsignalized intersections the Level of Service was predicated on the length of the average delay experienced by all motorists who must yield the right of way before turning or continuing through an intersection.

Trip Generation or the number of vehicle trips that are expected to be generated by development of the Live Oak Master Plan and Live Oak Residential Project has been estimated using typical trip generation rates. Data compiled by the Institute of Transportation Engineers (ITE) and presented in the ITE publication Trip Generation, 7th Edition is the source of trip generation rates for the uses within the Project area.

As indicated in Table 4.12 - 3 typical single family residences generate slightly less than 10 automobile trips per day. Of that total, one trip occurs during the p.m. peak hour and about ¾ of a trip is generated during the a.m. peak hour. Applying these rates to the number of dwellings expected in Live Oak Master Plan Project yields a forecast for 14,930 daily trips with 1,170 trips occurring in the a.m. peak hour and 1,576 trips occurring during the p.m. peak hour

**Table 4.12 - 3**
**Live Oak Master Plan Trip Generation Estimate**

| | | Trips Per Unit | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | | PM Peak Hour | | |
| Land Use | Quantity | Daily Trips | In | Out | Total | In | Out | Total |
| Single Family Residential | Dwelling | 9.57 | 0.19 | 0.56 | 0.75 | 0.65 | 0.36 | 1.01 |
| Live Oak Master Plan | 1,560 | 14,930 | 296 | 874 | 1,170 | 1,014 | 562 | 1,576 |

Trip Distribution estimates were made for the proposed Project. The regional distribution of Project trips was derived from review of current area travel patterns, from information presented in previous area traffic studies and from input from City of Hanford staff. As shown in Table 4.12 - 4, the distribution of Project trips to and from a residential Project will vary throughout the day. Table 4.12 - 4 also summaries the directional distribution of Project traffic, as well as the anticipated allocation of that traffic to the various streets that are available.

During the morning peak hour the trip distribution is related to commute activity and to travel to and from area schools. All high school aged students are assumed to attend the existing Hanford West campus on Lacey Blvd east of 12th Avenue. Elementary and Middle School age children will be divided between the Hanford and Armona School Districts, as 12th Avenue is the dividing line between these districts. Students living in the western half of the Project will attend school in Armona, while the half of the site east of 12th Avenue will attend Hanford Schools that lie off of Hume Avenue and 11th Avenue.

Planned improvements to the circulation system were also considered in the traffic analysis. The Live Oak Master Plan Project is located within an area of Hanford where planned roadways will eventually increase the capacity of the circulation system. However, not all of the area circulation system will be developed immediately. While the extension of Hume Avenue westerly to 13th Avenue will eventually occur under the General Plan, this analysis only assumes that the portion of this roadway planned for construction with the Live Oak Master Plan Project will be in place under "existing plus Project" conditions. Improvements that are conditions of approval for other Approved projects have been assumed to be constructed under "Existing Plus Approved Projects Plus Project" conditions. The City's planned signalization of the 12th Avenue/Hanford Armona intersection is also assumed.

The Project plus existing impacts were identified by superimposing Project traffic onto background conditions. Towards this end, the characteristics of the proposed Project have been determined based on probable peak hour and daily trip generation, regional trip distribution and local trip

assignment, then those daily traffic volumes were added to the study area street system assuming current conditions.

The Project plus existing impacts, plus reasonably foreseeable projects was evaluated within the context of short-term cumulative traffic conditions occurring with build out of other approved projects in western Hanford. To prepare this traffic volume forecast City of Hanford staff were asked to identify other approved projects that could be assumed to be developed over the next ten years when the Live Oak Master Plan Project could be expected to be developed.
The Live Oak Master Plan standards requires that off-street parking for residential units with only alley access (no street parking) have a ratio of four parking spaces per dwelling unit to provide for visitor parking.

**Table 4.12 - 4**
**Live Oak Master Plan Project – Trip Distribution Assumptions**

| Direction | Route | A.M Peak | | | | | | P.M. Peak | |
|---|---|---|---|---|---|---|---|---|---|
| | | School Related | | All Other | | Total | | | |
| | | In | Out | In | Out | In | Out | In | Out |
| North | 13th Ave beyond Hanford Armona | 0.0% | 0.0% | 1% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| | 12th Ave beyond Lacey | 0.0% | 0.0% | 1.0% | 10.0% | 1.0% | 10.0% | 10.0% | 10.0% |
| | 11th Ave beyond Hume | 7.5 % | 3.5% | 10% | 10.0% | 17.5% | 13.5% | 15.0% | 15.0% |
| | Subtotal | 7.5% | 3.5% | 12% | 21.0% | 19.5% | 24.5% | 26.0% | 26.0% |
| East | Lacey Blvd east of 12th | 10.0% | 12.5% | 2.5% | 2.5% | 12.5% | 15.0% | 7.5% | 12.5% |
| | Mall Drive east of 12th | 3.5% | 4.0% | 1.0% | 1.0% | 4.5% | 5.0% | 2.5% | 5.0% |
| | SR 198 east of 12th Ave | 0.0% | 0.0% | 11.5% | 8.0% | 11.5% | 8.0% | 15.0% | 15.0% |
| | Hanford Armona east of 12th Ave | 0.0% | 0.0% | 2.5% | 2.5% | 2.5% | 2.5% | 6.5% | 5.0% |
| | Hume Ave near 11th Ave | 13.0% | 7.0% | 0% | 0.0% | 13.0% | 7.0% | 1.0% | 1.0% |
| | Houston Avenue east of 11th Ave | 0.0% | 0.0% | 1.0% | 8.0% | 1.0% | 8.0% | 12.5% | 12.5% |
| | Subtotal | 26.5% | 23.5% | 18.5% | 22.0% | 45.0% | 45.5% | 45.0% | 51.0% |
| South | 11th Avenue south of Houston Ave | 0.0% | 0.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| | 12th Avenue south of Houston Ave | 0.0% | 0.0% | 1.0% | 2.0% | 1.0% | 2.0% | 3.0% | 1.0% |
| | 13th Avenue south of Houston Ave | 0.0% | 0.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| | Subtotal | 0.0% | 0.0% | 3.0% | 4.0% | 3.0% | 4.0% | 5.0% | 3.0% |
| West | Lacey Blvd west of 12th | 0.0% | 0.0% | 1.0% | 2.0% | 1.0% | 2.0% | 2.5% | 3.0% |
| | Centennial Blvd west of 12th | 0.0% | 0.0% | 1.0% | 2.0% | 1.0% | 2.0% | 2.5% | 5.0% |
| | Hanford Armona Rd beyond 13th | 13.0% | 7.0% | 1.0% | 1.0% | 14.0% | 8.0% | 2.0% | 1% |
| | SR 198 beyond 13th Ave | 0.0% | 0.0% | 2.5% | 2.0% | 2.5% | 2.0% | 7.0% | 5% |
| | Houston Avenue beyond 13th | 13.0% | 7.0% | 1.0% | 5.0% | 14.0% | 12.0% | 9.0% | 6% |
| | Subtotal | 26.0% | 14% | 6.5% | 12% | 32.5% | 26.0% | 24.0% | 20.0% |
| Total | | 60.0% | 41.0% | 40.0% | 59.0% | 100% | 100% | 100% | 100% |

**Table 4.12 - 5**
**Approved Projects in Western Hanford**

| Project | Description | Quantity |
|---|---|---|
| Various Residential Subdivisions | Subdivisions throughout the western half of the City | 2,032 lots |
| Armona Development | Approved Subdivisions | 220 lots |
| Hanford Station | Retail Shopping Center anchored by Wal-Mart west of 12th Avenue at Centennial | 242,000 square feet |
| Target Shopping Center Phase II | Balance of retail center on northwest corner of 12th Avenue/Centennial | 200,000 square feet |
| Tract 806 | Retail/Auto west of 12th Avenue at Glendale Avenue | 38 acres |
| Hanford Community Medical Center | Hospital/Medical Offices east of 12th Avenue on Mall Drive | 31 acres |
| Hanford Education Center | High School, Community College and Recreation east of 13th Avenue and north of Lacey Blvd | - |

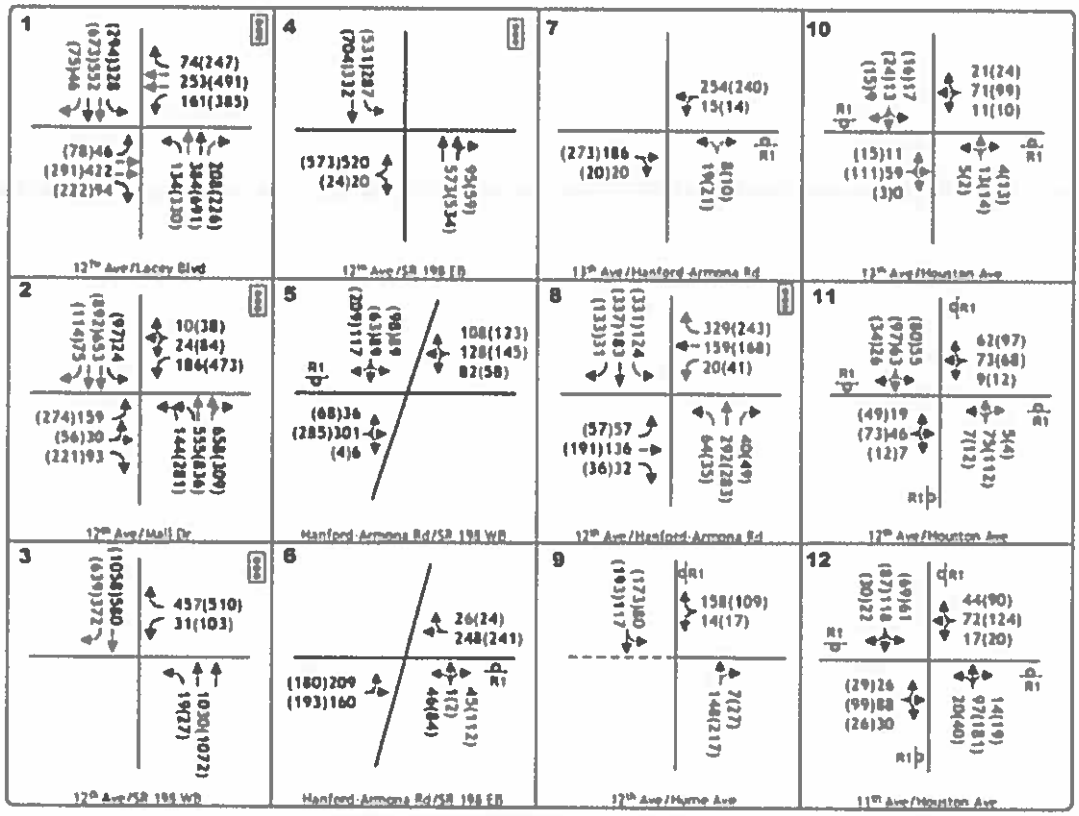
The trip generation characteristics of the approved projects were identified in two ways. First, the trip assignment for non-residential projects was identified from the traffic studies prepared for each Project. These assignments are presented in the Appendix 4.12-A Volume II of this EIR. Secondly, the trips generated by identified residential development were estimated and assigned to the city circulation system based on the location of each subdivision. To account for the potential interaction between new residential and non-residential uses, it was necessary to discount the residential trip assignment in proportion to assumed "matching" between these uses. A 16% a.m. and 20% p.m. reduction was taken. The resulting residential assignment is presented in the Appendix 4.12-A Volume II of this EIR. Resulting "Existing Plus Approved Projects (EPAP)" traffic volumes are presented in Figure 4.12 - 4.

To identify "EPAP Plus the Live Oak Master Plan Project" traffic volumes, Project trips were superimposed onto background traffic volumes assuming the regional distribution assumptions previously identified.

Cumulative traffic impacts have also been evaluated under both short-term and longterm horizons. Short-term conditions assume development and operation of other approved projects in Hanford, while long-term conditions have been based on Year 2030 traffic volume forecasts derived from Kings County Association of Governments (KCAG) regional travel demand forecasting model projections.

Under each scenario mitigation measures needed to deliver Levels of Service satisfying City of Hanford and Caltrans minimum standards have been identified.

## Figure 4.12 - 4
## Existing plus Approved Project Traffic Forecast at Study Intersection Locations



The volume of traffic added by the proposed Live Oak Master Plan Project to the street system surrounding the site is an issue with regard to the general capacity of these streets and the need to develop additional mainline travel lanes. Table 4.12 - 6 presents generalized LOS thresholds based on daily traffic volumes for two lane and four lane arterials.

**Table 4.12 - 6**
**Generalized Level of Service on Major Streets in the City of Hanford**

| Street Classification | Lanes | Average # of Signals per Mile | Maximum Daily Volume | | |
|---|---|---|---|---|---|
| | | | C | D | E |
| Divided Arterial | 4 | 0.0 to 0.75 | 33,000 | 34,900 | 36,700 |
| | | 0.76 to 1.5 | 31,000 | 32,500 | 34,000 |
| | | 1.6 to 2.5 | 29,500 | 31,700 | 33,400 |
| | | 2.6 to 3.5 | 20,100 | 30,200 | 33,200 |
| | | 3.6 to 4.5 | - | 26,300 | 32,100 |
| | | > 4.5 | | 22,800 | 32,100 |
| Undivided Arterial | 2 | 0.0 to 0.75 | 15,600 | 16,500 | 17,400 |
| | | 0.76 to 1.5 | 14,500 | 15,300 | 16,100 |
| | | 1.6 to 2.5 | 13,500 | 14,800 | 15,700 |
| | | 2.6 to 3.5 | 9,200 | 13,700 | 15,400 |
| | | 3.6 to 4.5 | - | 12,300 | 14,600 |

A multi-step process was employed to create peak hour volumes. To account for the effects of new roads (i.e., Hume Avenue to 13th Avenue and Centennial Blvd to Lacey Blvd) that do not exist today, two sets of forecasts were developed and the results averaged to create the volumes used for this report. First, the daily regional traffic model was run with regional land use assumptions that reflected build out of the Project and KCAG year 2030 land use assumptions throughout the balance of the County. These forecasts were compared to year 2005 base conditions runs in order to develop localized growth factors that could be applied to study area intersection approach volumes using the Furness methodology. Secondarily, the KCAG model was used to produce daily turning movement volumes at major study area intersections. Applicable peak hour percentages (i.e., 7.0% a.m. and 8.5% p.m.) were applied and typical directional splits (i.e., 55%/45%) to create a second set of forecasts.

The identified year 2030 traffic volume forecasts were used to calculate peak hours Levels of Service at study intersections. These calculations assume completion of the six lane section on 12th Avenue north of SR 198, as well as the local improvements described under EPAP conditions. A four lane section was assumed on the SR 198/12th Avenue interchange.

Significance Criteria

The project may result in significant transportation/circulation impact if it does the following:

1. Cause an increase in traffic which is substantial in relation to the existing traffic loads and capacity of the road system that are inconsistent with adopted standards.
2. Creates traffic conditions which expose people to traffic hazards.
3. Substantially interferes or prevents emergency access to the site or surrounding properties.
4. Conflicts with adopted policies or plans for alternative transportation.

Checklist Discussion

a) Less than Significant Impact – Changes proposed to the Live Oak Development, proposed herein, would not 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, beyond the effect analyzed in the Live Oak EIR.

The changes proposed to the project are less intensive (less units) than the original Live Oak project and will not expand the project boundary.
All requirements/mitigations set forth in the Live Oak EIR, development agreement, and project's conditions of approval still apply and are not impacted by the changes proposed to the project.

b) Less than Significant – the changes proposed to the Live Oak Development project, proposed herein, will not 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 of highways, beyond the effect analyzed in the Live Oak Development EIR, for which effects were determined to be less than significant with mitigation incorporation. Mitigations are cited in the EIR, development agreement, and project's conditions of approval.

The changes proposed to the project are less intensive (less units) than the original Live Oak project and will not expand the project boundary. All requirements/mitigations set forth in the Live Oak EIR, development agreement, and project's conditions of approval still apply and are not impacted by the changes proposed to the project.

c) No Impact - The proposed project will not create a change in air traffic patterns or increase traffic levels or change in location that result in substantial safety risks. The project is located approximately 2.0 miles southwest from the nearest municipal airport.

d) Less than Significant Impact- the changes proposed to the Live Oak Development project, proposed herein, will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) beyond the impact analyzed by the Live Oak EIR, for which mitigation measures were required to minimize the effect to a less than significant level.

The changes proposed to the project are less intensive (less units) than the original Live Oak project and will not expand the project boundary. All requirements/mitigations set forth in the Live Oak EIR, development agreement, and project's conditions of approval still apply and are not impacted by the changes proposed to the project.

e) Less than Significant Impact – the changes proposed to the Live Oak Development project, proposed herein, will not impede emergency access. The project will be developed to development standards, which ensures adequate emergency access.

f) Less than significant impact – the changes proposed to the Live Oak Development project will not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). The Live Oak EIR analyzed impacts to alternative transportation and mitigation measures were required to mitigate the effect of the Live Oak Development on alternative transportation to a less than significant effect. All mitigation measures and conditions of approval regarding alternative transportation still apply to the project and are not impacted by the request for project changes.

Conclusion

Impacts to Transportation and Traffic were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures cited in the EIR, Development Agreement, and conditions of approval for the development project. The proposed changes to the project will not further impact Transportation and Traffic. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source: 2017 General Plan, 2017 General Plan Update, Live Oak Master Plan/Residential Project EIR (SCH #2006091015); Traffic Study kdANDERSON – Live Oak Development (2005)

**Utilities and Service Systems**

Conclusion: Impacts to Utilities were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures cited in the EIR, Development Agreement, and conditions of approval for the development project. The proposed changes to the project will not further impact Utilities. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Environmental Setting

Wastewater

The City's wastewater system provides for treatment, disposal, and reuse of effluent, which meets all of the state's discharge requirements for the entire City of Hanford (City). The wastewater system consists of a treatment plant and 21 sanitary sewer lift stations located throughout the City. The treatment facility has a capacity of 8.0 million gallons per day and is located south of Houston Avenue and east of 11$^{th}$ Avenue.

While the City is constantly working to improve and provide adequate services to the population demand, the Irwin Street trunk main has become a priority issue for the City's wastewater system. The Irwin Street trunk main is located south of the Downtown East Precise Plan area and may eventually be undergoing capacity issues. Sections of the trunk line are in poor condition, with adverse grades, inadequate pipe sizing, and near full capacity.

The City's wastewater system has also pursued water conservation strategies to ensure long-term reuse of treated disinfected wastewater for agricultural purposes and to recharge groundwater supplies for agriculture. By doing so, the City accomplishes two important water conservation efforts: 1) the additional supply for the City extends the surface water irrigation season and 2) reduces the need for agricultural pumping of groundwater in an area known to be low in groundwater.

Water Supply

The City's water system is a groundwater system. The City is located within the Tulare Lake Hydrologic Region. Within that region, the City is located within the Tulare Lake Groundwater Subbasin, which transmits, filters, and stores water from the main San Joaquin Valley Groundwater Basin.

The City's groundwater system consists of 13 supply wells, one standby well, three elevated storage tanks (all three of which have abandoned), one existing 0.5 million gallon ground-level storage tank at the Industrial Park, 3.5 million gallon ground-level storage tanks, and a piping network for distributing the water throughout the City (2 million gallon storage tank at Grangeville and Centennial Drive facility and 1 million gallon storage tank at the Fargo Avenue facility). No surface water is used by the water system as groundwater is contained in both an unconfined and confined aquifer lying beneath the City. Currently, the City maintains 206 miles of main lines and 15,870 service connections, which includes 8-inch to 30-inch pipes with 12-inch mains laid out on an approximately 1-mile grid. Water is pumped from 13 deep wells. The well depth is determined by the water quality, but typically, is drilled to a minimum depth of 1,500 feet and below the Corcoran clay layer.

The City's groundwater supply is recharged by rain and snowfall in the Sierra Nevada range and, to a lesser degree, from rainfall on the Valley floor. In addition, the City, along with the Peoples Ditch Company and the Kings County Water District, deliver excess water flows from the Kings River and storm water runoff into the drainage and slough basins located throughout the City. This, as well as percolation from storm water basins, local waterways, and agricultural irrigation, help to replenish the City's groundwater in surplus years.

Storm Water Drainage

The City is predominantly located within a 500-year Flood Zone as defined by FEMA Flood Insurance Maps. Areas subject to the 500-year flood zone have a moderate to low risk of flooding.

There are two major irrigation ditches that flow through the City. Lakeside Ditch, which is operated and maintained by the Lakeside Water District, and the Peoples Ditch, which is operated and maintained by the Peoples Ditch Company.

The Existing drainage infrastructure within the boundaries covered by the City's Storm Water Management Program includes natural drainage channels, retention basins, natural vegetation, piping, and pump stations. There are numerous areas where storm drainage is controlled via drainage inlets and underground structures. The storm drainage system consists of 30 pump stations, 57 miles of pipeline ranging in size from 6-inch through 60-inch , and 220 acres of drainage basins and drainage ditches. The storm drainage system removes rainfall from surface streets and disposes the accumulated stormwater in drainage basins.

The City, in cooperation with the People's Ditch Company and the Kings County Water District, delivers excess water flows from the Kings River, along with storm water runoff, into the 125 acres of drainage and slough basins located throughout the City to help replenish the groundwater. Some of this acreage is located within the City's park facilities.

Solid Waste Disposal

The City's solid waste and recycling services are provided by the Kings Waste Recycling Authority (KWRA). The current KWRA facility is located at 7803 Hanford-Armona Road, southeast of the City near SR 43 and 198 and operates as a solid waste disposal and recycling facility. The responsibilities of the KWRA include the siting, permitting, financing, construction, and operation of landfills, as well as a Material Recovery Plan and Transfer Station. The KWRA also ensures all activities and waste diversion goals required by the State at the closure, post-closure monitoring, and liabilities of all identified former landfills in Kings County. The KWRA is the leading contributor to helping the City meet the State's recycling goals.

Refuse from both municipal and commercial haulers is sorted at the KWRA facility to recover a variety of recyclable materials. Once waste is separated from recyclable materials, it is then hauled by transfer trucks from the Material Recovery Facility to the State-permitted 320-acre Chemical Waste Management Landfill site in Kettleman Hills.

The landfills at the Kettlman Hills Facility are designed for municipal solid waste, which encompasses household and commercial trash. The facility is permitted to receive a maximum of 2,000 tons of municipal solid waste per day.

The City has instituted a greenwaste collection mixed recycle collection program for single-family residential customers.

Dry Utilities

Gas and Electric Service

The City's main electricity providers are Pacific Gas and Electric Company and Southern California Edison Company. Within the Study Area, PG&E provides power to sites south of Iona Avenue and north of Flint Avenue via 12 kv and 70kv lines. SCE supplies power to sites north of Iona Avenue and south of Flint Avenue via 12 kv and 66kv lines.

Communication Systems

AT&T and Comcast are currently available in Hanford. AT&T provides telephone services that include ISDN and all other necessary high-technological services. Many cellular and long-distance services are also available. Comcast, Dish Network, and Direct TV provide television services as well as internet access.

Thresholds of Significance

The project may result in significant impacts on utilities and service systems if it substantially and adversely alters the delivery of utilities or substantially increases the demand for utilities.

Checklist Discussion

a) Less than significant – Changes proposed to the project will not result in exceeding wastewater treatment requirements of the applicable Regional Water Quality Control Board.

   Impacts of the Live Oak project were evaluated in an EIR - The City of Hanford has approved a sewer collection system for the project area wand will collect wastewater impact fees from new development. The City of Hanford has wastewater discharge standards that would prevent the discharge of wastewater that does not meet the City's standards. The current capacity of the wastewater treatment facility is 8.0 mgd. That full build out the Live Oak project will add approximately 0.443 mgd. This addition is within the existing capacity of the facility.

b) Less than Significant – the changes proposed to the Live Oak Development project will not result in or require the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects beyond that impact analyzed in the Live Oak EIR.

   Impacts of the Live Oak project were evaluated in an EIR - The City of Hanford has a master wastewater plan for the subject site area and mainline systems have been installed. The project area is consistent with the master wastewater plan and the City will collect wastewater impact fees from the new development to pay for long term improvements to the City's wastewater treatment facility and recover costs for extending the mainline serve. Extension of sewer lines throughout the proposed project will be required. the extension of sewer lines is consistent with the City's Sewer Master Plan.

c) Less than Significant – The changes proposed to the Live Oak Project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities beyond the impact analyzed in the Live Oak EIR, for which mitigation measures were required to reduce the impact to a less than significant level.

   Impacts to the project were analyzed in the Live Oak EIR – the proposed Live Oak project is consistent with the general Plan and General Plan EIR. The project intends to implement the regional drainage basins (Sand Slough and Lone Oak Slough) shown in the General Plan.

   Requirements for the storm drainage basin development is cited in the EIR, Development Agreement, Master Plan, and project conditions of approval. Changes proposed to the Live Oak project will not impact the conditions of approval/mitigation measures.

d) Less Than Significant - changes to the Live Oak Development project will not further impact water supplies or result in additional expanded entitlements. A water distribution plan for the project area was approved for the Live Oak Development. Impact fees will be collected for water impacts of the new development to pay for long-term improvements to the City's water production facilities. The project was considered in the City's Urban Water Management Plan as a pending project. the project will require extension of water lines throughout the project area.

e) Less than Significant – the City of Hanford has approved a sewer collection system for the project are and will collect wastewater impact fees from new development to pay for long-term improvements to the City's wastewater treatment facilities.

f) Less than Significant - the City of Hanford will provide for solid waste collection and disposal for the proposed project site, when developed. The City has achieved a 50% diversion rate from the landfill and has incorporated a green waste program and recycling at the Materials Recycling Facility.

g) Less than Significant – Changes proposed to the Live Oak Development will not affect the project's ability to comply with federal, state, and local statutes and regulations related to solid waste. The City provides for solid waste collection and disposal for the project area. The City provides for solid waste disposal in facilities approved by the State of California Integrated Waste Management Board.

Conclusion

Impacts to Utilities were evaluated in the Live Oak Master Plan/Residential Project EIR and determined to be less than significant with Mitigation Measures cited in the EIR, Development Agreement, and conditions of approval for the development project. The proposed changes to the project will not further impact Utilities. The changes to the project do not involve expansion of the project site or an increase in the intensity of the project.

Source: 2017 General Plan and General Plan EIR, State of California Department of Water Resources, Cal Recycle 2015; Live Oak Master Plan/Residential Project EIR (SCH #2006091015);

**Environmental Analysis and Conclusions**

The changes proposed to the Live Oak Development project do not further affect any of the environmental factors evaluated under the Live Oak EIR ( (SCH #2006091015). Consequently, a subsequent or supplemental EIR or IS/MND is not required.

**Exhibit A:**

# Mitchell Air Quality Consulting

August 17, 2020

Carlos Yanez, AEP JD, Forward Planning Director
Blue Mountain Communities
707 Aldridge Road
Vacaville, CA 95688

**Subject:** **Assessment of Potential Air Quality and Greenhouse Gas Impacts of Proposed Modifications to Live Oak Master Plan in Hanford, California**

Dear Mr. Yanez:

Mitchell Air Quality Consulting (MAQC) prepared the following assessment to determine if modifications to the Live Oak Master Plan would result in new information or new significant impacts not addressed in the Environmental Impact Report (EIR) prepared for the project per criteria listed under CEQA Guidelines Section 15162.

**Proposed Modifications**

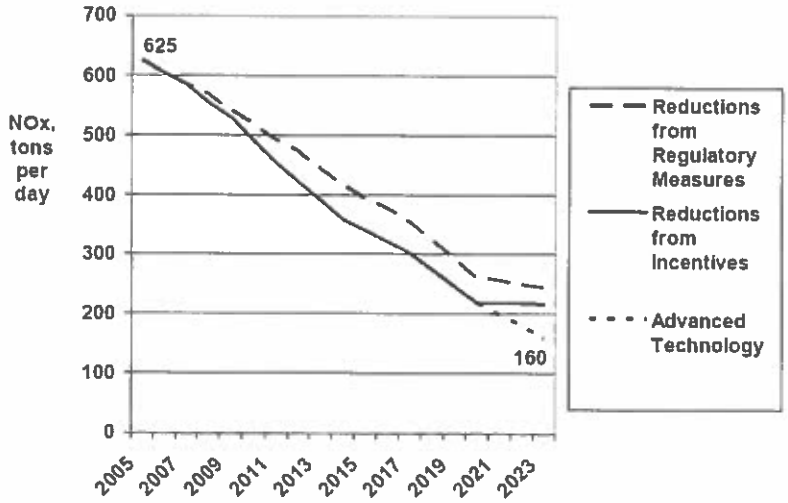
The proposed modifications include changes to plan policies that are inconsistent with the approved Development Agreement for the project and an increase in the lot count in Tentative Map 909. The modifications would delete or modify affordable housing provisions and the timing of park improvements. The DEIR analyzed the impacts of developing 1,560 dwelling units on 390 acres. The modified plans would create 1,470 dwelling units within the same 390-acre planning envelope. The increases in lot counts occur in portions of the site indicated on the overall site exhibit (attached) as additional lots. Other portions of site have revised subdivision designs that result in projected lot counts that are lower than were estimated for the conceptual design provided in the Master Plan and analyzed in the DEIR. The result of the modifications is a net decrease of 90 lots for the full project compared to the amount analyzed in the DEIR. A Recirculated DEIR dated March 9, 2009 was prepared for the project that addresses greenhouse gas (GHG) impacts. The RDEIR found GHG emissions from construction and operations to be significant and unavoidable. The number of dwelling units and acreage analyzed was not changed in the RDEIR.

## Background

The air quality modeling for the DEIR and GHG modeling in the RDEIR was conducted using URBEMIS which was developed by air districts around the State for estimating emissions from land use projects. The model provides emission estimates for construction activities and project operations. For construction, the analysis is based on the acreage of the project and the number and size of the structures that will be built. The results include emissions from construction equipment and fugitive dust generated during each phase of construction. For operations, the model provides results for area sources such as fireplaces and landscaping equipment, energy use, and transportation. URBEMIS has been replaced with the CalEEMod model which uses updated emission factors and usage data and accounts for motor vehicle and energy efficiency regulations adopted since the version of URBEMIS used for the DEIR and RDEIR was developed. Emissions

have declined substantially with the incorporation of these regulations. The emission reductions estimated in the San Joaquin Valley Air Pollution Control District (SJVAPCD) 2007 Ozone Plan are displayed in Figure 1. The ozone precursor oxides of nitrogen (NOx) would be reduced by about 66 percent between 2005 and 2021 with the implementation of regulatory measures and incentive programs.

**Figure 1: San Joaquin Valley $NO_X$ Emissions Forecast**




The reductions due to changes in dwelling units and regulations implemented between 2010 and 2022 can be illustrated using the CalEEMod model to estimate emissions using 2010 assumptions and 2022 assumptions. Table 1 provides the results for 2010 conditions with the 1,560 dwelling units analyzed in the DEIR and RDEIR. Table 2 provides the results for 2022 conditions with 1,470 dwelling units in the modified plan. Table 3 shows the percentage reductions that occurred for each pollutant during this timeframe.

**Table 1: Operational Air Pollutant Emissions (2010)**

| Source | Emissions (tons per year) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $PM_{10}$ | $PM_{2.5}$ | $CO_2e$ |
| Area | 15.87 | 0.73 | 12.58 | 0.11 | 0.11 | 699.32 |
| Energy | 0.22 | 1.88 | 0.80 | 0.15 | 0.15 | 6,180.85 |
| Mobile | 17.30 | 45.62 | 208.88 | 15.58 | 4.83 | 17,349.51 |
| Waste | | | | | | 807.82 |
| Water | | | | | | 364.47 |
| **Total Project Emissions** | **33.39** | **48.23** | **222.26** | **15.84** | **5.09** | **25,401.97** |

Notes:
ROG = reactive organic gases NOX = nitrogen oxides PM10 and PM2.5 = particulate matter
Area source emissions include emissions from natural gas, landscape, and painting.
Source: CalEEMod 2016.3.2

**Table 2: Operational Air Pollutant Emissions (2022)**

| Source | Emissions (tons per year) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $PM_{10}$ | $PM_{2.5}$ | $CO_2e$ |
| Area | 11.80 | 0.68 | 11.16 | 0.10 | 0.10 | 658.86 |
| Energy | 0.19 | 1.66 | 0.71 | 0.13 | 0.13 | 3,631.66 |
| Mobile | 4.35 | 15.57 | 50.94 | 13.88 | 3.80 | 13,164.44 |
| Waste | | | | | | 570.83 |
| Water | | | | | | 181.61 |
| **Total Project Emissions** | **16.35** | **17.91** | **62.81** | **14.12** | **4.04** | **18,207.41** |

Notes:
ROG = reactive organic gases NOX = nitrogen oxides PM10 and PM2.5 = particulate matter
Area source emissions include emissions from natural gas, landscape, and painting.
Source: CalEEMod 2016.3.2

**Table 3: Change in Operational Emissions 2010 to 2022**

| Source | Emissions (tons per year) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $PM_{10}$ | $PM_{2.5}$ | $CO_2e$ |
| Total Operational Emissions 2010 | 33.39 | 48.23 | 222.26 | 15.84 | 5.09 | 25,401.97 |
| Total Operational Emissions 2022 | 16.35 | 17.91 | 62.81 | 14.12 | 4.04 | 18,207.41 |
| **Emissions Reductions** | **17.05** | **30.32** | **159.45** | **1.72** | **1.06** | **7,194.56** |
| **Percentage Reductions 2010-2022** | **51.0%** | **62.9%** | **71.7%** | **10.9%** | **20.7%** | **28.3%** |

Notes:
ROG = reactive organic gases NOX = nitrogen oxides PM10 and PM2.5 = particulate matter
Area source emissions include emissions from natural gas, landscape, and painting.
Source: CalEEMod 2016.3.2

The results presented above are for illustrative purpose only and are not intended to replace the modeling conducted for the project DEIR and REIR.

The most important variables in air quality and GHG analyses for land use projects are the land use category, the site acreage, and the timing of construction and buildout. For single family residential land uses, the number of dwelling units is the primary variable. The primary source of emissions during project operations are from motor vehicles used by residents and others accessing the project which are based on average daily vehicle trips per dwelling unit. Since the number of dwelling units is less than was analyzed in the DEIR

and RDEIR, the emissions generated by the modified project would be less than the amounts previously assessed.

*Construction Emissions*

The DEIR found that the project emissions would be less than the SJVAPCD thresholds of significance for construction activities for the ozone precursor NOx for all years of construction, but would exceed the reactive organic gases (ROG) threshold during 2 years of construction due to the use of architectural coatings. The SJVAPCD did not have a quantitative construction PM10 threshold at the time the EIR was prepared; however, the SJVAPCD adopted PM10 thresholds in updates to their guidelines. In any case, emissions were below the new PM10 threshold (15 tons/year). Although emissions were above the thresholds for only ROG (14.92 tons/year compared to the ROG threshold of 10 tons/year), the DEIR found the cumulative emissions of ROG, NOx, and PM10 to be significant and unavoidable after mitigation. Since the DEIR was prepared, the SJVAPCD amended Rule 4601 Architectural Coatings to reduce the volatile organic compound (VOC) content of coatings sold in the San Joaquin Valley. The amendments reduced the VOC content of coatings most widely used in residential development by more than 50 percent. VOC is the same as ROG. Therefore, compliance with Rule 4601 would reduce ROG emissions to less than significant. PM10 fugitive dust emissions from construction activities would be less than significant with compliance with SJVAPCD Regulation VIII - Fugitive PM10 Prohibitions. Fugitive dust emissions from site preparation and grading would not change with the modifications because the site acreage remains unchanged. However, construction equipment used for site preparation and grading would be lower due to state and federal off-road equipment emission standards that apply to new equipment. Emissions associated with building construction and architectural coatings would decrease because fewer dwelling units are now proposed than were analyzed in the DEIR and from new regulations.

The RDEIR found that project construction emissions were significant and unavoidable after application of mitigation measures due to scope of the project and the level of construction activity anticipated. No quantitative threshold was available at the time, so the significance threshold was based on whether or not the potential increases are substantial when compared to the baseline conditions. The SJVAPCD had not adopted a GHG threshold of significance at the time the RDEIR was prepared. On December 17, 2009, the SJVAPCD Governing Board adopted "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA". The SJVAPCD did not include a threshold for construction emissions because the emissions are short term and end once a project becomes operational. As with criteria pollutant emissions, GHG emissions are generated by equipment and vehicles used during construction. GHG emissions are proportionate with the hours of equipment use and construction vehicle travel during construction. Since the modification results in fewer dwelling units being constructed, less equipment and vehicle use will occur and GHG emissions will be lower than were analyzed in the RDEIR. In addition, newer construction equipment is generally more fuel efficient than those used in the GHG modeling and would produce fewer GHG emissions. Therefore, no new significant impact would occur with the modified project and no further analysis is required.

*Operational Emissions*

The DEIR found project operational emission to have significant and unavoidable cumulative impacts for ROG and NOx. The operational emissions are proportionate with the number of dwelling units. Therefore, operational emissions would be less with the modified project. In addition, ROG and NOx emissions have declined substantially due to regulations adopted by the State and SJVAPCD to reduce these pollutants. Therefore, impacts from operational ROG and NOx emissions would be substantially less than analyzed in the DEIR. Operational PM10 emissions were less than significant in the DEIR. Operational PM10 emissions are primarily from entrained road dust related to motor vehicle travel. Since the number of dwelling units is less with the modified project, vehicle miles traveled will also be less and related entrained road dust emissions would also be less. The DEIR found localized carbon monoxide (CO) emission impacts would be less than significant. CO impacts are primarily caused by motor vehicle traffic. Since motor vehicle travel is reduced with the modified project, CO impacts would also be lower than analyzed in the DEIR. In addition, motor vehicle regulations have greatly reduced CO emissions, making CO impacts even lower that previously analyzed. Residential development is not considered to be a significant source of toxic air contaminant emissions and no special analysis was required.

The RDEIR found operational GHG emissions to be significant and unavoidable after application of mitigation measures to reduce emissions to the extent feasible. No quantitative threshold was available at the time, so the significance threshold was based on whether or not the potential increases are substantial when compared to the baseline conditions. The primary sources of operational GHG emissions are vehicle traffic and energy used by the homes. With fewer dwelling units in the modified project, GHG emissions would be lower than analyzed in the RDEIR; therefore, no new significant impact would occur. Since the RDEIR was prepared, the State has implemented its strategy contained in the 2008 ARB Scoping Plan to achieve the statewide GHG reduction targets from AB 32. The State GHG inventory reached the 2020 target in 2016 and 2017 and is expected to remain below the AB 32 target the 2020 milestone year. A new statewide target for 2030 was adopted in SB 32. The ARB 2017 Scoping Plan includes the State's strategy for achieving the 2030 target through continued implementation of existing regulations and programs and new regulations and programs. The 2017 Scoping Plan includes no specific reduction amount for new development, but the primary sources of GHG emissions from development projects, motor vehicles and energy use, will provide most of the reductions needed. The reductions would be achieved mostly with increased motor vehicle fuel efficiency, low carbon fuels, increasing renewable energy use, and increased building energy efficiency. No new threshold for post 2020 projects supported by substantial evidence has been identified for project level CEQA analysis. Therefore, the threshold used in the RDEIR remains appropriate. In addition, project GHG mitigation measures from the RDEIR remain valid and effective. Mitigation measures related to energy efficiency have nearly all been incorporated into Title 24 Building Energy Efficiency Standards updates. Single family residential development is now required to install solar panels and many development projects can now achieve zero net electricity use.

**Impact Assessment**

CEQA Guidelines 15162 includes criteria for determining whether changes to a project would require subsequent EIRs and negative declarations. No subsequent EIR or negative declaration shall be prepared unless on the basis of substantial evidence on or more of the following occur:

Substantial changes to the project require major revision of the EIR or negative declaration due to new significant effects or substantial increases to the severity of previously identified significant effects.

Substantial changes to the circumstances under which the project is undertaken require major revisions to the EIR or negative declaration due to the involvement of new significant effects or substantial increases to the severity of previously identified significant effects.

New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted.

The following assessment provided in Table 4 analyzes whether the modified project would result in any of the conditions listed above occurring for air quality impacts.

**Table 4: Modified Project Assessment**

| CEQA Criteria | Project Consistency |
|---|---|
| Does the modified project result in substantial changes to the project that require major revision of the EIR or negative declaration due to new significant effects or substantial increases to the severity of previously identified significant effects? | **Discussion:** The modified project does not result in new air quality and GHG impacts or an increase in severity that would require additional environmental review. The impacts of the modified project are less than those analyzed in the DEIR and RDEIR because less dwelling units will be constructed and new air quality and GHG regulations adopted since the DEIR and RDEIR were prepared result in lower emissions. |
| Does the modified project result in substantial changes to the circumstances under which the project is undertaken that require major revisions to the EIR or negative declaration due to the involvement of new significant effects or substantial increases to the severity of previously identified significant effects? | **Discussion:** There are no substantial changes in circumstances due to the modified project. The modified project is within the same footprint as the project analyzed in the DEIR and RDEIR. Project lot counts and new regulations result in lower emissions than presented in the DEIR and RDEIR. The project would not exceed any new quantitative threshold of significance. The project will comply with air quality and GHG regulations in effect at the time of construction. The latest SJVAPCD air quality plans include no new measures applicable to development projects that would require changes to the DEIR and RDEIR. |
| Is there new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted? | **Discussion:** There is no new information of substantial importance. There are no new significant effects not discussed in the DEIR. Air Quality impacts are less than analyzed in the DEIR, so are not more severe. No mitigation measures previously found not to be feasible were excluded from the DEIR. There are no mitigation measures or alternatives which are |

| | |
|---|---|
| | considerably different from those analyzed in the DEIR that would substantially reduce significant impacts that project proponents declined to adopt. The project is required to comply with SJVAPCD Rule 9510 Indirect Source Review (ISR) which requires developers to reduce project construction NOx emissions by 20 percent and exhaust PM10 emissions by 45 percent compared to the statewide average. This is accomplished by the use of cleaner than average construction equipment or through the payment of offsite mitigation fees. Operational NOx and PM10 emissions must be reduced 33 percent and 50 percent from the unmitigated baseline, respectively. Compliance is achieved through onsite design features and payment of offsite mitigation fees. Rule 9510 reduces cumulative ozone and PM10 impacts beyond what is expected from the DEIR mitigation measures, and does not constitute new information of substantial importance, since compliance is mandatory.<br><br>When the DEIR was prepared, GHG impacts were just beginning to be addressed in EIRs around the State. The GHG analysis was included in the RDEIR to address this emerging issue using an approach recommended by the Office of Planning and Research (OPR). The approach used was conservative in that it identified all feasible mitigation measures and found the impact to be significant and unavoidable. This threshold approach remains valid today, especially with lack of consensus around the State on an appropriate quantitative threshold based on project consistency with the SB 32 2030 reduction target. Therefore, new information related to the GHG emissions would not rise to the level that would require additional analysis. The GHG impacts are not new or more severe and remain significant and unavoidable as reported in the RDEIR. |

## Summary and Conclusion

The modified project results in impacts that are less than or equal to those analyzed in the DEIR and RDEIR. The project lot count is lower than was analyzed in the DEIR and RDEIR so emissions related to building construction and project operation will be lower. The project will comply with regulations not in effect at the time the DEIR and RDEIR were prepared that provide lower emissions than estimated in the DEIR and RDEIR. No new information is available that would result in new significant impacts or that would affect the severity of impacts found to be significant. Changes in circumstances due to new regulations result in lower criteria pollutant and GHG emissions than previously assessed and would not require subsequent environmental review.

If you have any questions regarding this analysis, please call me at (559) 246-3732, or via email at dmitchell@mitchellaq.com.

Sincerely,

David M. Mitchell

David M. Mitchell, Owner
**Mitchell Air Quality Consulting**
1164 E. Decatur Avenue
Fresno, CA 93720

Attachments

Live Oak Overall Site Exhibit
CalEEMod Modeling Output.

## Attachments

# LIVE OAK
## OVERALL SITE EXHIBIT
## HANFORD CALIFORNIA




## UNIT DISTRIBUTION

| | |
|---|---|
| LIVE OAK WEST = | 719 LOTS |
| LIVE OAK EAST PHASE 1 = | 214 LOTS |
| LIVE OAK EAST PHASE 2 = | 270 LOTS/39 ADDITIONAL LOTS) |
| LIVE OAK EAST PHASE 3 = | 94 LOTS/35 ADDITIONAL LOTS) |
| LIVE OAK NORTH = | 99 LOTS |
| TOTAL: | 1,396 LOTS/1,470 LOTS |
| EIR/DA/MASTER PLAN LOT TOTAL = | 1,560 LOTS |

# Live Oak Master Plan Const and Ops 2010

## Kings County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 1,560.00 | Dwelling Unit | 390.00 | 2,808,000.00 | 4462 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 37 |
| **Climate Zone** | 3 | | | **Operational Year** | 2010 |
| **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 - PG&E Intensity Factors

Land Use - Site plan acreage 390

Construction Phase - 10 year schedule

Architectural Coating - Rule 4601 Architectural Coatings compliance

Vehicle Trips - ITE 10th Ed. Trip Rates 9.44, 9.54, 8.55

Woodstoves - Default woodstoves

Area Coating - Rule 4601 Architectural Coatings compliance

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation - Distance to Downtown Hanford

Area Mitigation -

Energy Mitigation - 2019 Title 24 Compliance

Water Mitigation - CalGreen and MWELO conservation compliance

Waste Mitigation - Achieve 75% Statewide recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix 2022

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFleetMix | HHD | 0.13 | 0.02 |
| tblFleetMix | LDA | 0.41 | 0.53 |
| tblFleetMix | LDT1 | 0.05 | 0.20 |
| tblFleetMix | LDT2 | 0.13 | 0.17 |
| tblFleetMix | LHD1 | 0.05 | 1.3000e-003 |
| tblFleetMix | LHD2 | 7.2430e-003 | 9.0000e-004 |
| tblFleetMix | MCY | 7.9740e-003 | 2.5000e-003 |
| tblFleetMix | MDV | 0.20 | 0.05 |
| tblFleetMix | MH | 1.5340e-003 | 1.8000e-003 |
| tblFleetMix | MHD | 0.01 | 8.6000e-003 |
| tblFleetMix | OBUS | 2.1380e-003 | 0.00 |
| tblFleetMix | SBUS | 1.2030e-003 | 7.0000e-004 |
| tblFleetMix | UBUS | 2.2050e-003 | 4.4000e-003 |
| tblLandUse | LotAcreage | 506.49 | 390.00 |
| tblVehicleTrips | ST_TR | 9.91 | 9.54 |
| tblVehicleTrips | SU_TR | 8.62 | 8.55 |
| tblVehicleTrips | WD_TR | 9.52 | 9.44 |

## 2.0 Emissions Summary

## 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 | | | | | |
| 2021 | 0.2615 | 2.6765 | 1.4310 | 2.6000e-003 | 1.2019 | 0.1350 | 1.3369 | 0.6580 | 0.1242 | 0.7822 | 0.0000 | 228.5265 | 228.5265 | 0.0716 | 0.0000 | 230.3174 |
| 2022 | 0.4561 | 4.7454 | 3.3372 | 6.9500e-003 | 2.2752 | 0.2115 | 2.4866 | 0.8819 | 0.1945 | 1.0764 | 0.0000 | 610.9192 | 610.9192 | 0.1929 | 0.0000 | 615.7427 |
| 2023 | 0.4409 | 4.4934 | 3.7094 | 8.2500e-003 | 1.6257 | 0.1853 | 1.8110 | 0.5246 | 0.1705 | 0.6951 | 0.0000 | 724.9175 | 724.9175 | 0.2298 | 0.0000 | 730.6613 |
| 2024 | 0.4406 | 4.1192 | 3.7729 | 9.5400e-003 | 1.6168 | 0.1566 | 1.7735 | 0.4785 | 0.1445 | 0.6230 | 0.0000 | 848.5004 | 848.5004 | 0.2097 | 0.0000 | 853.7435 |
| 2025 | 0.4494 | 3.4512 | 3.9162 | 0.0140 | 0.7344 | 0.0740 | 0.8084 | 0.1985 | 0.0696 | 0.2681 | 0.0000 | 1,280.0748 | 1,280.0748 | 0.1249 | 0.0000 | 1,283.1965 |
| 2026 | 0.4365 | 3.4201 | 3.8116 | 0.0139 | 0.7344 | 0.0740 | 0.8084 | 0.1985 | 0.0696 | 0.2680 | 0.0000 | 1,264.1595 | 1,264.1595 | 0.1248 | 0.0000 | 1,267.2794 |
| 2027 | 0.4235 | 3.3906 | 3.7008 | 0.0137 | 0.7344 | 0.0738 | 0.8082 | 0.1985 | 0.0694 | 0.2679 | 0.0000 | 1,247.5088 | 1,247.5088 | 0.1244 | 0.0000 | 1,250.6192 |
| 2028 | 0.4089 | 3.3532 | 3.5917 | 0.0135 | 0.7315 | 0.0733 | 0.8048 | 0.1977 | 0.0689 | 0.2666 | 0.0000 | 1,228.3455 | 1,228.3455 | 0.1235 | 0.0000 | 1,231.4330 |
| 2029 | 0.3973 | 3.3427 | 3.5156 | 0.0134 | 0.7344 | 0.0733 | 0.8077 | 0.1985 | 0.0690 | 0.2674 | 0.0000 | 1,220.2999 | 1,220.2999 | 0.1235 | 0.0000 | 1,223.3876 |
| 2030 | 7.3660 | 1.9008 | 2.8772 | 9.4700e-003 | 0.4587 | 0.0308 | 0.4895 | 0.1237 | 0.0307 | 0.1544 | 0.0000 | 851.4822 | 851.4822 | 0.0426 | 0.0000 | 852.5463 |
| Maximum | 7.3660 | 4.7454 | 3.9162 | 0.0140 | 2.2752 | 0.2115 | 2.4866 | 0.8819 | 0.1945 | 1.0764 | 0.0000 | 1,280.0748 | 1,280.0748 | 0.2298 | 0.0000 | 1,283.1965 |

## 2.1 Overall Construction

**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 | | | | | |
| 2021 | 0.2615 | 2.6765 | 1.4310 | 2.6000e-003 | 0.5461 | 0.1350 | 0.6811 | 0.2975 | 0.1242 | 0.4217 | 0.0000 | 228.5262 | 228.5262 | 0.0716 | 0.0000 | 230.3171 |
| 2022 | 0.4561 | 4.7454 | 3.3372 | 6.9500e-003 | 1.0348 | 0.2115 | 1.2463 | 0.3998 | 0.1945 | 0.5943 | 0.0000 | 610.9185 | 610.9185 | 0.1929 | 0.0000 | 615.7420 |
| 2023 | 0.4409 | 4.4934 | 3.7093 | 8.2500e-003 | 0.7430 | 0.1853 | 0.9283 | 0.2391 | 0.1705 | 0.4096 | 0.0000 | 724.9167 | 724.9167 | 0.2298 | 0.0000 | 730.6604 |
| 2024 | 0.4406 | 4.1192 | 3.7729 | 9.5400e-003 | 0.8203 | 0.1566 | 0.9770 | 0.2404 | 0.1445 | 0.3848 | 0.0000 | 848.4997 | 848.4997 | 0.2097 | 0.0000 | 853.7427 |
| 2025 | 0.4494 | 3.4512 | 3.9162 | 0.0140 | 0.7344 | 0.0740 | 0.8084 | 0.1985 | 0.0696 | 0.2681 | 0.0000 | 1,280.0745 | 1,280.0745 | 0.1249 | 0.0000 | 1,283.1962 |
| 2026 | 0.4365 | 3.4201 | 3.8116 | 0.0139 | 0.7344 | 0.0740 | 0.8084 | 0.1985 | 0.0696 | 0.2680 | 0.0000 | 1,264.1591 | 1,264.1591 | 0.1248 | 0.0000 | 1,267.2791 |
| 2027 | 0.4235 | 3.3906 | 3.7008 | 0.0137 | 0.7344 | 0.0738 | 0.8082 | 0.1985 | 0.0694 | 0.2679 | 0.0000 | 1,247.5084 | 1,247.5084 | 0.1244 | 0.0000 | 1,250.6188 |
| 2028 | 0.4089 | 3.3532 | 3.5917 | 0.0135 | 0.7315 | 0.0733 | 0.8048 | 0.1977 | 0.0689 | 0.2666 | 0.0000 | 1,228.3451 | 1,228.3451 | 0.1235 | 0.0000 | 1,231.4327 |
| 2029 | 0.3973 | 3.3427 | 3.5156 | 0.0134 | 0.7344 | 0.0733 | 0.8077 | 0.1985 | 0.0690 | 0.2674 | 0.0000 | 1,220.2996 | 1,220.2996 | 0.1235 | 0.0000 | 1,223.3873 |
| 2030 | 7.3660 | 1.9008 | 2.8771 | 9.4700e-003 | 0.4587 | 0.0308 | 0.4895 | 0.1237 | 0.0307 | 0.1544 | 0.0000 | 851.4818 | 851.4818 | 0.0426 | 0.0000 | 852.5459 |
| Maximum | 7.3660 | 4.7454 | 3.9162 | 0.0140 | 1.0348 | 0.2115 | 1.2463 | 0.3998 | 0.1945 | 0.5943 | 0.0000 | 1,280.0745 | 1,280.0745 | 0.2298 | 0.0000 | 1,283.1962 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 32.96 | 0.00 | 29.96 | 37.35 | 0.00 | 29.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 7-1-2021 | 9-30-2021 | 1.4628 | 1.4628 |
| 2 | 10-1-2021 | 12-31-2021 | 1.4629 | 1.4629 |
| 3 | 1-1-2022 | 3-31-2022 | 1.1694 | 1.1694 |
| 4 | 4-1-2022 | 6-30-2022 | 1.2467 | 1.2467 |
| 5 | 7-1-2022 | 9-30-2022 | 1.3998 | 1.3998 |
| 6 | 10-1-2022 | 12-31-2022 | 1.4000 | 1.4000 |
| 7 | 1-1-2023 | 3-31-2023 | 1.2203 | 1.2203 |
| 8 | 4-1-2023 | 6-30-2023 | 1.2337 | 1.2337 |
| 9 | 7-1-2023 | 9-30-2023 | 1.2473 | 1.2473 |
| 10 | 10-1-2023 | 12-31-2023 | 1.2474 | 1.2474 |
| 11 | 1-1-2024 | 3-31-2024 | 1.1607 | 1.1607 |
| 12 | 4-1-2024 | 6-30-2024 | 1.1606 | 1.1606 |
| 13 | 7-1-2024 | 9-30-2024 | 1.1733 | 1.1733 |
| 14 | 10-1-2024 | 12-31-2024 | 1.0610 | 1.0610 |
| 15 | 1-1-2025 | 3-31-2025 | 0.9672 | 0.9672 |
| 16 | 4-1-2025 | 6-30-2025 | 0.9721 | 0.9721 |
| 17 | 7-1-2025 | 9-30-2025 | 0.9828 | 0.9828 |
| 18 | 10-1-2025 | 12-31-2025 | 0.9887 | 0.9887 |
| 19 | 1-1-2026 | 3-31-2026 | 0.9558 | 0.9558 |
| 20 | 4-1-2026 | 6-30-2026 | 0.9610 | 0.9610 |
| 21 | 7-1-2026 | 9-30-2026 | 0.9716 | 0.9716 |
| 22 | 10-1-2026 | 12-31-2026 | 0.9771 | 0.9771 |
| 23 | 1-1-2027 | 3-31-2027 | 0.9449 | 0.9449 |
| 24 | 4-1-2027 | 6-30-2027 | 0.9504 | 0.9504 |
| 25 | 7-1-2027 | 9-30-2027 | 0.9608 | 0.9608 |
| 26 | 10-1-2027 | 12-31-2027 | 0.9659 | 0.9659 |

| | | | | |
|---|---|---|---|---|
| 27 | 1-1-2028 | 3-31-2028 | 0.9456 | 0.9456 |
| 28 | 4-1-2028 | 6-30-2028 | 0.9409 | 0.9409 |
| 29 | 7-1-2028 | 9-30-2028 | 0.9512 | 0.9512 |
| 30 | 10-1-2028 | 12-31-2028 | 0.9560 | 0.9560 |
| 31 | 1-1-2029 | 3-31-2029 | 0.9257 | 0.9257 |
| 32 | 4-1-2029 | 6-30-2029 | 0.9316 | 0.9316 |
| 33 | 7-1-2029 | 9-30-2029 | 0.9419 | 0.9419 |
| 34 | 10-1-2029 | 12-31-2029 | 0.9463 | 0.9463 |
| 35 | 1-1-2030 | 3-31-2030 | 0.7691 | 0.7691 |
| 36 | 4-1-2030 | 6-30-2030 | 0.7735 | 0.7735 |
| 37 | 7-1-2030 | 9-30-2030 | 3.5767 | 3.5767 |
| | | Highest | 3.5767 | 3.5767 |

## 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 | 23.8177 | 1.9088 | 84.7554 | 0.2398 | | 11.8830 | 11.8830 | | 11.8830 | 11.8830 | 1,576.6619 | 694.7245 | 2,271.3864 | 7.4066 | 0.0124 | 2,460.2431 |
| Energy | 0.2199 | 1.8794 | 0.7997 | 0.0120 | | 0.1520 | 0.1520 | | 0.1520 | 0.1520 | 0.0000 | 6,152.3425 | 6,152.3425 | 0.2215 | 0.0771 | 6,180.8549 |
| Mobile | 17.8575 | 48.4713 | 220.9648 | 0.2058 | 15.6939 | 1.0359 | 16.7298 | 4.1984 | 0.9848 | 5.1832 | 0.0000 | 18,508.2207 | 18,508.2207 | 2.6432 | 0.0000 | 18,574.2998 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 326.0684 | 0.0000 | 326.0684 | 19.2701 | 0.0000 | 807.8208 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 32.2458 | 225.2373 | 257.4831 | 3.3221 | 0.0803 | 364.4687 |
| Total | 41.8951 | 52.2595 | 306.5199 | 0.4576 | 15.6939 | 13.0709 | 28.7648 | 4.1984 | 13.0198 | 17.2182 | 1,934.9762 | 25,580.5250 | 27,515.5012 | 32.8635 | 0.1698 | 28,387.6873 |

## 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 | 15.8696 | 0.7313 | 12.5753 | 4.3400e-003 | | 0.1081 | 0.1081 | | 0.1081 | 0.1081 | 0.0000 | 694.7245 | 694.7245 | 0.0360 | 0.0124 | 699.3168 |
| Energy | 0.2199 | 1.8794 | 0.7997 | 0.0120 | | 0.1520 | 0.1520 | | 0.1520 | 0.1520 | 0.0000 | 6,152.3425 | 6,152.3425 | 0.2215 | 0.0771 | 6,180.8549 |
| Mobile | 17.3015 | 45.6208 | 208.8843 | 0.1922 | 14.6110 | 0.9729 | 15.5840 | 3.9087 | 0.9249 | 4.8336 | 0.0000 | 17,286.3507 | 17,286.3507 | 2.5263 | 0.0000 | 17,349.5087 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 326.0684 | 0.0000 | 326.0684 | 19.2701 | 0.0000 | 807.8208 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 32.2458 | 225.2373 | 257.4831 | 3.3221 | 0.0803 | 364.4687 |
| Total | 33.3911 | 48.2315 | 222.2593 | 0.2086 | 14.6110 | 1.2330 | 15.8440 | 3.9087 | 1.1850 | 5.0937 | 358.3142 | 24,358.6550 | 24,716.9692 | 25.3760 | 0.1698 | 25,401.9699 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 20.30 | 7.71 | 27.49 | 54.42 | 6.90 | 90.57 | 44.92 | 6.90 | 90.90 | 70.42 | 81.48 | 4.78 | 10.17 | 22.78 | 0.00 | 10.52 |

## 3.0 Construction Detail

**Construction Phase**

Live Oak Master Plan Const and Ops 2010 - 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 | 7/1/2021 | 6/1/2022 | 5 | 240 | |
| 2 | Grading | Grading | 6/2/2022 | 10/16/2024 | 5 | 620 | |
| 3 | Building Construction | Building Construction | 10/17/2024 | 7/17/2030 | 5 | 6200 | |
| 4 | Paving | Paving | 7/18/2030 | 12/4/2030 | 5 | 440 | |
| 5 | Architectural Coating | Architectural Coating | 7/19/2030 | 12/31/2030 | 5 | 440 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1550**

**Acres of Paving: 0**

**Residential Indoor: 5,686,200; Residential Outdoor: 1,895,400; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Live Oak Master Plan Const and Ops 2010 - 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 | 562.00 | 167.00 | 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 | 112.00 | 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 - 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 | | | | | |
| Fugitive Dust | | | | | 1.1924 | 0.0000 | 1.1924 | 0.6554 | 0.0000 | 0.6554 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2566 | 2.6728 | 1.3962 | 2.5100e-003 | | 0.1349 | 0.1349 | | 0.1241 | 0.1241 | 0.0000 | 220.6757 | 220.6757 | 0.0714 | 0.0000 | 222.4600 |
| **Total** | **0.2566** | **2.6728** | **1.3962** | **2.5100e-003** | **1.1924** | **0.1349** | **1.3273** | **0.6554** | **0.1241** | **0.7796** | **0.0000** | **220.6757** | **220.6757** | **0.0714** | **0.0000** | **222.4600** |

## 3.2 Site Preparation - 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 | 4.8300e-003 | 3.6400e-003 | 0.0348 | 9.0000e-005 | 9.5400e-003 | 6.0000e-005 | 9.6100e-003 | 2.5400e-003 | 6.0000e-005 | 2.5900e-003 | 0.0000 | 7.8507 | 7.8507 | 2.7000e-004 | 0.0000 | 7.8574 |
| **Total** | **4.8300e-003** | **3.6400e-003** | **0.0348** | **9.0000e-005** | **9.5400e-003** | **6.0000e-005** | **9.6100e-003** | **2.5400e-003** | **6.0000e-005** | **2.5900e-003** | **0.0000** | **7.8507** | **7.8507** | **2.7000e-004** | **0.0000** | **7.8574** |

### 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 | | | | | 0.5366 | 0.0000 | 0.5366 | 0.2949 | 0.0000 | 0.2949 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2566 | 2.6728 | 1.3962 | 2.5100e-003 | | 0.1349 | 0.1349 | | 0.1241 | 0.1241 | 0.0000 | 220.6755 | 220.6755 | 0.0714 | 0.0000 | 222.4597 |
| **Total** | **0.2566** | **2.6728** | **1.3962** | **2.5100e-003** | **0.5366** | **0.1349** | **0.6715** | **0.2949** | **0.1241** | **0.4191** | **0.0000** | **220.6755** | **220.6755** | **0.0714** | **0.0000** | **222.4597** |

### 3.2 Site Preparation - 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 | 4.8300e-003 | 3.6400e-003 | 0.0348 | 9.0000e-005 | 9.5400e-003 | 6.0000e-005 | 9.6100e-003 | 2.5400e-003 | 6.0000e-005 | 2.5900e-003 | 0.0000 | 7.8507 | 7.8507 | 2.7000e-004 | 0.0000 | 7.8574 |
| **Total** | **4.8300e-003** | **3.6400e-003** | **0.0348** | **9.0000e-005** | **9.5400e-003** | **6.0000e-005** | **9.6100e-003** | **2.5400e-003** | **6.0000e-005** | **2.5900e-003** | **0.0000** | **7.8507** | **7.8507** | **2.7000e-004** | **0.0000** | **7.8574** |

### 3.2 Site Preparation - 2022

**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 | | | | | 0.9756 | 0.0000 | 0.9756 | 0.5363 | 0.0000 | 0.5363 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1712 | 1.7865 | 1.0637 | 2.0500e-003 | | 0.0871 | 0.0871 | | 0.0801 | 0.0801 | 0.0000 | 180.5727 | 180.5727 | 0.0584 | 0.0000 | 182.0327 |
| **Total** | **0.1712** | **1.7865** | **1.0637** | **2.0500e-003** | **0.9756** | **0.0871** | **1.0627** | **0.5363** | **0.0801** | **0.6164** | **0.0000** | **180.5727** | **180.5727** | **0.0584** | **0.0000** | **182.0327** |

### 3.2 Site Preparation - 2022

**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 | 3.6600e-003 | 2.6600e-003 | 0.0259 | 7.0000e-005 | 7.8100e-003 | 5.0000e-005 | 7.8600e-003 | 2.0700e-003 | 5.0000e-005 | 2.1200e-003 | 0.0000 | 6.1953 | 6.1953 | 1.9000e-004 | 0.0000 | 6.2002 |
| **Total** | **3.6600e-003** | **2.6600e-003** | **0.0259** | **7.0000e-005** | **7.8100e-003** | **5.0000e-005** | **7.8600e-003** | **2.0700e-003** | **5.0000e-005** | **2.1200e-003** | **0.0000** | **6.1953** | **6.1953** | **1.9000e-004** | **0.0000** | **6.2002** |

**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 | | | | | 0.4390 | 0.0000 | 0.4390 | 0.2413 | 0.0000 | 0.2413 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1712 | 1.7865 | 1.0637 | 2.0500e-003 | | 0.0871 | 0.0871 | | 0.0801 | 0.0801 | 0.0000 | 180.5725 | 180.5725 | 0.0584 | 0.0000 | 182.0325 |
| **Total** | **0.1712** | **1.7865** | **1.0637** | **2.0500e-003** | **0.4390** | **0.0871** | **0.5261** | **0.2413** | **0.0801** | **0.3214** | **0.0000** | **180.5725** | **180.5725** | **0.0584** | **0.0000** | **182.0325** |

### 3.2 Site Preparation - 2022

**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 | 3.6600e-003 | 2.6600e-003 | 0.0259 | 7.0000e-005 | 7.8100e-003 | 5.0000e-005 | 7.8600e-003 | 2.0700e-003 | 5.0000e-005 | 2.1200e-003 | 0.0000 | 6.1953 | 6.1953 | 1.9000e-004 | 0.0000 | 6.2002 |
| **Total** | **3.6600e-003** | **2.6600e-003** | **0.0259** | **7.0000e-005** | **7.8100e-003** | **5.0000e-005** | **7.8600e-003** | **2.0700e-003** | **5.0000e-005** | **2.1200e-003** | **0.0000** | **6.1953** | **6.1953** | **1.9000e-004** | **0.0000** | **6.2002** |

### 3.3 Grading - 2022

**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 | | | | | 1.2796 | 0.0000 | 1.2796 | 0.3403 | 0.0000 | 0.3403 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2755 | 2.9521 | 2.2072 | 4.7200e-003 | | 0.1243 | 0.1243 | | 0.1143 | 0.1143 | 0.0000 | 414.4630 | 414.4630 | 0.1341 | 0.0000 | 417.8141 |
| **Total** | **0.2755** | **2.9521** | **2.2072** | **4.7200e-003** | **1.2796** | **0.1243** | **1.4038** | **0.3403** | **0.1143** | **0.4546** | **0.0000** | **414.4630** | **414.4630** | **0.1341** | **0.0000** | **417.8141** |

## 3.3 Grading - 2022

### 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 | 5.7200e-003 | 4.1600e-003 | 0.0405 | 1.1000e-004 | 0.0122 | 8.0000e-005 | 0.0123 | 3.2400e-003 | 7.0000e-005 | 3.3200e-003 | 0.0000 | 9.6882 | 9.6882 | 3.0000e-004 | 0.0000 | 9.6957 |
| **Total** | **5.7200e-003** | **4.1600e-003** | **0.0405** | **1.1000e-004** | **0.0122** | **8.0000e-005** | **0.0123** | **3.2400e-003** | **7.0000e-005** | **3.3200e-003** | **0.0000** | **9.6882** | **9.6882** | **3.0000e-004** | **0.0000** | **9.6957** |

### 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 | | | | | 0.5758 | 0.0000 | 0.5758 | 0.1531 | 0.0000 | 0.1531 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2755 | 2.9521 | 2.2072 | 4.7200e-003 | | 0.1243 | 0.1243 | | 0.1143 | 0.1143 | 0.0000 | 414.4625 | 414.4625 | 0.1341 | 0.0000 | 417.8136 |
| **Total** | **0.2755** | **2.9521** | **2.2072** | **4.7200e-003** | **0.5758** | **0.1243** | **0.7001** | **0.1531** | **0.1143** | **0.2675** | **0.0000** | **414.4625** | **414.4625** | **0.1341** | **0.0000** | **417.8136** |

### 3.3 Grading - 2022

**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 | 5.7200e-003 | 4.1600e-003 | 0.0405 | 1.1000e-004 | 0.0122 | 8.0000e-005 | 0.0123 | 3.2400e-003 | 7.0000e-005 | 3.3200e-003 | 0.0000 | 9.6882 | 9.6882 | 3.0000e-004 | 0.0000 | 9.6957 |
| **Total** | **5.7200e-003** | **4.1600e-003** | **0.0405** | **1.1000e-004** | **0.0122** | **8.0000e-005** | **0.0123** | **3.2400e-003** | **7.0000e-005** | **3.3200e-003** | **0.0000** | **9.6882** | **9.6882** | **3.0000e-004** | **0.0000** | **9.6957** |

### 3.3 Grading - 2023

**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 | | | | | 1.6048 | 0.0000 | 1.6048 | 0.5191 | 0.0000 | 0.5191 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.4318 | 4.4870 | 3.6467 | 8.0700e-003 | | 0.1852 | 0.1852 | | 0.1704 | 0.1704 | 0.0000 | 708.9577 | 708.9577 | 0.2293 | 0.0000 | 714.6900 |
| **Total** | **0.4318** | **4.4870** | **3.6467** | **8.0700e-003** | **1.6048** | **0.1852** | **1.7899** | **0.5191** | **0.1704** | **0.6894** | **0.0000** | **708.9577** | **708.9577** | **0.2293** | **0.0000** | **714.6900** |

## 3.3 Grading - 2023

### 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 | 9.0900e-003 | 6.3600e-003 | 0.0627 | 1.8000e-004 | 0.0209 | 1.3000e-004 | 0.0210 | 5.5500e-003 | 1.2000e-004 | 5.6700e-003 | 0.0000 | 15.9598 | 15.9598 | 4.6000e-004 | 0.0000 | 15.9713 |
| **Total** | **9.0900e-003** | **6.3600e-003** | **0.0627** | **1.8000e-004** | **0.0209** | **1.3000e-004** | **0.0210** | **5.5500e-003** | **1.2000e-004** | **5.6700e-003** | **0.0000** | **15.9598** | **15.9598** | **4.6000e-004** | **0.0000** | **15.9713** |

### 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 | | | | | 0.7221 | 0.0000 | 0.7221 | 0.2336 | 0.0000 | 0.2336 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.4318 | 4.4870 | 3.6467 | 8.0700e-003 | | 0.1852 | 0.1852 | | 0.1704 | 0.1704 | 0.0000 | 708.9569 | 708.9569 | 0.2293 | 0.0000 | 714.6891 |
| **Total** | **0.4318** | **4.4870** | **3.6467** | **8.0700e-003** | **0.7221** | **0.1852** | **0.9073** | **0.2336** | **0.1704** | **0.4040** | **0.0000** | **708.9569** | **708.9569** | **0.2293** | **0.0000** | **714.6891** |

### 3.3 Grading - 2023

**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 | 9.0900e-003 | 6.3600e-003 | 0.0627 | 1.8000e-004 | 0.0209 | 1.3000e-004 | 0.0210 | 5.5500e-003 | 1.2000e-004 | 5.6700e-003 | 0.0000 | 15.9598 | 15.9598 | 4.6000e-004 | 0.0000 | 15.9713 |
| **Total** | **9.0900e-003** | **6.3600e-003** | **0.0627** | **1.8000e-004** | **0.0209** | **1.3000e-004** | **0.0210** | **5.5500e-003** | **1.2000e-004** | **5.6700e-003** | **0.0000** | **15.9598** | **15.9598** | **4.6000e-004** | **0.0000** | **15.9713** |

### 3.3 Grading - 2024

**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 | | | | | 1.4482 | 0.0000 | 1.4482 | 0.4330 | 0.0000 | 0.4330 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3347 | 3.3672 | 2.8832 | 6.4600e-003 | | 0.1389 | 0.1389 | | 0.1278 | 0.1278 | 0.0000 | 567.0030 | 567.0030 | 0.1834 | 0.0000 | 571.5875 |
| **Total** | **0.3347** | **3.3672** | **2.8832** | **6.4600e-003** | **1.4482** | **0.1389** | **1.5871** | **0.4330** | **0.1278** | **0.5608** | **0.0000** | **567.0030** | **567.0030** | **0.1834** | **0.0000** | **571.5875** |

## 3.3 Grading - 2024

### 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 | 6.8000e-003 | 4.5800e-003 | 0.0461 | 1.4000e-004 | 0.0167 | 1.0000e-004 | 0.0168 | 4.4400e-003 | 9.0000e-005 | 4.5300e-003 | 0.0000 | 12.3054 | 12.3054 | 3.3000e-004 | 0.0000 | 12.3136 |
| **Total** | **6.8000e-003** | **4.5800e-003** | **0.0461** | **1.4000e-004** | **0.0167** | **1.0000e-004** | **0.0168** | **4.4400e-003** | **9.0000e-005** | **4.5300e-003** | **0.0000** | **12.3054** | **12.3054** | **3.3000e-004** | **0.0000** | **12.3136** |

### 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 | | | | | 0.6517 | 0.0000 | 0.6517 | 0.1949 | 0.0000 | 0.1949 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3347 | 3.3672 | 2.8832 | 6.4600e-003 | | 0.1389 | 0.1389 | | 0.1278 | 0.1278 | 0.0000 | 567.0024 | 567.0024 | 0.1834 | 0.0000 | 571.5869 |
| **Total** | **0.3347** | **3.3672** | **2.8832** | **6.4600e-003** | **0.6517** | **0.1389** | **0.7906** | **0.1949** | **0.1278** | **0.3226** | **0.0000** | **567.0024** | **567.0024** | **0.1834** | **0.0000** | **571.5869** |

### 3.3 Grading - 2024

**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 | 6.8000e-003 | 4.5800e-003 | 0.0461 | 1.4000e-004 | 0.0167 | 1.0000e-004 | 0.0168 | 4.4400e-003 | 9.0000e-005 | 4.5300e-003 | 0.0000 | 12.3054 | 12.3054 | 3.3000e-004 | 0.0000 | 12.3136 |
| **Total** | **6.8000e-003** | **4.5800e-003** | **0.0461** | **1.4000e-004** | **0.0167** | **1.0000e-004** | **0.0168** | **4.4400e-003** | **9.0000e-005** | **4.5300e-003** | **0.0000** | **12.3054** | **12.3054** | **3.3000e-004** | **0.0000** | **12.3136** |

### 3.4 Building Construction - 2024

**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 | 0.0397 | 0.3630 | 0.4365 | 7.3000e-004 | | 0.0166 | 0.0166 | | 0.0156 | 0.0156 | 0.0000 | 62.5993 | 62.5993 | 0.0148 | 0.0000 | 62.9693 |
| **Total** | **0.0397** | **0.3630** | **0.4365** | **7.3000e-004** | | **0.0166** | **0.0166** | | **0.0156** | **0.0156** | **0.0000** | **62.5993** | **62.5993** | **0.0148** | **0.0000** | **62.9693** |

## 3.4 Building Construction - 2024

### 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 | 9.7600e-003 | 0.3510 | 0.0705 | 1.2300e-003 | 0.0300 | 3.6000e-004 | 0.0304 | 8.6700e-003 | 3.4000e-004 | 9.0100e-003 | 0.0000 | 116.8228 | 116.8228 | 8.8100e-003 | 0.0000 | 117.0430 |
| Worker | 0.0496 | 0.0334 | 0.3366 | 9.9000e-004 | 0.1219 | 7.4000e-004 | 0.1226 | 0.0324 | 6.8000e-004 | 0.0331 | 0.0000 | 89.7700 | 89.7700 | 2.4000e-003 | 0.0000 | 89.8300 |
| **Total** | **0.0594** | **0.3844** | **0.4071** | **2.2200e-003** | **0.1519** | **1.1000e-003** | **0.1530** | **0.0411** | **1.0200e-003** | **0.0421** | **0.0000** | **206.5928** | **206.5928** | **0.0112** | **0.0000** | **206.8730** |

### 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 | 0.0397 | 0.3630 | 0.4365 | 7.3000e-004 | | 0.0166 | 0.0166 | | 0.0156 | 0.0156 | 0.0000 | 62.5992 | 62.5992 | 0.0148 | 0.0000 | 62.9693 |
| **Total** | **0.0397** | **0.3630** | **0.4365** | **7.3000e-004** | | **0.0166** | **0.0166** | | **0.0156** | **0.0156** | **0.0000** | **62.5992** | **62.5992** | **0.0148** | **0.0000** | **62.9693** |

## 3.4 Building Construction - 2024

**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 | 9.7600e-003 | 0.3510 | 0.0705 | 1.2300e-003 | 0.0300 | 3.6000e-004 | 0.0304 | 8.6700e-003 | 3.4000e-004 | 9.0100e-003 | 0.0000 | 116.8228 | 116.8228 | 8.8100e-003 | 0.0000 | 117.0430 |
| Worker | 0.0496 | 0.0334 | 0.3366 | 9.9000e-004 | 0.1219 | 7.4000e-004 | 0.1226 | 0.0324 | 6.8000e-004 | 0.0331 | 0.0000 | 89.7700 | 89.7700 | 2.4000e-003 | 0.0000 | 89.8300 |
| **Total** | **0.0594** | **0.3844** | **0.4071** | **2.2200e-003** | **0.1519** | **1.1000e-003** | **0.1530** | **0.0411** | **1.0200e-003** | **0.0421** | **0.0000** | **206.5928** | **206.5928** | **0.0112** | **0.0000** | **206.8730** |

## 3.4 Building Construction - 2025

**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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

## 3.4 Building Construction - 2025

### 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 | 0.0459 | 1.6781 | 0.3242 | 5.9100e-003 | 0.1451 | 1.7000e-003 | 0.1468 | 0.0419 | 1.6300e-003 | 0.0435 | 0.0000 | 560.4631 | 560.4631 | 0.0434 | 0.0000 | 561.5467 |
| Worker | 0.2250 | 0.1458 | 1.4929 | 4.6100e-003 | 0.5892 | 3.4900e-003 | 0.5927 | 0.1566 | 3.2100e-003 | 0.1598 | 0.0000 | 416.9569 | 416.9569 | 0.0104 | 0.0000 | 417.2163 |
| **Total** | **0.2710** | **1.8239** | **1.8171** | **0.0105** | **0.7344** | **5.1900e-003** | **0.7395** | **0.1985** | **4.8400e-003** | **0.2033** | **0.0000** | **977.4200** | **977.4200** | **0.0537** | **0.0000** | **978.7630** |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

## 3.4 Building Construction - 2025

**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 | 0.0459 | 1.6781 | 0.3242 | 5.9100e-003 | 0.1451 | 1.7000e-003 | 0.1468 | 0.0419 | 1.6300e-003 | 0.0435 | 0.0000 | 560.4631 | 560.4631 | 0.0434 | 0.0000 | 561.5467 |
| Worker | 0.2250 | 0.1458 | 1.4929 | 4.6100e-003 | 0.5892 | 3.4900e-003 | 0.5927 | 0.1566 | 3.2100e-003 | 0.1598 | 0.0000 | 416.9569 | 416.9569 | 0.0104 | 0.0000 | 417.2163 |
| **Total** | **0.2710** | **1.8239** | **1.8171** | **0.0105** | **0.7344** | **5.1900e-003** | **0.7395** | **0.1985** | **4.8400e-003** | **0.2033** | **0.0000** | **977.4200** | **977.4200** | **0.0537** | **0.0000** | **978.7630** |

## 3.4 Building Construction - 2026

**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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

## 3.4 Building Construction - 2026

### 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 | 0.0450 | 1.6596 | 0.3121 | 5.8700e-003 | 0.1451 | 1.6900e-003 | 0.1468 | 0.0419 | 1.6100e-003 | 0.0435 | 0.0000 | 556.7384 | 556.7384 | 0.0441 | 0.0000 | 557.8399 |
| Worker | 0.2131 | 0.1331 | 1.4004 | 4.4800e-003 | 0.5892 | 3.4700e-003 | 0.5927 | 0.1566 | 3.1900e-003 | 0.1597 | 0.0000 | 404.7662 | 404.7662 | 9.5900e-003 | 0.0000 | 405.0060 |
| **Total** | **0.2580** | **1.7928** | **1.7126** | **0.0104** | **0.7344** | **5.1600e-003** | **0.7395** | **0.1985** | **4.8000e-003** | **0.2033** | **0.0000** | **961.5046** | **961.5046** | **0.0537** | **0.0000** | **962.8459** |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

## 3.4 Building Construction - 2026

**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 | 0.0450 | 1.6596 | 0.3121 | 5.8700e-003 | 0.1451 | 1.6900e-003 | 0.1468 | 0.0419 | 1.6100e-003 | 0.0435 | 0.0000 | 556.7384 | 556.7384 | 0.0441 | 0.0000 | 557.8399 |
| Worker | 0.2131 | 0.1331 | 1.4004 | 4.4800e-003 | 0.5892 | 3.4700e-003 | 0.5927 | 0.1566 | 3.1900e-003 | 0.1597 | 0.0000 | 404.7662 | 404.7662 | 9.5900e-003 | 0.0000 | 405.0060 |
| **Total** | **0.2580** | **1.7928** | **1.7126** | **0.0104** | **0.7344** | **5.1600e-003** | **0.7395** | **0.1985** | **4.8000e-003** | **0.2033** | **0.0000** | **961.5046** | **961.5046** | **0.0537** | **0.0000** | **962.8459** |

## 3.4 Building Construction - 2027

**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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

## 3.4 Building Construction - 2027

### 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 | 0.0440 | 1.6418 | 0.3008 | 5.8400e-003 | 0.1451 | 1.6600e-003 | 0.1468 | 0.0419 | 1.5900e-003 | 0.0435 | 0.0000 | 553.5363 | 553.5363 | 0.0446 | 0.0000 | 554.6511 |
| Worker | 0.2010 | 0.1215 | 1.3009 | 4.3300e-003 | 0.5892 | 3.3000e-003 | 0.5925 | 0.1566 | 3.0300e-003 | 0.1596 | 0.0000 | 391.3176 | 391.3176 | 8.6800e-003 | 0.0000 | 391.5346 |
| **Total** | **0.2450** | **1.7633** | **1.6018** | **0.0102** | **0.7344** | **4.9600e-003** | **0.7393** | **0.1985** | **4.6200e-003** | **0.2031** | **0.0000** | **944.8539** | **944.8539** | **0.0533** | **0.0000** | **946.1857** |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

## 3.4 Building Construction - 2027

**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 | 0.0440 | 1.6418 | 0.3008 | 5.8400e-003 | 0.1451 | 1.6600e-003 | 0.1468 | 0.0419 | 1.5900e-003 | 0.0435 | 0.0000 | 553.5363 | 553.5363 | 0.0446 | 0.0000 | 554.6511 |
| Worker | 0.2010 | 0.1215 | 1.3009 | 4.3300e-003 | 0.5892 | 3.3000e-003 | 0.5925 | 0.1566 | 3.0300e-003 | 0.1596 | 0.0000 | 391.3176 | 391.3176 | 8.6800e-003 | 0.0000 | 391.5346 |
| **Total** | **0.2450** | **1.7633** | **1.6018** | **0.0102** | **0.7344** | **4.9600e-003** | **0.7393** | **0.1985** | **4.6200e-003** | **0.2031** | **0.0000** | **944.8539** | **944.8539** | **0.0533** | **0.0000** | **946.1857** |

## 3.4 Building Construction - 2028

**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 | 0.1778 | 1.6211 | 2.0910 | 3.5000e-003 | | 0.0686 | 0.0686 | | 0.0645 | 0.0645 | 0.0000 | 301.4953 | 301.4953 | 0.0709 | 0.0000 | 303.2671 |
| **Total** | **0.1778** | **1.6211** | **2.0910** | **3.5000e-003** | | **0.0686** | **0.0686** | | **0.0645** | **0.0645** | **0.0000** | **301.4953** | **301.4953** | **0.0709** | **0.0000** | **303.2671** |

## 3.4 Building Construction - 2028

### 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 | 0.0432 | 1.6216 | 0.2917 | 5.7900e-003 | 0.1446 | 1.6400e-003 | 0.1462 | 0.0418 | 1.5700e-003 | 0.0433 | 0.0000 | 548.9044 | 548.9044 | 0.0448 | 0.0000 | 550.0237 |
| Worker | 0.1879 | 0.1106 | 1.2090 | 4.1800e-003 | 0.5870 | 3.0600e-003 | 0.5900 | 0.1560 | 2.8100e-003 | 0.1588 | 0.0000 | 377.9458 | 377.9458 | 7.8600e-003 | 0.0000 | 378.1423 |
| **Total** | **0.2311** | **1.7322** | **1.5007** | **9.9700e-003** | **0.7315** | **4.7000e-003** | **0.7362** | **0.1977** | **4.3800e-003** | **0.2021** | **0.0000** | **926.8502** | **926.8502** | **0.0526** | **0.0000** | **928.1660** |

### 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 | 0.1778 | 1.6211 | 2.0910 | 3.5000e-003 | | 0.0686 | 0.0686 | | 0.0645 | 0.0645 | 0.0000 | 301.4949 | 301.4949 | 0.0709 | 0.0000 | 303.2667 |
| **Total** | **0.1778** | **1.6211** | **2.0910** | **3.5000e-003** | | **0.0686** | **0.0686** | | **0.0645** | **0.0645** | **0.0000** | **301.4949** | **301.4949** | **0.0709** | **0.0000** | **303.2667** |

## 3.4 Building Construction - 2028

**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 | 0.0432 | 1.6216 | 0.2917 | 5.7900e-003 | 0.1446 | 1.6400e-003 | 0.1462 | 0.0418 | 1.5700e-003 | 0.0433 | 0.0000 | 548.9044 | 548.9044 | 0.0448 | 0.0000 | 550.0237 |
| Worker | 0.1879 | 0.1106 | 1.2090 | 4.1800e-003 | 0.5870 | 3.0600e-003 | 0.5900 | 0.1560 | 2.8100e-003 | 0.1588 | 0.0000 | 377.9458 | 377.9458 | 7.8600e-003 | 0.0000 | 378.1423 |
| **Total** | **0.2311** | **1.7322** | **1.5007** | **9.9700e-003** | **0.7315** | **4.7000e-003** | **0.7362** | **0.1977** | **4.3800e-003** | **0.2021** | **0.0000** | **926.8502** | **926.8502** | **0.0526** | **0.0000** | **928.1660** |

## 3.4 Building Construction - 2029

**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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

## 3.4 Building Construction - 2029

### 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 | 0.0428 | 1.6141 | 0.2855 | 5.7900e-003 | 0.1451 | 1.6300e-003 | 0.1468 | 0.0419 | 1.5600e-003 | 0.0435 | 0.0000 | 548.8037 | 548.8037 | 0.0452 | 0.0000 | 549.9341 |
| Worker | 0.1761 | 0.1013 | 1.1311 | 4.0800e-003 | 0.5892 | 2.8600e-003 | 0.5921 | 0.1566 | 2.6300e-003 | 0.1592 | 0.0000 | 368.8414 | 368.8414 | 7.1500e-003 | 0.0000 | 369.0200 |
| Total | 0.2188 | 1.7154 | 1.4166 | 9.8700e-003 | 0.7344 | 4.4900e-003 | 0.7389 | 0.1985 | 4.1900e-003 | 0.2027 | 0.0000 | 917.6450 | 917.6450 | 0.0524 | 0.0000 | 918.9541 |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| Total | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |

### 3.4 Building Construction - 2029

**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 | 0.0428 | 1.6141 | 0.2855 | 5.7900e-003 | 0.1451 | 1.6300e-003 | 0.1468 | 0.0419 | 1.5600e-003 | 0.0435 | 0.0000 | 548.8037 | 548.8037 | 0.0452 | 0.0000 | 549.9341 |
| Worker | 0.1761 | 0.1013 | 1.1311 | 4.0800e-003 | 0.5892 | 2.8600e-003 | 0.5921 | 0.1566 | 2.6300e-003 | 0.1592 | 0.0000 | 368.8414 | 368.8414 | 7.1500e-003 | 0.0000 | 369.0200 |
| **Total** | **0.2188** | **1.7154** | **1.4166** | **9.8700e-003** | **0.7344** | **4.4900e-003** | **0.7389** | **0.1985** | **4.1900e-003** | **0.2027** | **0.0000** | **917.6450** | **917.6450** | **0.0524** | **0.0000** | **918.9541** |

### 3.4 Building Construction - 2030

**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 | 0.0930 | 0.5634 | 1.1472 | 2.2000e-003 | | 0.0105 | 0.0105 | | 0.0105 | 0.0105 | 0.0000 | 186.6313 | 186.6313 | 7.4900e-003 | 0.0000 | 186.8185 |
| **Total** | **0.0930** | **0.5634** | **1.1472** | **2.2000e-003** | | **0.0105** | **0.0105** | | **0.0105** | **0.0105** | **0.0000** | **186.6313** | **186.6313** | **7.4900e-003** | **0.0000** | **186.8185** |

## 3.4 Building Construction - 2030

### 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 | 0.0230 | 0.8716 | 0.1523 | 3.1400e-003 | 0.0790 | 8.8000e-004 | 0.0799 | 0.0228 | 8.4000e-004 | 0.0236 | 0.0000 | 297.6468 | 297.6468 | 0.0247 | 0.0000 | 298.2633 |
| Worker | 0.0887 | 0.0501 | 0.5734 | 2.1600e-003 | 0.3206 | 1.4500e-003 | 0.3220 | 0.0852 | 1.3300e-003 | 0.0865 | 0.0000 | 195.5775 | 195.5775 | 3.5100e-003 | 0.0000 | 195.6653 |
| **Total** | **0.1117** | **0.9217** | **0.7257** | **5.3000e-003** | **0.3995** | **2.3300e-003** | **0.4019** | **0.1080** | **2.1700e-003** | **0.1101** | **0.0000** | **493.2243** | **493.2243** | **0.0282** | **0.0000** | **493.9286** |

### 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 | 0.0930 | 0.5634 | 1.1471 | 2.2000e-003 | | 0.0105 | 0.0105 | | 0.0105 | 0.0105 | 0.0000 | 186.6311 | 186.6311 | 7.4900e-003 | 0.0000 | 186.8183 |
| **Total** | **0.0930** | **0.5634** | **1.1471** | **2.2000e-003** | | **0.0105** | **0.0105** | | **0.0105** | **0.0105** | **0.0000** | **186.6311** | **186.6311** | **7.4900e-003** | **0.0000** | **186.8183** |

### 3.4 Building Construction - 2030

**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 | 0.0230 | 0.8716 | 0.1523 | 3.1400e-003 | 0.0790 | 8.8000e-004 | 0.0799 | 0.0228 | 8.4000e-004 | 0.0236 | 0.0000 | 297.6468 | 297.6468 | 0.0247 | 0.0000 | 298.2633 |
| Worker | 0.0887 | 0.0501 | 0.5734 | 2.1600e-003 | 0.3206 | 1.4500e-003 | 0.3220 | 0.0852 | 1.3300e-003 | 0.0865 | 0.0000 | 195.5775 | 195.5775 | 3.5100e-003 | 0.0000 | 195.6653 |
| **Total** | **0.1117** | **0.9217** | **0.7257** | **5.3000e-003** | **0.3995** | **2.3300e-003** | **0.4019** | **0.1080** | **2.1700e-003** | **0.1101** | **0.0000** | **493.2243** | **493.2243** | **0.0282** | **0.0000** | **493.9286** |

### 3.5 Paving - 2030

**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 | 0.0692 | 0.3560 | 0.7925 | 1.4000e-003 | | 0.0165 | 0.0165 | | 0.0165 | 0.0165 | 0.0000 | 120.4976 | 120.4976 | 5.6500e-003 | 0.0000 | 120.6388 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0692** | **0.3560** | **0.7925** | **1.4000e-003** | | **0.0165** | **0.0165** | | **0.0165** | **0.0165** | **0.0000** | **120.4976** | **120.4976** | **5.6500e-003** | **0.0000** | **120.6388** |

## 3.5 Paving - 2030

### 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 | 1.6700e-003 | 9.4000e-004 | 0.0108 | 4.0000e-005 | 6.0300e-003 | 3.0000e-005 | 6.0500e-003 | 1.6000e-003 | 3.0000e-005 | 1.6300e-003 | 0.0000 | 3.6761 | 3.6761 | 7.0000e-005 | 0.0000 | 3.6777 |
| **Total** | **1.6700e-003** | **9.4000e-004** | **0.0108** | **4.0000e-005** | **6.0300e-003** | **3.0000e-005** | **6.0500e-003** | **1.6000e-003** | **3.0000e-005** | **1.6300e-003** | **0.0000** | **3.6761** | **3.6761** | **7.0000e-005** | **0.0000** | **3.6777** |

### 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 | 0.0692 | 0.3560 | 0.7925 | 1.4000e-003 | | 0.0165 | 0.0165 | | 0.0165 | 0.0165 | 0.0000 | 120.4974 | 120.4974 | 5.6500e-003 | 0.0000 | 120.6387 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0692** | **0.3560** | **0.7925** | **1.4000e-003** | | **0.0165** | **0.0165** | | **0.0165** | **0.0165** | **0.0000** | **120.4974** | **120.4974** | **5.6500e-003** | **0.0000** | **120.6387** |

### 3.5 Paving - 2030

**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 | 1.6700e-003 | 9.4000e-004 | 0.0108 | 4.0000e-005 | 6.0300e-003 | 3.0000e-005 | 6.0500e-003 | 1.6000e-003 | 3.0000e-005 | 1.6300e-003 | 0.0000 | 3.6761 | 3.6761 | 7.0000e-005 | 0.0000 | 3.6777 |
| **Total** | **1.6700e-003** | **9.4000e-004** | **0.0108** | **4.0000e-005** | **6.0300e-003** | **3.0000e-005** | **6.0500e-003** | **1.6000e-003** | **3.0000e-005** | **1.6300e-003** | **0.0000** | **3.6761** | **3.6761** | **7.0000e-005** | **0.0000** | **3.6777** |

### 3.6 Architectural Coating - 2030

**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 | 7.0681 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.7100e-003 | 0.0505 | 0.1061 | 1.8000e-004 | | 1.2000e-003 | 1.2000e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 15.0642 | 15.0642 | 6.1000e-004 | 0.0000 | 15.0794 |
| **Total** | **7.0758** | **0.0505** | **0.1061** | **1.8000e-004** | | **1.2000e-003** | **1.2000e-003** | | **1.2000e-003** | **1.2000e-003** | **0.0000** | **15.0642** | **15.0642** | **6.1000e-004** | **0.0000** | **15.0794** |

## 3.6 Architectural Coating - 2030

### 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 | 0.0147 | 8.2900e-003 | 0.0950 | 3.6000e-004 | 0.0531 | 2.4000e-004 | 0.0533 | 0.0141 | 2.2000e-004 | 0.0143 | 0.0000 | 32.3888 | 32.3888 | 5.8000e-004 | 0.0000 | 32.4033 |
| **Total** | **0.0147** | **8.2900e-003** | **0.0950** | **3.6000e-004** | **0.0531** | **2.4000e-004** | **0.0533** | **0.0141** | **2.2000e-004** | **0.0143** | **0.0000** | **32.3888** | **32.3888** | **5.8000e-004** | **0.0000** | **32.4033** |

### 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 | 7.0681 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.7100e-003 | 0.0505 | 0.1061 | 1.8000e-004 | | 1.2000e-003 | 1.2000e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 15.0642 | 15.0642 | 6.1000e-004 | 0.0000 | 15.0794 |
| **Total** | **7.0758** | **0.0505** | **0.1061** | **1.8000e-004** | | **1.2000e-003** | **1.2000e-003** | | **1.2000e-003** | **1.2000e-003** | **0.0000** | **15.0642** | **15.0642** | **6.1000e-004** | **0.0000** | **15.0794** |

### 3.6 Architectural Coating - 2030

**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 | 0.0147 | 8.2900e-003 | 0.0950 | 3.6000e-004 | 0.0531 | 2.4000e-004 | 0.0533 | 0.0141 | 2.2000e-004 | 0.0143 | 0.0000 | 32.3888 | 32.3888 | 5.8000e-004 | 0.0000 | 32.4033 |
| **Total** | **0.0147** | **8.2900e-003** | **0.0950** | **3.6000e-004** | **0.0531** | **2.4000e-004** | **0.0533** | **0.0141** | **2.2000e-004** | **0.0143** | **0.0000** | **32.3888** | **32.3888** | **5.8000e-004** | **0.0000** | **32.4033** |

## 4.0 Operational Detail - Mobile

### 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 | 17.3015 | 45.6208 | 208.8843 | 0.1922 | 14.6110 | 0.9729 | 15.5840 | 3.9087 | 0.9249 | 4.8336 | 0.0000 | 17,286.3507 | 17,286.3507 | 2.5263 | 0.0000 | 17,349.5087 |
| Unmitigated | 17.8575 | 48.4713 | 220.9648 | 0.2058 | 15.6939 | 1.0359 | 16.7298 | 4.1984 | 0.9848 | 5.1832 | 0.0000 | 18,508.2207 | 18,508.2207 | 2.6432 | 0.0000 | 18,574.2998 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 14,726.40 | 14,882.40 | 13338.00 | 41,646,703 | 38,773,081 |
| Total | 14,726.40 | 14,882.40 | 13,338.00 | 41,646,703 | 38,773,081 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| Single Family Housing | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.534300 | 0.203000 | 0.167300 | 0.054500 | 0.001300 | 0.000900 | 0.008600 | 0.020700 | 0.000000 | 0.004400 | 0.002500 | 0.000700 | 0.001800 |

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | 3,975.8156 | 3,975.8156 | 0.1798 | 0.0372 | 3,991.3940 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 3,975.8156 | 3,975.8156 | 0.1798 | 0.0372 | 3,991.3940 |
| NaturalGas Mitigated | 0.2199 | 1.8794 | 0.7997 | 0.0120 | | 0.1520 | 0.1520 | | 0.1520 | 0.1520 | 0.0000 | 2,176.5269 | 2,176.5269 | 0.0417 | 0.0399 | 2,189.4610 |
| NaturalGas Unmitigated | 0.2199 | 1.8794 | 0.7997 | 0.0120 | | 0.1520 | 0.1520 | | 0.1520 | 0.1520 | 0.0000 | 2,176.5269 | 2,176.5269 | 0.0417 | 0.0399 | 2,189.4610 |

## 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 | | | | | |
| Single Family Housing | 4.07866e+007 | 0.2199 | 1.8794 | 0.7997 | 0.0120 | | 0.1520 | 0.1520 | | 0.1520 | 0.1520 | 0.0000 | 2,176.5269 | 2,176.5269 | 0.0417 | 0.0399 | 2,189.4610 |
| Total | | 0.2199 | 1.8794 | 0.7997 | 0.0120 | | 0.1520 | 0.1520 | | 0.1520 | 0.1520 | 0.0000 | 2,176.5269 | 2,176.5269 | 0.0417 | 0.0399 | 2,189.4610 |

### 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 | | | | | |
| Single Family Housing | 4.07866e+007 | 0.2199 | 1.8794 | 0.7997 | 0.0120 | | 0.1520 | 0.1520 | | 0.1520 | 0.1520 | 0.0000 | 2,176.5269 | 2,176.5269 | 0.0417 | 0.0399 | 2,189.4610 |
| Total | | 0.2199 | 1.8794 | 0.7997 | 0.0120 | | 0.1520 | 0.1520 | | 0.1520 | 0.1520 | 0.0000 | 2,176.5269 | 2,176.5269 | 0.0417 | 0.0399 | 2,189.4610 |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Single Family Housing | 1.36668e+007 | 3,975.8156 | 0.1798 | 0.0372 | 3,991.3940 |
| Total | | 3,975.8156 | 0.1798 | 0.0372 | 3,991.3940 |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Single Family Housing | 1.36668e+007 | 3,975.8156 | 0.1798 | 0.0372 | 3,991.3940 |
| Total | | 3,975.8156 | 0.1798 | 0.0372 | 3,991.3940 |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

| | ROG | NOx | CO | SO2 | Fugitive 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 | 15.8696 | 0.7313 | 12.5753 | 4.3400e-003 | | 0.1081 | 0.1081 | | 0.1081 | 0.1081 | 0.0000 | 694.7245 | 694.7245 | 0.0360 | 0.0124 | 699.3168 |
| Unmitigated | 23.8177 | 1.9088 | 84.7554 | 0.2398 | | 11.8830 | 11.8830 | | 11.8830 | 11.8830 | 1,576.6619 | 694.7245 | 2,271.3864 | 7.4066 | 0.0124 | 2,460.2431 |

## 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 | 4.3926 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 10.9666 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 8.0163 | 1.7610 | 72.4283 | 0.2392 | | 11.8221 | 11.8221 | | 11.8221 | 11.8221 | 1,576.6619 | 675.8035 | 2,252.4655 | 7.3835 | 0.0124 | 2,440.7458 |
| Landscaping | 0.4421 | 0.1478 | 12.3270 | 6.1000e-004 | | 0.0610 | 0.0610 | | 0.0610 | 0.0610 | 0.0000 | 18.9209 | 18.9209 | 0.0231 | 0.0000 | 19.4973 |
| **Total** | **23.8177** | **1.9088** | **84.7554** | **0.2398** | | **11.8830** | **11.8830** | | **11.8830** | **11.8830** | **1,576.6619** | **694.7245** | **2,271.3864** | **7.4066** | **0.0124** | **2,460.2431** |

## 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 | 4.3926 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 10.9666 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0683 | 0.5835 | 0.2483 | 3.7200e-003 | | 0.0472 | 0.0472 | | 0.0472 | 0.0472 | 0.0000 | 675.8035 | 675.8035 | 0.0130 | 0.0124 | 679.8195 |
| Landscaping | 0.4421 | 0.1478 | 12.3270 | 6.1000e-004 | | 0.0610 | 0.0610 | | 0.0610 | 0.0610 | 0.0000 | 18.9209 | 18.9209 | 0.0231 | 0.0000 | 19.4973 |
| Total | 15.8696 | 0.7313 | 12.5754 | 4.3300e-003 | | 0.1081 | 0.1081 | | 0.1081 | 0.1081 | 0.0000 | 694.7245 | 694.7245 | 0.0360 | 0.0124 | 699.3168 |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 257.4831 | 3.3221 | 0.0803 | 364.4687 |
| Unmitigated | 257.4831 | 3.3221 | 0.0803 | 364.4687 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Single Family Housing | 101.64 / 64.0776 | 257.4831 | 3.3221 | 0.0803 | 364.4687 |
| **Total** | | **257.4831** | **3.3221** | **0.0803** | **364.4687** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Single Family Housing | 101.64 / 64.0776 | 257.4831 | 3.3221 | 0.0803 | 364.4687 |
| Total | | 257.4831 | 3.3221 | 0.0803 | 364.4687 |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 326.0684 | 19.2701 | 0.0000 | 807.8208 |
| Unmitigated | 326.0684 | 19.2701 | 0.0000 | 807.8208 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Single Family Housing | 1606.32 | 326.0684 | 19.2701 | 0.0000 | 807.8208 |
| Total | | 326.0684 | 19.2701 | 0.0000 | 807.8208 |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Single Family Housing | 1606.32 | 326.0684 | 19.2701 | 0.0000 | 807.8208 |
| Total | | 326.0684 | 19.2701 | 0.0000 | 807.8208 |

## 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

| 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 |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Live Oak Master Plan Const and Ops 2022

## Kings County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 1,470.00 | Dwelling Unit | 390.00 | 2,646,000.00 | 4204 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 37 |
| **Climate Zone** | 3 | | | **Operational Year** | 2022 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 290 | **CH4 Intensity (lb/MWhr)** | 0.022 | **N2O Intensity (lb/MWhr)** | 0.005 |

### 1.3 User Entered Comments & Non-Default Data

Live Oak Master Plan Const and Ops 2022 - Kings County, Annual

Project Characteristics - PG&E Intensity Factors

Land Use - Site plan acreage 390

Construction Phase - 8 year schedule

Architectural Coating - Rule 4601 Architectural Coatings compliance

Vehicle Trips - ITE 10th Ed. Trip Rates 9.44, 9.54, 8.55

Woodstoves - Default woodstoves

Area Coating - Rule 4601 Architectural Coatings compliance

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation - Distance to Downtown Hanford

Area Mitigation -

Energy Mitigation - 2019 Title 24 Compliance

Water Mitigation - CalGreen and MWELO conservation compliance

Waste Mitigation - Achieve 75% Statewide recycling mandate

Fleet Mix - SJVAPCD Residential Fleet Mix 2022

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | EF_Nonresidential_Interior | 150.00 | 65.00 |
| tblArchitecturalCoating | EF_Residential_Exterior | 150.00 | 65.00 |
| tblArchitecturalCoating | EF_Residential_Interior | 150.00 | 65.00 |
| tblAreaCoating | Area_EF_Residential_Exterior | 150 | 65 |
| tblAreaCoating | Area_EF_Residential_Interior | 150 | 65 |
| tblConstructionPhase | NumDays | 6,200.00 | 1,500.00 |
| tblConstructionPhase | NumDays | 440.00 | 100.00 |
| tblConstructionPhase | NumDays | 440.00 | 118.00 |
| tblConstructionPhase | PhaseEndDate | 7/22/2048 | 7/17/2030 |
| tblConstructionPhase | PhaseEndDate | 3/30/2050 | 12/4/2030 |
| tblConstructionPhase | PhaseEndDate | 12/6/2051 | 12/31/2030 |

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseStartDate | 7/23/2048 | 7/18/2030 |
| tblConstructionPhase | PhaseStartDate | 3/31/2050 | 7/19/2030 |
| tblFleetMix | HHD | 0.16 | 0.02 |
| tblFleetMix | LDA | 0.50 | 0.53 |
| tblFleetMix | LDT1 | 0.03 | 0.20 |
| tblFleetMix | LDT2 | 0.15 | 0.17 |
| tblFleetMix | LHD1 | 0.02 | 1.3000e-003 |
| tblFleetMix | LHD2 | 4.3940e-003 | 9.0000e-004 |
| tblFleetMix | MCY | 5.6650e-003 | 2.5000e-003 |
| tblFleetMix | MDV | 0.12 | 0.05 |
| tblFleetMix | MH | 6.9000e-004 | 1.8000e-003 |
| tblFleetMix | MHD | 0.01 | 8.6000e-003 |
| tblFleetMix | OBUS | 1.7250e-003 | 0.00 |
| tblFleetMix | SBUS | 9.4300e-004 | 7.0000e-004 |
| tblFleetMix | UBUS | 1.7700e-003 | 4.4000e-003 |
| tblLandUse | LotAcreage | 477.27 | 390.00 |
| tblProjectCharacteristics | CH4IntensityFactor | 0.029 | 0.022 |
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 290 |
| tblProjectCharacteristics | N2OIntensityFactor | 0.006 | 0.005 |
| tblVehicleTrips | ST_TR | 9.91 | 9.54 |
| tblVehicleTrips | SU_TR | 8.62 | 8.55 |
| tblVehicleTrips | WD_TR | 9.52 | 9.44 |

## 2.0 Emissions Summary

## 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 | | | | | |
| 2021 | 0.2615 | 2.6765 | 1.4310 | 2.6000e-003 | 1.2019 | 0.1350 | 1.3369 | 0.6580 | 0.1242 | 0.7822 | 0.0000 | 228.5265 | 228.5265 | 0.0716 | 0.0000 | 230.3174 |
| 2022 | 0.4561 | 4.7454 | 3.3372 | 6.9500e-003 | 2.2752 | 0.2115 | 2.4866 | 0.8819 | 0.1945 | 1.0764 | 0.0000 | 610.9192 | 610.9192 | 0.1929 | 0.0000 | 615.7427 |
| 2023 | 0.4409 | 4.4934 | 3.7094 | 8.2500e-003 | 1.6257 | 0.1853 | 1.8110 | 0.5246 | 0.1705 | 0.6951 | 0.0000 | 724.9175 | 724.9175 | 0.2298 | 0.0000 | 730.6613 |
| 2024 | 0.4371 | 4.0962 | 3.7489 | 9.4100e-003 | 1.6079 | 0.1566 | 1.7645 | 0.4761 | 0.1444 | 0.6205 | 0.0000 | 836.2339 | 836.2339 | 0.2091 | 0.0000 | 841.4602 |
| 2025 | 0.4334 | 3.3421 | 3.8091 | 0.0134 | 0.6911 | 0.0737 | 0.7648 | 0.1868 | 0.0693 | 0.2561 | 0.0000 | 1,222.0310 | 1,222.0310 | 0.1217 | 0.0000 | 1,225.0725 |
| 2026 | 0.4213 | 3.3129 | 3.7107 | 0.0133 | 0.6911 | 0.0737 | 0.7648 | 0.1868 | 0.0693 | 0.2560 | 0.0000 | 1,207.0544 | 1,207.0544 | 0.1216 | 0.0000 | 1,210.0944 |
| 2027 | 0.4090 | 3.2852 | 3.6064 | 0.0131 | 0.6911 | 0.0735 | 0.7646 | 0.1868 | 0.0691 | 0.2559 | 0.0000 | 1,191.3852 | 1,191.3852 | 0.1212 | 0.0000 | 1,194.4161 |
| 2028 | 0.3953 | 3.2496 | 3.5032 | 0.0129 | 0.6884 | 0.0730 | 0.7614 | 0.1860 | 0.0686 | 0.2547 | 0.0000 | 1,173.2844 | 1,173.2844 | 0.1204 | 0.0000 | 1,176.2934 |
| 2029 | 0.3844 | 3.2401 | 3.4321 | 0.0128 | 0.6911 | 0.0731 | 0.7641 | 0.1868 | 0.0687 | 0.2555 | 0.0000 | 1,165.7795 | 1,165.7795 | 0.1204 | 0.0000 | 1,168.7890 |
| 2030 | 11.0524 | 1.8452 | 2.8293 | 9.1400e-003 | 0.4323 | 0.0307 | 0.4629 | 0.1166 | 0.0305 | 0.1471 | 0.0000 | 820.4399 | 820.4399 | 0.0409 | 0.0000 | 821.4611 |
| Maximum | 11.0524 | 4.7454 | 3.8091 | 0.0134 | 2.2752 | 0.2115 | 2.4866 | 0.8819 | 0.1945 | 1.0764 | 0.0000 | 1,222.0310 | 1,222.0310 | 0.2298 | 0.0000 | 1,225.0725 |

## 2.1 Overall Construction

**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 | | | | | |
| 2021 | 0.2615 | 2.6765 | 1.4310 | 2.6000e-003 | 0.5461 | 0.1350 | 0.6811 | 0.2975 | 0.1242 | 0.4217 | 0.0000 | 228.5262 | 228.5262 | 0.0716 | 0.0000 | 230.3171 |
| 2022 | 0.4561 | 4.7454 | 3.3372 | 6.9500e-003 | 1.0348 | 0.2115 | 1.2463 | 0.3998 | 0.1945 | 0.5943 | 0.0000 | 610.9185 | 610.9185 | 0.1929 | 0.0000 | 615.7420 |
| 2023 | 0.4409 | 4.4934 | 3.7093 | 8.2500e-003 | 0.7430 | 0.1853 | 0.9283 | 0.2391 | 0.1705 | 0.4096 | 0.0000 | 724.9167 | 724.9167 | 0.2298 | 0.0000 | 730.6604 |
| 2024 | 0.4371 | 4.0962 | 3.7489 | 9.4100e-003 | 0.8114 | 0.1566 | 0.9679 | 0.2379 | 0.1444 | 0.3823 | 0.0000 | 836.2331 | 836.2331 | 0.2091 | 0.0000 | 841.4594 |
| 2025 | 0.4334 | 3.3421 | 3.8091 | 0.0134 | 0.6911 | 0.0737 | 0.7648 | 0.1868 | 0.0693 | 0.2561 | 0.0000 | 1,222.0306 | 1,222.0306 | 0.1217 | 0.0000 | 1,225.0722 |
| 2026 | 0.4213 | 3.3129 | 3.7107 | 0.0133 | 0.6911 | 0.0737 | 0.7648 | 0.1868 | 0.0693 | 0.2560 | 0.0000 | 1,207.0541 | 1,207.0541 | 0.1216 | 0.0000 | 1,210.0940 |
| 2027 | 0.4090 | 3.2852 | 3.6064 | 0.0131 | 0.6911 | 0.0735 | 0.7646 | 0.1868 | 0.0691 | 0.2559 | 0.0000 | 1,191.3848 | 1,191.3848 | 0.1212 | 0.0000 | 1,194.4157 |
| 2028 | 0.3953 | 3.2496 | 3.5032 | 0.0129 | 0.6884 | 0.0730 | 0.7614 | 0.1860 | 0.0686 | 0.2547 | 0.0000 | 1,173.2840 | 1,173.2840 | 0.1204 | 0.0000 | 1,176.2930 |
| 2029 | 0.3844 | 3.2401 | 3.4321 | 0.0128 | 0.6911 | 0.0731 | 0.7641 | 0.1868 | 0.0687 | 0.2555 | 0.0000 | 1,165.7791 | 1,165.7791 | 0.1204 | 0.0000 | 1,168.7887 |
| 2030 | 11.0524 | 1.8452 | 2.8293 | 9.1400e-003 | 0.4323 | 0.0307 | 0.4629 | 0.1166 | 0.0305 | 0.1471 | 0.0000 | 820.4395 | 820.4395 | 0.0409 | 0.0000 | 821.4607 |
| Maximum | 11.0524 | 4.7454 | 3.8091 | 0.0134 | 1.0348 | 0.2115 | 1.2463 | 0.3998 | 0.1945 | 0.5943 | 0.0000 | 1,222.0306 | 1,222.0306 | 0.2298 | 0.0000 | 1,225.0722 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 33.74 | 0.00 | 30.61 | 38.05 | 0.00 | 29.71 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Live Oak Master Plan Const and Ops 2022 - Kings County, Annual

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 7-1-2021 | 9-30-2021 | 1.4628 | 1.4628 |
| 2 | 10-1-2021 | 12-31-2021 | 1.4629 | 1.4629 |
| 3 | 1-1-2022 | 3-31-2022 | 1.1694 | 1.1694 |
| 4 | 4-1-2022 | 6-30-2022 | 1.2467 | 1.2467 |
| 5 | 7-1-2022 | 9-30-2022 | 1.3998 | 1.3998 |
| 6 | 10-1-2022 | 12-31-2022 | 1.4000 | 1.4000 |
| 7 | 1-1-2023 | 3-31-2023 | 1.2203 | 1.2203 |
| 8 | 4-1-2023 | 6-30-2023 | 1.2337 | 1.2337 |
| 9 | 7-1-2023 | 9-30-2023 | 1.2473 | 1.2473 |
| 10 | 10-1-2023 | 12-31-2023 | 1.2474 | 1.2474 |
| 11 | 1-1-2024 | 3-31-2024 | 1.1607 | 1.1607 |
| 12 | 4-1-2024 | 6-30-2024 | 1.1606 | 1.1606 |
| 13 | 7-1-2024 | 9-30-2024 | 1.1733 | 1.1733 |
| 14 | 10-1-2024 | 12-31-2024 | 1.0340 | 1.0340 |
| 15 | 1-1-2025 | 3-31-2025 | 0.9360 | 0.9360 |
| 16 | 4-1-2025 | 6-30-2025 | 0.9409 | 0.9409 |
| 17 | 7-1-2025 | 9-30-2025 | 0.9513 | 0.9513 |
| 18 | 10-1-2025 | 12-31-2025 | 0.9568 | 0.9568 |
| 19 | 1-1-2026 | 3-31-2026 | 0.9253 | 0.9253 |
| 20 | 4-1-2026 | 6-30-2026 | 0.9305 | 0.9305 |
| 21 | 7-1-2026 | 9-30-2026 | 0.9407 | 0.9407 |
| 22 | 10-1-2026 | 12-31-2026 | 0.9459 | 0.9459 |
| 23 | 1-1-2027 | 3-31-2027 | 0.9151 | 0.9151 |
| 24 | 4-1-2027 | 6-30-2027 | 0.9205 | 0.9205 |
| 25 | 7-1-2027 | 9-30-2027 | 0.9306 | 0.9306 |
| 26 | 10-1-2027 | 12-31-2027 | 0.9354 | 0.9354 |

| | | | | |
|---|---|---|---|---|
| 27 | 1-1-2028 | 3-31-2028 | 0.9160 | 0.9160 |
| 28 | 4-1-2028 | 6-30-2028 | 0.9116 | 0.9116 |
| 29 | 7-1-2028 | 9-30-2028 | 0.9216 | 0.9216 |
| 30 | 10-1-2028 | 12-31-2028 | 0.9261 | 0.9261 |
| 31 | 1-1-2029 | 3-31-2029 | 0.8970 | 0.8970 |
| 32 | 4-1-2029 | 6-30-2029 | 0.9029 | 0.9029 |
| 33 | 7-1-2029 | 9-30-2029 | 0.9128 | 0.9128 |
| 34 | 10-1-2029 | 12-31-2029 | 0.9170 | 0.9170 |
| 35 | 1-1-2030 | 3-31-2030 | 0.7409 | 0.7409 |
| 36 | 4-1-2030 | 6-30-2030 | 0.7453 | 0.7453 |
| 37 | 7-1-2030 | 9-30-2030 | 5.2255 | 5.2255 |
| | | Highest | 5.2255 | 5.2255 |

## 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 | 19.7526 | 1.8534 | 83.3407 | 0.2396 | | 11.8797 | 11.8797 | | 11.8797 | 11.8797 | 1,576.6619 | 654.6442 | 2,231.3062 | 7.4000 | 0.0117 | 2,419.7848 |
| Energy | 0.2072 | 1.7710 | 0.7536 | 0.0113 | | 0.1432 | 0.1432 | | 0.1432 | 0.1432 | 0.0000 | 3,744.9911 | 3,744.9911 | 0.1678 | 0.0668 | 3,769.0955 |
| Mobile | 4.4408 | 16.2203 | 53.8231 | 0.1534 | 14.7721 | 0.1396 | 14.9117 | 3.9491 | 0.1303 | 4.0794 | 0.0000 | 14,046.7229 | 14,046.7229 | 0.8300 | 0.0000 | 14,067.4725 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 307.2146 | 0.0000 | 307.2146 | 18.1559 | 0.0000 | 761.1113 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 30.3854 | 95.9701 | 126.3556 | 3.1282 | 0.0754 | 227.0124 |
| Total | 24.4006 | 19.8447 | 137.9173 | 0.4043 | 14.7721 | 12.1625 | 26.9346 | 3.9491 | 12.1532 | 16.1023 | 1,914.2620 | 18,542.3283 | 20,456.5903 | 29.6818 | 0.1538 | 21,244.4764 |

## 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 | 11.8045 | 0.6759 | 11.1607 | 4.0900e-003 | | 0.1048 | 0.1048 | | 0.1048 | 0.1048 | 0.0000 | 654.6442 | 654.6442 | 0.0294 | 0.0117 | 658.8585 |
| Energy | 0.1948 | 1.6646 | 0.7084 | 0.0106 | | 0.1346 | 0.1346 | | 0.1346 | 0.1346 | 0.0000 | 3,608.3869 | 3,608.3869 | 0.1644 | 0.0643 | 3,631.6649 |
| Mobile | 4.3461 | 15.5701 | 50.9423 | 0.1436 | 13.7529 | 0.1311 | 13.8839 | 3.6767 | 0.1223 | 3.7990 | 0.0000 | 13,144.5395 | 13,144.5395 | 0.7960 | 0.0000 | 13,164.4392 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 230.4110 | 0.0000 | 230.4110 | 13.6169 | 0.0000 | 570.8335 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 24.3084 | 76.7761 | 101.0845 | 2.5025 | 0.0603 | 181.6099 |
| Total | 16.3454 | 17.9106 | 62.8113 | 0.1583 | 13.7529 | 0.3705 | 14.1234 | 3.6767 | 0.3618 | 4.0384 | 254.7193 | 17,484.3468 | 17,739.0661 | 17.1093 | 0.1363 | 18,207.4060 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 33.01 | 9.75 | 54.46 | 60.85 | 6.90 | 96.95 | 47.56 | 6.90 | 97.02 | 74.92 | 86.69 | 5.71 | 13.28 | 42.36 | 11.42 | 14.30 |

## 3.0 Construction Detail

**Construction Phase**

Live Oak Master Plan Const and Ops 2022 - 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 | 7/1/2021 | 6/1/2022 | 5 | 240 | |
| 2 | Grading | Grading | 6/2/2022 | 10/16/2024 | 5 | 620 | |
| 3 | Building Construction | Building Construction | 10/17/2024 | 7/17/2030 | 5 | 1500 | |
| 4 | Paving | Paving | 7/18/2030 | 12/4/2030 | 5 | 100 | |
| 5 | Architectural Coating | Architectural Coating | 7/19/2030 | 12/31/2030 | 5 | 118 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 1550**

**Acres of Paving: 0**

**Residential Indoor: 5,358,150; Residential Outdoor: 1,786,050; 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 |
|---|---|---|---|---|---|
| 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 | 529.00 | 157.00 | 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 | 106.00 | 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 - 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 | | | | | |
| Fugitive Dust | | | | | 1.1924 | 0.0000 | 1.1924 | 0.6554 | 0.0000 | 0.6554 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2566 | 2.6728 | 1.3962 | 2.5100e-003 | | 0.1349 | 0.1349 | | 0.1241 | 0.1241 | 0.0000 | 220.6757 | 220.6757 | 0.0714 | 0.0000 | 222.4600 |
| **Total** | **0.2566** | **2.6728** | **1.3962** | **2.5100e-003** | **1.1924** | **0.1349** | **1.3273** | **0.6554** | **0.1241** | **0.7796** | **0.0000** | **220.6757** | **220.6757** | **0.0714** | **0.0000** | **222.4600** |

## 3.2 Site Preparation - 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 | 4.8300e-003 | 3.6400e-003 | 0.0348 | 9.0000e-005 | 9.5400e-003 | 6.0000e-005 | 9.6100e-003 | 2.5400e-003 | 6.0000e-005 | 2.5900e-003 | 0.0000 | 7.8507 | 7.8507 | 2.7000e-004 | 0.0000 | 7.8574 |
| **Total** | **4.8300e-003** | **3.6400e-003** | **0.0348** | **9.0000e-005** | **9.5400e-003** | **6.0000e-005** | **9.6100e-003** | **2.5400e-003** | **6.0000e-005** | **2.5900e-003** | **0.0000** | **7.8507** | **7.8507** | **2.7000e-004** | **0.0000** | **7.8574** |

### 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 | | | | | 0.5366 | 0.0000 | 0.5366 | 0.2949 | 0.0000 | 0.2949 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2566 | 2.6728 | 1.3962 | 2.5100e-003 | | 0.1349 | 0.1349 | | 0.1241 | 0.1241 | 0.0000 | 220.6755 | 220.6755 | 0.0714 | 0.0000 | 222.4597 |
| **Total** | **0.2566** | **2.6728** | **1.3962** | **2.5100e-003** | **0.5366** | **0.1349** | **0.6715** | **0.2949** | **0.1241** | **0.4191** | **0.0000** | **220.6755** | **220.6755** | **0.0714** | **0.0000** | **222.4597** |

### 3.2 Site Preparation - 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 | 4.8300e-003 | 3.6400e-003 | 0.0348 | 9.0000e-005 | 9.5400e-003 | 6.0000e-005 | 9.6100e-003 | 2.5400e-003 | 6.0000e-005 | 2.5900e-003 | 0.0000 | 7.8507 | 7.8507 | 2.7000e-004 | 0.0000 | 7.8574 |
| **Total** | **4.8300e-003** | **3.6400e-003** | **0.0348** | **9.0000e-005** | **9.5400e-003** | **6.0000e-005** | **9.6100e-003** | **2.5400e-003** | **6.0000e-005** | **2.5900e-003** | **0.0000** | **7.8507** | **7.8507** | **2.7000e-004** | **0.0000** | **7.8574** |

### 3.2 Site Preparation - 2022

**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 | | | | | 0.9756 | 0.0000 | 0.9756 | 0.5363 | 0.0000 | 0.5363 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1712 | 1.7865 | 1.0637 | 2.0500e-003 | | 0.0871 | 0.0871 | | 0.0801 | 0.0801 | 0.0000 | 180.5727 | 180.5727 | 0.0584 | 0.0000 | 182.0327 |
| **Total** | **0.1712** | **1.7865** | **1.0637** | **2.0500e-003** | **0.9756** | **0.0871** | **1.0627** | **0.5363** | **0.0801** | **0.6164** | **0.0000** | **180.5727** | **180.5727** | **0.0584** | **0.0000** | **182.0327** |

## 3.2 Site Preparation - 2022

### 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 | 3.6600e-003 | 2.6600e-003 | 0.0259 | 7.0000e-005 | 7.8100e-003 | 5.0000e-005 | 7.8600e-003 | 2.0700e-003 | 5.0000e-005 | 2.1200e-003 | 0.0000 | 6.1953 | 6.1953 | 1.9000e-004 | 0.0000 | 6.2002 |
| **Total** | **3.6600e-003** | **2.6600e-003** | **0.0259** | **7.0000e-005** | **7.8100e-003** | **5.0000e-005** | **7.8600e-003** | **2.0700e-003** | **5.0000e-005** | **2.1200e-003** | **0.0000** | **6.1953** | **6.1953** | **1.9000e-004** | **0.0000** | **6.2002** |

### 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 | | | | | 0.4390 | 0.0000 | 0.4390 | 0.2413 | 0.0000 | 0.2413 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1712 | 1.7865 | 1.0637 | 2.0500e-003 | | 0.0871 | 0.0871 | | 0.0801 | 0.0801 | 0.0000 | 180.5725 | 180.5725 | 0.0584 | 0.0000 | 182.0325 |
| **Total** | **0.1712** | **1.7865** | **1.0637** | **2.0500e-003** | **0.4390** | **0.0871** | **0.5261** | **0.2413** | **0.0801** | **0.3214** | **0.0000** | **180.5725** | **180.5725** | **0.0584** | **0.0000** | **182.0325** |

### 3.2 Site Preparation - 2022

**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 | 3.6600e-003 | 2.6600e-003 | 0.0259 | 7.0000e-005 | 7.8100e-003 | 5.0000e-005 | 7.8600e-003 | 2.0700e-003 | 5.0000e-005 | 2.1200e-003 | 0.0000 | 6.1953 | 6.1953 | 1.9000e-004 | 0.0000 | 6.2002 |
| **Total** | **3.6600e-003** | **2.6600e-003** | **0.0259** | **7.0000e-005** | **7.8100e-003** | **5.0000e-005** | **7.8600e-003** | **2.0700e-003** | **5.0000e-005** | **2.1200e-003** | **0.0000** | **6.1953** | **6.1953** | **1.9000e-004** | **0.0000** | **6.2002** |

### 3.3 Grading - 2022

**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 | | | | | 1.2796 | 0.0000 | 1.2796 | 0.3403 | 0.0000 | 0.3403 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2755 | 2.9521 | 2.2072 | 4.7200e-003 | | 0.1243 | 0.1243 | | 0.1143 | 0.1143 | 0.0000 | 414.4630 | 414.4630 | 0.1341 | 0.0000 | 417.8141 |
| **Total** | **0.2755** | **2.9521** | **2.2072** | **4.7200e-003** | **1.2796** | **0.1243** | **1.4038** | **0.3403** | **0.1143** | **0.4546** | **0.0000** | **414.4630** | **414.4630** | **0.1341** | **0.0000** | **417.8141** |

## 3.3 Grading - 2022

### 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 | 5.7200e-003 | 4.1600e-003 | 0.0405 | 1.1000e-004 | 0.0122 | 8.0000e-005 | 0.0123 | 3.2400e-003 | 7.0000e-005 | 3.3200e-003 | 0.0000 | 9.6882 | 9.6882 | 3.0000e-004 | 0.0000 | 9.6957 |
| **Total** | **5.7200e-003** | **4.1600e-003** | **0.0405** | **1.1000e-004** | **0.0122** | **8.0000e-005** | **0.0123** | **3.2400e-003** | **7.0000e-005** | **3.3200e-003** | **0.0000** | **9.6882** | **9.6882** | **3.0000e-004** | **0.0000** | **9.6957** |

### 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 | | | | | 0.5758 | 0.0000 | 0.5758 | 0.1531 | 0.0000 | 0.1531 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.2755 | 2.9521 | 2.2072 | 4.7200e-003 | | 0.1243 | 0.1243 | | 0.1143 | 0.1143 | 0.0000 | 414.4625 | 414.4625 | 0.1341 | 0.0000 | 417.8136 |
| **Total** | **0.2755** | **2.9521** | **2.2072** | **4.7200e-003** | **0.5758** | **0.1243** | **0.7001** | **0.1531** | **0.1143** | **0.2675** | **0.0000** | **414.4625** | **414.4625** | **0.1341** | **0.0000** | **417.8136** |

## 3.3 Grading - 2022

**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 | 5.7200e-003 | 4.1600e-003 | 0.0405 | 1.1000e-004 | 0.0122 | 8.0000e-005 | 0.0123 | 3.2400e-003 | 7.0000e-005 | 3.3200e-003 | 0.0000 | 9.6882 | 9.6882 | 3.0000e-004 | 0.0000 | 9.6957 |
| Total | 5.7200e-003 | 4.1600e-003 | 0.0405 | 1.1000e-004 | 0.0122 | 8.0000e-005 | 0.0123 | 3.2400e-003 | 7.0000e-005 | 3.3200e-003 | 0.0000 | 9.6882 | 9.6882 | 3.0000e-004 | 0.0000 | 9.6957 |

## 3.3 Grading - 2023

**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 | | | | | 1.6048 | 0.0000 | 1.6048 | 0.5191 | 0.0000 | 0.5191 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.4318 | 4.4870 | 3.6467 | 8.0700e-003 | | 0.1852 | 0.1852 | | 0.1704 | 0.1704 | 0.0000 | 708.9577 | 708.9577 | 0.2293 | 0.0000 | 714.6900 |
| Total | 0.4318 | 4.4870 | 3.6467 | 8.0700e-003 | 1.6048 | 0.1852 | 1.7899 | 0.5191 | 0.1704 | 0.6894 | 0.0000 | 708.9577 | 708.9577 | 0.2293 | 0.0000 | 714.6900 |

### 3.3 Grading - 2023

**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 | 9.0900e-003 | 6.3600e-003 | 0.0627 | 1.8000e-004 | 0.0209 | 1.3000e-004 | 0.0210 | 5.5500e-003 | 1.2000e-004 | 5.6700e-003 | 0.0000 | 15.9598 | 15.9598 | 4.6000e-004 | 0.0000 | 15.9713 |
| **Total** | **9.0900e-003** | **6.3600e-003** | **0.0627** | **1.8000e-004** | **0.0209** | **1.3000e-004** | **0.0210** | **5.5500e-003** | **1.2000e-004** | **5.6700e-003** | **0.0000** | **15.9598** | **15.9598** | **4.6000e-004** | **0.0000** | **15.9713** |

**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 | | | | | 0.7221 | 0.0000 | 0.7221 | 0.2336 | 0.0000 | 0.2336 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.4318 | 4.4870 | 3.6467 | 8.0700e-003 | | 0.1852 | 0.1852 | | 0.1704 | 0.1704 | 0.0000 | 708.9569 | 708.9569 | 0.2293 | 0.0000 | 714.6891 |
| **Total** | **0.4318** | **4.4870** | **3.6467** | **8.0700e-003** | **0.7221** | **0.1852** | **0.9073** | **0.2336** | **0.1704** | **0.4040** | **0.0000** | **708.9569** | **708.9569** | **0.2293** | **0.0000** | **714.6891** |

### 3.3 Grading - 2023

**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 | 9.0900e-003 | 6.3600e-003 | 0.0627 | 1.8000e-004 | 0.0209 | 1.3000e-004 | 0.0210 | 5.5500e-003 | 1.2000e-004 | 5.6700e-003 | 0.0000 | 15.9598 | 15.9598 | 4.6000e-004 | 0.0000 | 15.9713 |
| **Total** | **9.0900e-003** | **6.3600e-003** | **0.0627** | **1.8000e-004** | **0.0209** | **1.3000e-004** | **0.0210** | **5.5500e-003** | **1.2000e-004** | **5.6700e-003** | **0.0000** | **15.9598** | **15.9598** | **4.6000e-004** | **0.0000** | **15.9713** |

### 3.3 Grading - 2024

**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 | | | | | 1.4482 | 0.0000 | 1.4482 | 0.4330 | 0.0000 | 0.4330 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3347 | 3.3672 | 2.8832 | 6.4600e-003 | | 0.1389 | 0.1389 | | 0.1278 | 0.1278 | 0.0000 | 567.0030 | 567.0030 | 0.1834 | 0.0000 | 571.5875 |
| **Total** | **0.3347** | **3.3672** | **2.8832** | **6.4600e-003** | **1.4482** | **0.1389** | **1.5871** | **0.4330** | **0.1278** | **0.5608** | **0.0000** | **567.0030** | **567.0030** | **0.1834** | **0.0000** | **571.5875** |

## 3.3 Grading - 2024

### 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 | 6.8000e-003 | 4.5800e-003 | 0.0461 | 1.4000e-004 | 0.0167 | 1.0000e-004 | 0.0168 | 4.4400e-003 | 9.0000e-005 | 4.5300e-003 | 0.0000 | 12.3054 | 12.3054 | 3.3000e-004 | 0.0000 | 12.3136 |
| **Total** | **6.8000e-003** | **4.5800e-003** | **0.0461** | **1.4000e-004** | **0.0167** | **1.0000e-004** | **0.0168** | **4.4400e-003** | **9.0000e-005** | **4.5300e-003** | **0.0000** | **12.3054** | **12.3054** | **3.3000e-004** | **0.0000** | **12.3136** |

### 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 | | | | | 0.6517 | 0.0000 | 0.6517 | 0.1949 | 0.0000 | 0.1949 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.3347 | 3.3672 | 2.8832 | 6.4600e-003 | | 0.1389 | 0.1389 | | 0.1278 | 0.1278 | 0.0000 | 567.0024 | 567.0024 | 0.1834 | 0.0000 | 571.5869 |
| **Total** | **0.3347** | **3.3672** | **2.8832** | **6.4600e-003** | **0.6517** | **0.1389** | **0.7906** | **0.1949** | **0.1278** | **0.3226** | **0.0000** | **567.0024** | **567.0024** | **0.1834** | **0.0000** | **571.5869** |

### 3.3 Grading - 2024

**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 | 6.8000e-003 | 4.5800e-003 | 0.0461 | 1.4000e-004 | 0.0167 | 1.0000e-004 | 0.0168 | 4.4400e-003 | 9.0000e-005 | 4.5300e-003 | 0.0000 | 12.3054 | 12.3054 | 3.3000e-004 | 0.0000 | 12.3136 |
| **Total** | **6.8000e-003** | **4.5800e-003** | **0.0461** | **1.4000e-004** | **0.0167** | **1.0000e-004** | **0.0168** | **4.4400e-003** | **9.0000e-005** | **4.5300e-003** | **0.0000** | **12.3054** | **12.3054** | **3.3000e-004** | **0.0000** | **12.3136** |

### 3.4 Building Construction - 2024

**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 | 0.0397 | 0.3630 | 0.4365 | 7.3000e-004 | | 0.0166 | 0.0166 | | 0.0156 | 0.0156 | 0.0000 | 62.5993 | 62.5993 | 0.0148 | 0.0000 | 62.9693 |
| **Total** | **0.0397** | **0.3630** | **0.4365** | **7.3000e-004** | | **0.0166** | **0.0166** | | **0.0156** | **0.0156** | **0.0000** | **62.5993** | **62.5993** | **0.0148** | **0.0000** | **62.9693** |

## 3.4 Building Construction - 2024

### 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 | 9.1800e-003 | 0.3300 | 0.0662 | 1.1600e-003 | 0.0282 | 3.4000e-004 | 0.0286 | 8.1500e-003 | 3.2000e-004 | 8.4700e-003 | 0.0000 | 109.8274 | 109.8274 | 8.2800e-003 | 0.0000 | 110.0344 |
| Worker | 0.0467 | 0.0315 | 0.3169 | 9.3000e-004 | 0.1148 | 7.0000e-004 | 0.1154 | 0.0305 | 6.4000e-004 | 0.0311 | 0.0000 | 84.4988 | 84.4988 | 2.2600e-003 | 0.0000 | 84.5553 |
| **Total** | **0.0559** | **0.3614** | **0.3831** | **2.0900e-003** | **0.1430** | **1.0400e-003** | **0.1440** | **0.0386** | **9.6000e-004** | **0.0396** | **0.0000** | **194.3262** | **194.3262** | **0.0105** | **0.0000** | **194.5897** |

### 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 | 0.0397 | 0.3630 | 0.4365 | 7.3000e-004 | | 0.0166 | 0.0166 | | 0.0156 | 0.0156 | 0.0000 | 62.5992 | 62.5992 | 0.0148 | 0.0000 | 62.9693 |
| **Total** | **0.0397** | **0.3630** | **0.4365** | **7.3000e-004** | | **0.0166** | **0.0166** | | **0.0156** | **0.0156** | **0.0000** | **62.5992** | **62.5992** | **0.0148** | **0.0000** | **62.9693** |

### 3.4 Building Construction - 2024

**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 | 9.1800e-003 | 0.3300 | 0.0662 | 1.1600e-003 | 0.0282 | 3.4000e-004 | 0.0286 | 8.1500e-003 | 3.2000e-004 | 8.4700e-003 | 0.0000 | 109.8274 | 109.8274 | 8.2800e-003 | 0.0000 | 110.0344 |
| Worker | 0.0467 | 0.0315 | 0.3169 | 9.3000e-004 | 0.1148 | 7.0000e-004 | 0.1154 | 0.0305 | 6.4000e-004 | 0.0311 | 0.0000 | 84.4988 | 84.4988 | 2.2600e-003 | 0.0000 | 84.5553 |
| **Total** | **0.0559** | **0.3614** | **0.3831** | **2.0900e-003** | **0.1430** | **1.0400e-003** | **0.1440** | **0.0386** | **9.6000e-004** | **0.0396** | **0.0000** | **194.3262** | **194.3262** | **0.0105** | **0.0000** | **194.5897** |

### 3.4 Building Construction - 2025

**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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

## 3.4 Building Construction - 2025

### 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 | 0.0432 | 1.5776 | 0.3048 | 5.5500e-003 | 0.1365 | 1.6000e-003 | 0.1381 | 0.0394 | 1.5300e-003 | 0.0409 | 0.0000 | 526.9024 | 526.9024 | 0.0408 | 0.0000 | 527.9212 |
| Worker | 0.2118 | 0.1372 | 1.4053 | 4.3400e-003 | 0.5546 | 3.2900e-003 | 0.5579 | 0.1474 | 3.0300e-003 | 0.1504 | 0.0000 | 392.4737 | 392.4737 | 9.7700e-003 | 0.0000 | 392.7178 |
| **Total** | **0.2550** | **1.7148** | **1.7100** | **9.8900e-003** | **0.6911** | **4.8900e-003** | **0.6960** | **0.1868** | **4.5600e-003** | **0.1913** | **0.0000** | **919.3761** | **919.3761** | **0.0505** | **0.0000** | **920.6390** |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

## 3.4 Building Construction - 2025

**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 | 0.0432 | 1.5776 | 0.3048 | 5.5500e-003 | 0.1365 | 1.6000e-003 | 0.1381 | 0.0394 | 1.5300e-003 | 0.0409 | 0.0000 | 526.9024 | 526.9024 | 0.0408 | 0.0000 | 527.9212 |
| Worker | 0.2118 | 0.1372 | 1.4053 | 4.3400e-003 | 0.5546 | 3.2900e-003 | 0.5579 | 0.1474 | 3.0300e-003 | 0.1504 | 0.0000 | 392.4737 | 392.4737 | 9.7700e-003 | 0.0000 | 392.7178 |
| **Total** | **0.2550** | **1.7148** | **1.7100** | **9.8900e-003** | **0.6911** | **4.8900e-003** | **0.6960** | **0.1868** | **4.5600e-003** | **0.1913** | **0.0000** | **919.3761** | **919.3761** | **0.0505** | **0.0000** | **920.6390** |

## 3.4 Building Construction - 2026

**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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

## 3.4 Building Construction - 2026

### 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 | 0.0423 | 1.5603 | 0.2934 | 5.5200e-003 | 0.1365 | 1.5800e-003 | 0.1380 | 0.0394 | 1.5100e-003 | 0.0409 | 0.0000 | 523.4007 | 523.4007 | 0.0414 | 0.0000 | 524.4364 |
| Worker | 0.2005 | 0.1253 | 1.3182 | 4.2100e-003 | 0.5546 | 3.2600e-003 | 0.5579 | 0.1474 | 3.0000e-003 | 0.1504 | 0.0000 | 380.9988 | 380.9988 | 9.0300e-003 | 0.0000 | 381.2245 |
| **Total** | **0.2428** | **1.6856** | **1.6116** | **9.7300e-003** | **0.6911** | **4.8400e-003** | **0.6959** | **0.1868** | **4.5100e-003** | **0.1913** | **0.0000** | **904.3996** | **904.3996** | **0.0505** | **0.0000** | **905.6608** |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

## 3.4 Building Construction - 2026

**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 | 0.0423 | 1.5603 | 0.2934 | 5.5200e-003 | 0.1365 | 1.5800e-003 | 0.1380 | 0.0394 | 1.5100e-003 | 0.0409 | 0.0000 | 523.4007 | 523.4007 | 0.0414 | 0.0000 | 524.4364 |
| Worker | 0.2005 | 0.1253 | 1.3182 | 4.2100e-003 | 0.5546 | 3.2600e-003 | 0.5579 | 0.1474 | 3.0000e-003 | 0.1504 | 0.0000 | 380.9988 | 380.9988 | 9.0300e-003 | 0.0000 | 381.2245 |
| **Total** | **0.2428** | **1.6856** | **1.6116** | **9.7300e-003** | **0.6911** | **4.8400e-003** | **0.6959** | **0.1868** | **4.5100e-003** | **0.1913** | **0.0000** | **904.3996** | **904.3996** | **0.0505** | **0.0000** | **905.6608** |

## 3.4 Building Construction - 2027

**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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

## 3.4 Building Construction - 2027

### 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 | 0.0414 | 1.5435 | 0.2828 | 5.4900e-003 | 0.1365 | 1.5700e-003 | 0.1380 | 0.0394 | 1.5000e-003 | 0.0409 | 0.0000 | 520.3904 | 520.3904 | 0.0419 | 0.0000 | 521.4385 |
| Worker | 0.1892 | 0.1144 | 1.2246 | 4.0700e-003 | 0.5546 | 3.1000e-003 | 0.5577 | 0.1474 | 2.8600e-003 | 0.1502 | 0.0000 | 368.3399 | 368.3399 | 8.1700e-003 | 0.0000 | 368.5441 |
| **Total** | **0.2306** | **1.6579** | **1.5074** | **9.5600e-003** | **0.6911** | **4.6700e-003** | **0.6957** | **0.1868** | **4.3600e-003** | **0.1911** | **0.0000** | **888.7303** | **888.7303** | **0.0501** | **0.0000** | **889.9826** |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

### 3.4 Building Construction - 2027

**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 | 0.0414 | 1.5435 | 0.2828 | 5.4900e-003 | 0.1365 | 1.5700e-003 | 0.1380 | 0.0394 | 1.5000e-003 | 0.0409 | 0.0000 | 520.3904 | 520.3904 | 0.0419 | 0.0000 | 521.4385 |
| Worker | 0.1892 | 0.1144 | 1.2246 | 4.0700e-003 | 0.5546 | 3.1000e-003 | 0.5577 | 0.1474 | 2.8600e-003 | 0.1502 | 0.0000 | 368.3399 | 368.3399 | 8.1700e-003 | 0.0000 | 368.5441 |
| **Total** | **0.2306** | **1.6579** | **1.5074** | **9.5600e-003** | **0.6911** | **4.6700e-003** | **0.6957** | **0.1868** | **4.3600e-003** | **0.1911** | **0.0000** | **888.7303** | **888.7303** | **0.0501** | **0.0000** | **889.9826** |

### 3.4 Building Construction - 2028

**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 | 0.1778 | 1.6211 | 2.0910 | 3.5000e-003 | | 0.0686 | 0.0686 | | 0.0645 | 0.0645 | 0.0000 | 301.4953 | 301.4953 | 0.0709 | 0.0000 | 303.2671 |
| **Total** | **0.1778** | **1.6211** | **2.0910** | **3.5000e-003** | | **0.0686** | **0.0686** | | **0.0645** | **0.0645** | **0.0000** | **301.4953** | **301.4953** | **0.0709** | **0.0000** | **303.2671** |

## 3.4 Building Construction - 2028

### 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 | 0.0406 | 1.5245 | 0.2742 | 5.4400e-003 | 0.1359 | 1.5400e-003 | 0.1375 | 0.0393 | 1.4800e-003 | 0.0407 | 0.0000 | 516.0359 | 516.0359 | 0.0421 | 0.0000 | 517.0881 |
| Worker | 0.1769 | 0.1041 | 1.1381 | 3.9300e-003 | 0.5525 | 2.8800e-003 | 0.5554 | 0.1468 | 2.6500e-003 | 0.1494 | 0.0000 | 355.7532 | 355.7532 | 7.4000e-003 | 0.0000 | 355.9382 |
| **Total** | **0.2175** | **1.6286** | **1.4122** | **9.3700e-003** | **0.6884** | **4.4200e-003** | **0.6928** | **0.1860** | **4.1300e-003** | **0.1902** | **0.0000** | **871.7891** | **871.7891** | **0.0495** | **0.0000** | **873.0263** |

### 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 | 0.1778 | 1.6211 | 2.0910 | 3.5000e-003 | | 0.0686 | 0.0686 | | 0.0645 | 0.0645 | 0.0000 | 301.4949 | 301.4949 | 0.0709 | 0.0000 | 303.2667 |
| **Total** | **0.1778** | **1.6211** | **2.0910** | **3.5000e-003** | | **0.0686** | **0.0686** | | **0.0645** | **0.0645** | **0.0000** | **301.4949** | **301.4949** | **0.0709** | **0.0000** | **303.2667** |

### 3.4 Building Construction - 2028

**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 | 0.0406 | 1.5245 | 0.2742 | 5.4400e-003 | 0.1359 | 1.5400e-003 | 0.1375 | 0.0393 | 1.4800e-003 | 0.0407 | 0.0000 | 516.0359 | 516.0359 | 0.0421 | 0.0000 | 517.0881 |
| Worker | 0.1769 | 0.1041 | 1.1381 | 3.9300e-003 | 0.5525 | 2.8800e-003 | 0.5554 | 0.1468 | 2.6500e-003 | 0.1494 | 0.0000 | 355.7532 | 355.7532 | 7.4000e-003 | 0.0000 | 355.9382 |
| **Total** | **0.2175** | **1.6286** | **1.4122** | **9.3700e-003** | **0.6884** | **4.4200e-003** | **0.6928** | **0.1860** | **4.1300e-003** | **0.1902** | **0.0000** | **871.7891** | **871.7891** | **0.0495** | **0.0000** | **873.0263** |

### 3.4 Building Construction - 2029

**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 | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

## 3.4 Building Construction - 2029

### 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 | 0.0402 | 1.5174 | 0.2684 | 5.4400e-003 | 0.1365 | 1.5300e-003 | 0.1380 | 0.0394 | 1.4700e-003 | 0.0409 | 0.0000 | 515.9412 | 515.9412 | 0.0425 | 0.0000 | 517.0039 |
| Worker | 0.1657 | 0.0954 | 1.0647 | 3.8400e-003 | 0.5546 | 2.6900e-003 | 0.5573 | 0.1474 | 2.4800e-003 | 0.1498 | 0.0000 | 347.1834 | 347.1834 | 6.7300e-003 | 0.0000 | 347.3516 |
| **Total** | **0.2059** | **1.6128** | **1.3331** | **9.2800e-003** | **0.6911** | **4.2200e-003** | **0.6953** | **0.1868** | **3.9500e-003** | **0.1907** | **0.0000** | **863.1246** | **863.1246** | **0.0492** | **0.0000** | **864.3555** |

### 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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

### 3.4 Building Construction - 2029

**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 | 0.0402 | 1.5174 | 0.2684 | 5.4400e-003 | 0.1365 | 1.5300e-003 | 0.1380 | 0.0394 | 1.4700e-003 | 0.0409 | 0.0000 | 515.9412 | 515.9412 | 0.0425 | 0.0000 | 517.0039 |
| Worker | 0.1657 | 0.0954 | 1.0647 | 3.8400e-003 | 0.5546 | 2.6900e-003 | 0.5573 | 0.1474 | 2.4800e-003 | 0.1498 | 0.0000 | 347.1834 | 347.1834 | 6.7300e-003 | 0.0000 | 347.3516 |
| **Total** | **0.2059** | **1.6128** | **1.3331** | **9.2800e-003** | **0.6911** | **4.2200e-003** | **0.6953** | **0.1868** | **3.9500e-003** | **0.1907** | **0.0000** | **863.1246** | **863.1246** | **0.0492** | **0.0000** | **864.3555** |

### 3.4 Building Construction - 2030

**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 | 0.0930 | 0.5634 | 1.1472 | 2.2000e-003 | | 0.0105 | 0.0105 | | 0.0105 | 0.0105 | 0.0000 | 186.6313 | 186.6313 | 7.4900e-003 | 0.0000 | 186.8185 |
| **Total** | **0.0930** | **0.5634** | **1.1472** | **2.2000e-003** | | **0.0105** | **0.0105** | | **0.0105** | **0.0105** | **0.0000** | **186.6313** | **186.6313** | **7.4900e-003** | **0.0000** | **186.8185** |

## 3.4 Building Construction - 2030

### 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 | 0.0216 | 0.8194 | 0.1432 | 2.9500e-003 | 0.0742 | 8.3000e-004 | 0.0751 | 0.0214 | 7.9000e-004 | 0.0222 | 0.0000 | 279.8237 | 279.8237 | 0.0232 | 0.0000 | 280.4032 |
| Worker | 0.0835 | 0.0471 | 0.5398 | 2.0300e-003 | 0.3017 | 1.3600e-003 | 0.3031 | 0.0802 | 1.2500e-003 | 0.0814 | 0.0000 | 184.0934 | 184.0934 | 3.3100e-003 | 0.0000 | 184.1760 |
| **Total** | **0.1051** | **0.8666** | **0.6829** | **4.9800e-003** | **0.3760** | **2.1900e-003** | **0.3782** | **0.1016** | **2.0400e-003** | **0.1037** | **0.0000** | **463.9170** | **463.9170** | **0.0265** | **0.0000** | **464.5792** |

### 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 | 0.0930 | 0.5634 | 1.1471 | 2.2000e-003 | | 0.0105 | 0.0105 | | 0.0105 | 0.0105 | 0.0000 | 186.6311 | 186.6311 | 7.4900e-003 | 0.0000 | 186.8183 |
| **Total** | **0.0930** | **0.5634** | **1.1471** | **2.2000e-003** | | **0.0105** | **0.0105** | | **0.0105** | **0.0105** | **0.0000** | **186.6311** | **186.6311** | **7.4900e-003** | **0.0000** | **186.8183** |

### 3.4 Building Construction - 2030

**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 | 0.0216 | 0.8194 | 0.1432 | 2.9500e-003 | 0.0742 | 8.3000e-004 | 0.0751 | 0.0214 | 7.9000e-004 | 0.0222 | 0.0000 | 279.8237 | 279.8237 | 0.0232 | 0.0000 | 280.4032 |
| Worker | 0.0835 | 0.0471 | 0.5398 | 2.0300e-003 | 0.3017 | 1.3600e-003 | 0.3031 | 0.0802 | 1.2500e-003 | 0.0814 | 0.0000 | 184.0934 | 184.0934 | 3.3100e-003 | 0.0000 | 184.1760 |
| **Total** | **0.1051** | **0.8666** | **0.6829** | **4.9800e-003** | **0.3760** | **2.1900e-003** | **0.3782** | **0.1016** | **2.0400e-003** | **0.1037** | **0.0000** | **463.9170** | **463.9170** | **0.0265** | **0.0000** | **464.5792** |

### 3.5 Paving - 2030

**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 | 0.0692 | 0.3560 | 0.7925 | 1.4000e-003 | | 0.0165 | 0.0165 | | 0.0165 | 0.0165 | 0.0000 | 120.4976 | 120.4976 | 5.6500e-003 | 0.0000 | 120.6388 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0692** | **0.3560** | **0.7925** | **1.4000e-003** | | **0.0165** | **0.0165** | | **0.0165** | **0.0165** | **0.0000** | **120.4976** | **120.4976** | **5.6500e-003** | **0.0000** | **120.6388** |

### 3.5 Paving - 2030

**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 | 1.6700e-003 | 9.4000e-004 | 0.0108 | 4.0000e-005 | 6.0300e-003 | 3.0000e-005 | 6.0500e-003 | 1.6000e-003 | 3.0000e-005 | 1.6300e-003 | 0.0000 | 3.6761 | 3.6761 | 7.0000e-005 | 0.0000 | 3.6777 |
| **Total** | **1.6700e-003** | **9.4000e-004** | **0.0108** | **4.0000e-005** | **6.0300e-003** | **3.0000e-005** | **6.0500e-003** | **1.6000e-003** | **3.0000e-005** | **1.6300e-003** | **0.0000** | **3.6761** | **3.6761** | **7.0000e-005** | **0.0000** | **3.6777** |

**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 | 0.0692 | 0.3560 | 0.7925 | 1.4000e-003 | | 0.0165 | 0.0165 | | 0.0165 | 0.0165 | 0.0000 | 120.4974 | 120.4974 | 5.6500e-003 | 0.0000 | 120.6387 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0692** | **0.3560** | **0.7925** | **1.4000e-003** | | **0.0165** | **0.0165** | | **0.0165** | **0.0165** | **0.0000** | **120.4974** | **120.4974** | **5.6500e-003** | **0.0000** | **120.6387** |

### 3.5 Paving - 2030

**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 | 1.6700e-003 | 9.4000e-004 | 0.0108 | 4.0000e-005 | 6.0300e-003 | 3.0000e-005 | 6.0500e-003 | 1.6000e-003 | 3.0000e-005 | 1.6300e-003 | 0.0000 | 3.6761 | 3.6761 | 7.0000e-005 | 0.0000 | 3.6777 |
| Total | 1.6700e-003 | 9.4000e-004 | 0.0108 | 4.0000e-005 | 6.0300e-003 | 3.0000e-005 | 6.0500e-003 | 1.6000e-003 | 3.0000e-005 | 1.6300e-003 | 0.0000 | 3.6761 | 3.6761 | 7.0000e-005 | 0.0000 | 3.6777 |

### 3.6 Architectural Coating - 2030

**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 | 10.7618 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.7100e-003 | 0.0505 | 0.1061 | 1.8000e-004 | | 1.2000e-003 | 1.2000e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 15.0642 | 15.0642 | 6.1000e-004 | 0.0000 | 15.0794 |
| Total | 10.7696 | 0.0505 | 0.1061 | 1.8000e-004 | | 1.2000e-003 | 1.2000e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 15.0642 | 15.0642 | 6.1000e-004 | 0.0000 | 15.0794 |

## 3.6 Architectural Coating - 2030

### 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 | 0.0139 | 7.8500e-003 | 0.0899 | 3.4000e-004 | 0.0502 | 2.3000e-004 | 0.0505 | 0.0134 | 2.1000e-004 | 0.0136 | 0.0000 | 30.6536 | 30.6536 | 5.5000e-004 | 0.0000 | 30.6674 |
| **Total** | **0.0139** | **7.8500e-003** | **0.0899** | **3.4000e-004** | **0.0502** | **2.3000e-004** | **0.0505** | **0.0134** | **2.1000e-004** | **0.0136** | **0.0000** | **30.6536** | **30.6536** | **5.5000e-004** | **0.0000** | **30.6674** |

### 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 | 10.7618 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.7100e-003 | 0.0505 | 0.1061 | 1.8000e-004 | | 1.2000e-003 | 1.2000e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 15.0642 | 15.0642 | 6.1000e-004 | 0.0000 | 15.0794 |
| **Total** | **10.7696** | **0.0505** | **0.1061** | **1.8000e-004** | | **1.2000e-003** | **1.2000e-003** | | **1.2000e-003** | **1.2000e-003** | **0.0000** | **15.0642** | **15.0642** | **6.1000e-004** | **0.0000** | **15.0794** |

### 3.6 Architectural Coating - 2030

**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 | 0.0139 | 7.8500e-003 | 0.0899 | 3.4000e-004 | 0.0502 | 2.3000e-004 | 0.0505 | 0.0134 | 2.1000e-004 | 0.0136 | 0.0000 | 30.6536 | 30.6536 | 5.5000e-004 | 0.0000 | 30.6674 |
| **Total** | **0.0139** | **7.8500e-003** | **0.0899** | **3.4000e-004** | **0.0502** | **2.3000e-004** | **0.0505** | **0.0134** | **2.1000e-004** | **0.0136** | **0.0000** | **30.6536** | **30.6536** | **5.5000e-004** | **0.0000** | **30.6674** |

## 4.0 Operational Detail - Mobile

### 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 | 4.3461 | 15.5701 | 50.9423 | 0.1436 | 13.7529 | 0.1311 | 13.8839 | 3.6767 | 0.1223 | 3.7990 | 0.0000 | 13,144.5395 | 13,144.5395 | 0.7960 | 0.0000 | 13,164.4392 |
| Unmitigated | 4.4408 | 16.2203 | 53.8231 | 0.1534 | 14.7721 | 0.1396 | 14.9117 | 3.9491 | 0.1303 | 4.0794 | 0.0000 | 14,046.7229 | 14,046.7229 | 0.8300 | 0.0000 | 14,067.4725 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 13,876.80 | 14,023.80 | 12568.50 | 39,244,009 | 36,536,172 |
| Total | 13,876.80 | 14,023.80 | 12,568.50 | 39,244,009 | 36,536,172 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |
| Single Family Housing | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.534300 | 0.203000 | 0.167300 | 0.054500 | 0.001300 | 0.000900 | 0.008600 | 0.020700 | 0.000000 | 0.004400 | 0.002500 | 0.000700 | 0.001800 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

| | ROG | NOx | CO | SO2 | Fugitive 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 | 1,680.5524 | 1,680.5524 | 0.1275 | 0.0290 | 1,692.3743 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 1,694.0330 | 1,694.0330 | 0.1285 | 0.0292 | 1,705.9496 |
| NaturalGas Mitigated | 0.1948 | 1.6646 | 0.7084 | 0.0106 | | 0.1346 | 0.1346 | | 0.1346 | 0.1346 | 0.0000 | 1,927.8345 | 1,927.8345 | 0.0370 | 0.0353 | 1,939.2907 |
| NaturalGas Unmitigated | 0.2072 | 1.7710 | 0.7536 | 0.0113 | | 0.1432 | 0.1432 | | 0.1432 | 0.1432 | 0.0000 | 2,050.9581 | 2,050.9581 | 0.0393 | 0.0376 | 2,063.1459 |

## 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 | | | | | |
| Single Family Housing | 3.84335e+007 | 0.2072 | 1.7710 | 0.7536 | 0.0113 | | 0.1432 | 0.1432 | | 0.1432 | 0.1432 | 0.0000 | 2,050.9581 | 2,050.9581 | 0.0393 | 0.0376 | 2,063.1459 |
| Total | | 0.2072 | 1.7710 | 0.7536 | 0.0113 | | 0.1432 | 0.1432 | | 0.1432 | 0.1432 | 0.0000 | 2,050.9581 | 2,050.9581 | 0.0393 | 0.0376 | 2,063.1459 |

### 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 | | | | | |
| Single Family Housing | 3.61263e+007 | 0.1948 | 1.6646 | 0.7084 | 0.0106 | | 0.1346 | 0.1346 | | 0.1346 | 0.1346 | 0.0000 | 1,927.8345 | 1,927.8345 | 0.0370 | 0.0353 | 1,939.2907 |
| Total | | 0.1948 | 1.6646 | 0.7084 | 0.0106 | | 0.1346 | 0.1346 | | 0.1346 | 0.1346 | 0.0000 | 1,927.8345 | 1,927.8345 | 0.0370 | 0.0353 | 1,939.2907 |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Single Family Housing | 1.28783e+007 | 1,694.0330 | 0.1285 | 0.0292 | 1,705.9496 |
| Total | | 1,694.0330 | 0.1285 | 0.0292 | 1,705.9496 |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Single Family Housing | 1.27758e+007 | 1,680.5524 | 0.1275 | 0.0290 | 1,692.3743 |
| Total | | 1,680.5524 | 0.1275 | 0.0290 | 1,692.3743 |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use only Natural Gas Hearths

| | ROG | NOx | CO | SO2 | Fugitive 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 | 11.8045 | 0.6759 | 11.1607 | 4.0900e-003 | | 0.1048 | 0.1048 | | 0.1048 | 0.1048 | 0.0000 | 654.6442 | 654.6442 | 0.0294 | 0.0117 | 658.8585 |
| Unmitigated | 19.7526 | 1.8534 | 83.3407 | 0.2396 | | 11.8797 | 11.8797 | | 11.8797 | 11.8797 | 1,576.6619 | 654.6442 | 2,231.3062 | 7.4000 | 0.0117 | 2,419.7848 |

## 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 | 1.0762 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 10.3340 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 8.0124 | 1.7274 | 72.4140 | 0.2390 | | 11.8193 | 11.8193 | | 11.8193 | 11.8193 | 1,576.6619 | 636.8149 | 2,213.4768 | 7.3828 | 0.0117 | 2,401.5254 |
| Landscaping | 0.3300 | 0.1260 | 10.9267 | 5.8000e-004 | | 0.0604 | 0.0604 | | 0.0604 | 0.0604 | 0.0000 | 17.8293 | 17.8293 | 0.0172 | 0.0000 | 18.2594 |
| **Total** | **19.7526** | **1.8534** | **83.3407** | **0.2396** | | **11.8797** | **11.8797** | | **11.8797** | **11.8797** | **1,576.6619** | **654.6442** | **2,231.3062** | **7.4000** | **0.0117** | **2,419.7848** |

### 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 | 1.0762 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 10.3340 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0644 | 0.5499 | 0.2340 | 3.5100e-003 | | 0.0445 | 0.0445 | | 0.0445 | 0.0445 | 0.0000 | 636.8149 | 636.8149 | 0.0122 | 0.0117 | 640.5991 |
| Landscaping | 0.3300 | 0.1260 | 10.9267 | 5.8000e-004 | | 0.0604 | 0.0604 | | 0.0604 | 0.0604 | 0.0000 | 17.8293 | 17.8293 | 0.0172 | 0.0000 | 18.2594 |
| **Total** | **11.8045** | **0.6759** | **11.1607** | **4.0900e-003** | | **0.1048** | **0.1048** | | **0.1048** | **0.1048** | **0.0000** | **654.6442** | **654.6442** | **0.0294** | **0.0117** | **658.8585** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 101.0845 | 2.5025 | 0.0603 | 181.6099 |
| Unmitigated | 126.3556 | 3.1282 | 0.0754 | 227.0124 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Single Family Housing | 95.7764 / 60.3808 | 126.3556 | 3.1282 | 0.0754 | 227.0124 |
| **Total** | | **126.3556** | **3.1282** | **0.0754** | **227.0124** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Single Family Housing | 76.6211 / 48.3046 | 101.0845 | 2.5025 | 0.0603 | 181.6099 |
| Total | | 101.0845 | 2.5025 | 0.0603 | 181.6099 |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 230.4110 | 13.6169 | 0.0000 | 570.8335 |
| Unmitigated | 307.2146 | 18.1559 | 0.0000 | 761.1113 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Single Family Housing | 1513.44 | 307.2146 | 18.1559 | 0.0000 | 761.1113 |
| Total | | 307.2146 | 18.1559 | 0.0000 | 761.1113 |

### 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Single Family Housing | 1135.08 | 230.4110 | 13.6169 | 0.0000 | 570.8335 |
| Total | | 230.4110 | 13.6169 | 0.0000 | 570.8335 |

## 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**

| 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 |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|

set forth in §2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 Code of Federal Regulations.

b. Improve Walkability Design – This measure is to improve design elements to enhance walkability and connectivity. Improved street network characteristics within a neighborhood include street accessibility, usually measured in terms of average block size, proportion of four-way intersections, or number of intersections per square mile. Design is also measured in terms of sidewalk coverage, building setbacks, street widths, pedestrian crossings, presence of street trees, and a host of other physical variables that differentiate pedestrian-oriented environments from auto-oriented environments.

c. Improve Destination Accessibility – This measure is to locate the project in an area with high accessibility to destinations. Destination accessibility is measured in terms of the number of jobs or other attractions reachable within a given travel time, which tends to be highest at central locations and lowest at peripheral ones. The location of the project also increases the potential for pedestrians to walk and bike to these destinations and therefore reduces the (vehicle miles traveled) VMT.

d. Increase Transit Accessibility – This measure is to locate the project with high density near transit which will facilitate the use of transit by people traveling to or from the Project site. The use of transit results in a mode shift and therefore reduced VMT. A project with a residential/commercial center designed around a rail or bus station, is called a transit-oriented development (TOD). The project description should include, at a minimum, the following design features:

- A transit station/stop with high-quality, high-frequency bus service located within a 5-10 minute walk (or roughly ¼ mile from stop to edge of development), and/or
- A rail station located within a 20 minute walk (or roughly ½ mile from station to edge of development)
- Fast, frequent, and reliable transit service connecting to a high percentage of regional destinations
- Neighborhood designed for walking and cycling

e. Voluntary Emission Reduction Agreement - Design elements, mitigation measures, and compliance with District rules and regulations may not be sufficient to reduce project-related impacts on air quality to a less than significant level. In such situation, project proponents may enter into a Voluntary Emission Reduction Agreement (VERA) with the District to reduce the project related impact on air quality to a less than significant level. A VERA is a mitigation measure by which the project proponent provides pound-for-pound mitigation of air emissions increases through a process that funds and implements emission reduction projects, which are administered through the District's emission reduction incentive grant programs. A VERA can be implemented to address impacts from both construction and operational phases of a project.

The District recommends that a copy of the District's comment letter be provided to the Project proponent. District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this Project. If you have any questions or require further information, please contact Carol Flores by e-mail at carol.flores@valleyair.org or by phone at (559) 230-5935. When calling or emailing the District, please reference District CEQA number 20200402.

Analysis:

The project will be subject to District Rule 9510, which is intended to mitigate the project's impact on air quality though design elements or payment of applicable off-site mitigation fees. An Air Impact Assessment application is required to be submitted to the SJVAPCD prior to issuance of a building permit.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|

The project does not propose renovation or demolition of any buildings on site, therefore, the project is not subject to District Rule 4002.

The project is required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to any earthmoving activities.

A copy of the District's comments has been provided to the Project proponent. The Project proponent has been encouraged to contact the Air District's small Business Assistance Office to identify other rules and regulations the project may be subject to.

**Checklist Discussion**

a) **Less than Significant Impact with Mitigation Incorporation** - The project will not disrupt implementation of the San Joaquin Valley Unified Air Pollution Control District's Air Quality Plan. Compliance with the Air District's Air Quality Plan is a requirement of development. Additionally, the applicant will be required to obtain any necessary permits through the SJVAPCD. With these mitigation measures, the project will have a less than significant impact. Coccidiodes immiti, the fungus that causes valley fever, a serious and potentially long-term respiratory illness, is endemic in the soils of Kings County. Construction activities that disturb soils containing the spores of the fungus can put workers and the nearby public at risk. Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents. More information regarding the prevention of work related valley fever is available at www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf and http://www.cdph.ca.gov/programs/ohb/Documents/OccCocci.pdf. Contact the San Joaquin Valley Air Pollution Control District for more information on dust control techniques.

b) **Less than Significant with Mitigation Incorporation** – in a consultation received from the San Joaquin Valley Air Pollution Control District, it was determined that the project would not exceed the District's significance thresholds for NOX, ROG, or PM10. The District concluded that the project specific criteria pollutant emissions would have no significant adverse impact on air quality. The project will be subject to District Rule 9510, which is intended to mitigate the project's impact on air quality though design elements or payment of applicable off-site mitigation fees. An Air Impact Assessment application is required to be submitted to the SJVAPCD prior to issuance of a building permit. The project is required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to any earthmoving activities.

c) **Less than Significant with Mitigation Incorporation** – in a consultation received from the San Joaquin Valley Air Pollution Control District, it was determined that the project would not exceed the District's significance thresholds for NOX, ROG, or PM10. The District concluded that the project specific criteria pollutant emissions would have no significant adverse impact on air quality. The District concluded that the project specific criteria pollutant emissions would have no significant adverse impact on air quality. The project will be subject to District Rule 9510, which is intended to mitigate the project's impact on air quality though design elements or payment of applicable off-site mitigation fees. An Air Impact Assessment application is required to be submitted to the SJVAPCD prior to issuance of a building permit. The project is required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to any earthmoving activities.

d) Less than Significant Impact - There are no known pollutant concentrations that would be generated by the future residential development project that would expose sensitive receptors to substantial pollutant concentrations. The nearest potential sensitive receptors are directly to the south, east and west, where residential development is located or proposed; however, since there are not known pollutant concentrations to be emitted from the project, the project impact is considered less than significant

e) Less than Significant Impact – the proposed project is for a residential development. The normal use of a

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|

residential subdivision does not create objectionable odors. No objectionable odors are anticipated to occur as a result of development of the residential subdivision. Therefore, the impact is considered less than significant.

**Mitigation Measures:**

**MM Air Quality 1:** That the applicant complies with the SJVAPCDC Air Quality Plan and obtains any necessary permits through the SJVAPCD.

**MM Air Quality 2:** That effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents. More information regarding the prevention of work related valley fever is available at www.cdph.ca.gov/programs/hesis/Documents/CocciFact.pdf and http://www.cdph.ca.gov/programs/ohb/Documents/OccCocci.pdf. Contact the San Joaquin Valley Air Pollution Control District for more information on dust control techniques.

**MM Air Quality 3:** The project is subject to District Rule 9510, which is intended to mitigate a project's impact on air quality through project design elements or by payment of applicable off-site mitigation fees. The applicant is required to submit an Air Impact Assessment (AIA) application to the District prior to issuance of a building permit.

**Conclusion:** Less than Significant with Mitigation Incorporation -The project will not create or result in any significant air quality impacts, with the incorporation of the rules and regulations of the SJVUAPCD for dust control measures.

**Source(s):** Hanford General Plan (2017), General Plan Environmental Impact Report (2017), San Joaquin Valley Air Pollution Control District, California Air Resources Board 2008, Ambient Air Quality Standards (4/1/2008) http://www.arb.ca.ags; Consultation received from the San Joaquin Valley Air Pollution Control District on February 15, 2018 (attached)

| **IV. 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 Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☑ | ☐ |
| 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 Game or US Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☑ |
| 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? | ☐ | ☐ | ☐ | ☑ |
| 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 | ☐ | ☐ | ☑ | ☐ |