Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

Mitigated Negative Declaration

Pursuant to Title 14, Division 6, Chapter 3, Article 6, Sections 15070 and 15071 of the California Code of Regulations and pursuant to the Procedures for Preparation and Processing of Environmental Documents adopted by the County of Sacramento pursuant to Sacramento County Ordinance No. SCC-116, the Environmental Coordinator of Sacramento County, State of California, does prepare, make, declare, publish, and cause to be filed with the County Clerk of Sacramento County, State of California, this Mitigated Negative Declaration re: The Project described as follows:

1. **Control Number:** PLNP2022-00088

2. **Title and Short Description of Project:** Hazel Ridge

The project consists of the following entitlement requests:

1. **Community Plan Amendment** of approximately 4.63 gross acres from the existing RD-5 (Residential, 5 acres) land use designation to the proposed RD-10 (Residential, 10 acres) land use designation.
2. A **Rezone** of approximately 4.63 gross acres from the existing RD-5 zoning district to the proposed RD-10 zoning district.
3. A **Tentative Subdivision Map** to divide 4.63 gross acres into 23 single-family residential lots and 12 halfplex lots, and one drainage lot, for a total of 36 lots, in the RD-10 zoning district.
4. A **Conditional Use Permit** to allow more than ten halfplex lots, for a total of 12, in the RD-10 zoning district.
5. A **Special Development Permit** to allow the proposed project to deviate from the following development standards:
    - Minimum Corner Lot Area – Halfplex (Section 5.4.2.B, Table 5.7.A): The minimum corner lot area for a halfplex is 3,500 square feet. As proposed, 11 of the 12 halfplex lots are less than 3,500 square feet.
    - Minimum Interior Lot Area – Halfplex (Section 5.4.2.B, Table 5.7.A). The minimum interior lot area for a halfplex is 3,000 square feet. As proposed, five of the halfplex interior lots are less than 3,000 square feet.
    - Public Street Frontage (Section 5.4.2.B, Table 5.7.A): Up to two lots may be served by a private drive without meeting the public street frontage requirement. As proposed, the 36-lot subdivision would be served by a private street network.
    - Minimum Front Yard (Section 5.4.2.C, Table 5.7.C): The minimum front yard setback is 20 feet. As proposed, all homes provide a 12.5-foot front yard setback.
    - Minimum Rear Yard (Section 5.4.2.C, Table 5.7.C): The minimum rear yard setback for lot depths less than or equal to 125 feet is 20 percent of the average lot depth. As proposed, the single-family dwellings and halfplex lots will not be providing the minimum rear yard requirement.
    - Driveways (Section 5.9.3.F.2.e): Driveways must be a minimum of 19 feet in length. However, when a carport or garage opens onto a side street yard, the driveway length shall be a minimum of 20 feet.
6. A **Design Review** to determine substantial compliance with the Sacramento County Countywide Design Guidelines (Design Guidelines).

The applicant proposes to develop the subject site with 23 single-family residences, 12 halfplex dwelling units, and one drainage lot. The site is currently accessed from Hazel Avenue and the project proposes a private street network.

A sound wall and gate with associated landscaping is proposed along the Hazel Avenue frontage. Six-foot-tall wood fencing is proposed around the perimeter of the subject site and residences. The proposed drainage lot is located in the southeast corner of the project site which will be enclosed with open fencing. The project site contains an existing 1,416 square foot, single-family residence constructed in 1950, and an accessory structure that will be demolished as part of the project. Demolition of the two structures total approximately 2,700 square-feet. There is existing water and sewer in Hazel Avenue that the project will connect to.

3. **Assessor's Parcel Number:** 223-0012-053-0000, 223-0012-060-0000, 223-0012-061-000

4. **Location of Project:** The project site is located at 6416-6422 Hazel Avenue, approximately 1,450 feet north of the intersection with Greenback Lane, in the Orangevale community of unincorporated Sacramento County

5. **Project Applicant:** JEL Development Inc.,

6. Said project will not have a significant effect on the environment for the following reasons:
   a. It will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.
   b. It will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.
   c. It will not have impacts, which are individually limited, but cumulatively considerable.
   d. It will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

7. As a result thereof, the preparation of an environmental impact report pursuant to the Environmental Quality Act (Division 13 of the Public Resources Code of the State of California) is not required.

8. The attached Initial Study has been prepared by the Sacramento County Planning and Environmental Review Division in support of this Mitigated Negative Declaration. Further information may be obtained by contacting the Planning and Environmental Review Division at 827 Seventh Street, Room 225, Sacramento, California, 95814, or phone (916) 874-6141.

[Original Signature on File]
Julie Newton
Environmental Coordinator
County of Sacramento, State of California

COUNTY OF SACRAMENTO
PLANNING AND ENVIRONMENTAL REVIEW
INITIAL STUDY

PROJECT INFORMATION

CONTROL NUMBER: PLNP2022-00088

NAME: Hazel Ridge

LOCATION: The project site is located at 6416-6422 Hazel Avenue, approximately 1,450 feet north of the intersection with Greenback Lane, in the Orangevale community of unincorporated Sacramento County (reference **Plate IS-1**)

ASSESSOR'S PARCEL NUMBER: 223-0012-053-0000, 223-0012-060-0000, 223-0012-061-000

OWNER/APPLICANT:

JEL Development Inc.,
6912 Thayer Way, Orangevale, CA 95662
Contact: Jim Luse

PROJECT DESCRIPTION

The project consists of the following entitlement requests:

1. **Community Plan Amendment** of approximately 4.63 gross acres from the existing RD-5 (Residential, 5 acres) land use designation to the proposed RD-10 (Residential, 10 acres) land use designation.

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5. A **Special Development Permit** to allow the proposed project to deviate from the following development standards:

- Minimum Corner Lot Area – Halfplex (Section 5.4.2.B, Table 5.7.A): The minimum corner lot area for a halfplex is 3,500 square feet. As proposed, all six halfplex corner lots are less than 3,500 square feet.
- Minimum Interior Lot Area – Halfplex (Section 5.4.2.B, Table 5.7.A). The minimum interior lot area for a halfplex is 3,000 square feet. As proposed, five of the halfplex interior lots are less than 3,000 square feet.

- Public Street Frontage (Section 5.4.2.B, Table 5.7.A): Up to two lots may be served by a private drive without meeting the public street frontage requirement. As proposed, the 36-lot subdivision would be served by a private street network.

- Minimum Front Yard (Section 5.4.2.C, Table 5.7.C): The minimum front yard setback is 20 feet. As proposed, all homes provide a 12.5-foot front yard setback.

- Minimum Rear Yard (Section 5.4.2.C, Table 5.7.C): The minimum rear yard setback for lot depths less than or equal to 125 feet is 20 percent of the average lot depth. As proposed, the single-family dwellings and halfplex lots will not be providing the minimum rear yard requirement.

- Driveways (Section 5.9.3.F.2.e): Driveways must be a minimum of 19 feet in length. However, when a carport or garage opens onto a side street yard, the driveway length shall be a minimum of 20 feet.

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The applicant proposes to develop the subject site with 23 single-family residences, 12 halfplex dwelling units, and one drainage lot. The site is currently accessed from Hazel Avenue and the project proposes a private street network. A sound wall and gate with associated landscaping is proposed along the Hazel Avenue frontage. Six-foot-tall wood fencing is proposed around the perimeter of the subject site and residences. The proposed drainage lot is located in the southeast corner of the project site which will be enclosed with open fencing. The project site contains an existing 1,416 square foot, single-family residence constructed in 1950, and an accessory structure that will be demolished as part of the project. Demolition of the two structures total approximately 2,700 square-feet. There is existing water and sewer in Hazel Avenue that the project will connect to.

ENVIRONMENTAL SETTING

The subject site is located at 6416, 6420, and 6422 Hazel Avenue, in the Orangevale Community. 6420 and 6422 Hazel Avenue are currently undeveloped, while 6416 Hazel Avenue contains an existing 1,416 square foot, single-family residence constructed in

1950 and a detached two car garage. The parcels are surrounded by single-family residential lots

The 4.63-acre site is mostly undeveloped with the 1,416 square-foot single family residence on at the northeast corner (**Plate IS-1**). The site currently has unimproved frontage along Hazel Avenue in the form of a dirt/gravel drive. Parcels within a ¼ mile buffer surrounding the project site are a mixture of residential zoning: Residential Density (RD) 2, RD-3, RD-4, and RD-5. Approximately 850 south on Hazel Avenue the parcels are a mixture of RD-30 and Orangevale Community Plan Land Use Special Planning Area (SPA) zoning, which features mostly commercial use parcels. (**Plate IS-2** and **Plate IS-3**)

The project site contains a mixture of native and non-native tree and shrubs with an existing drainage swale running across the project form the center on the north side to the southeast corner. Much of the project site to the east of the residence has intermittently been used for horse pasture but is now fallow. The northern, eastern, and southern boundaries are fenced with a mixture of chain link and redwood fences. The project site is regularly mowed for fire prevention. The project site is relatively flat but does change in elevation from the highest point at the northeast corner to the lowest point at the southeast corner by approximately six feet. Existing electrical utilities are overhead along the property line fronting Hazel Avenue and water and sewer are located underground within the right-of-way of Hazel Avenue.

Plate IS-1: Vicinity Map

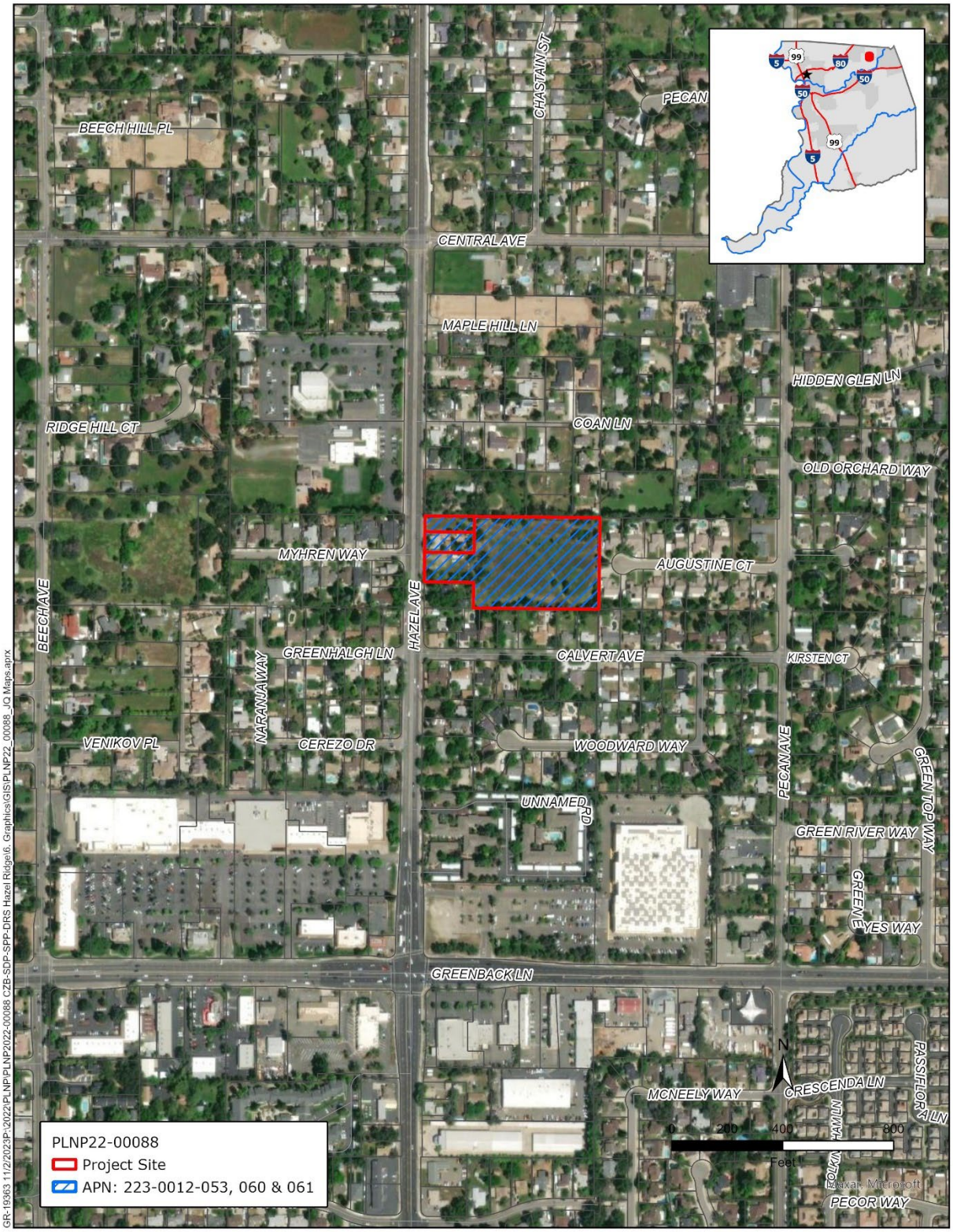


Plate IS-2: Zoning

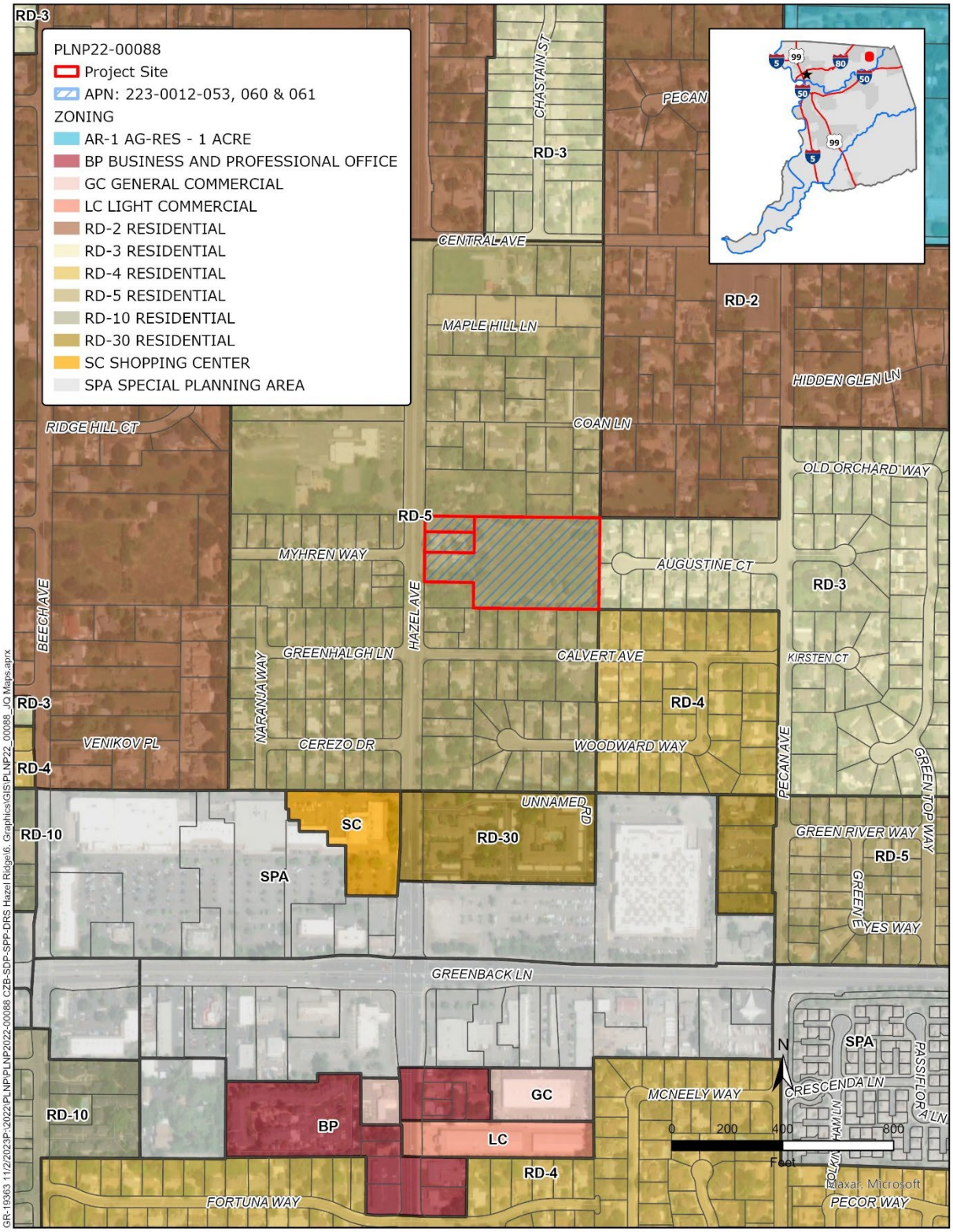


Plate IS-3: Orangevale Community Plan Map

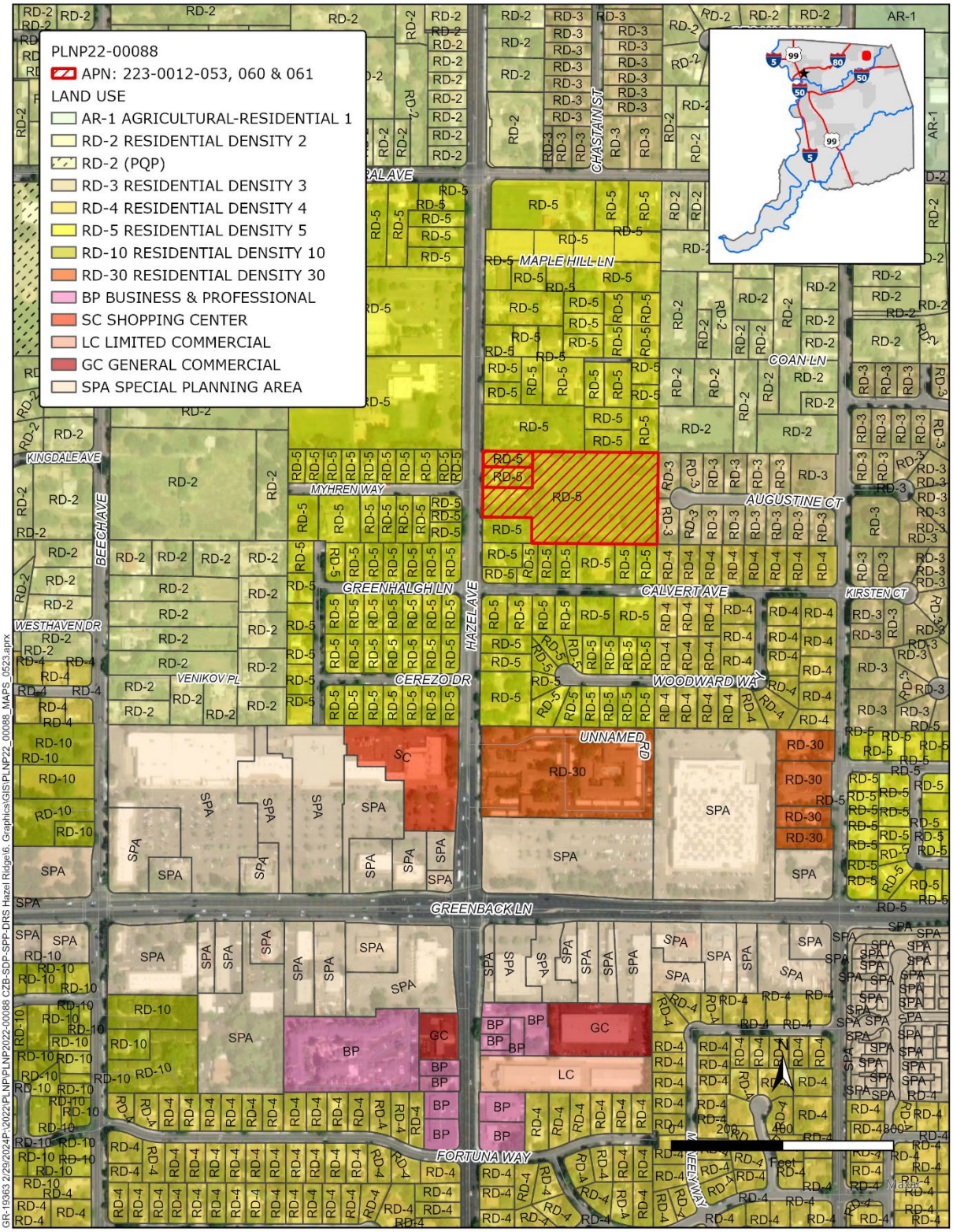
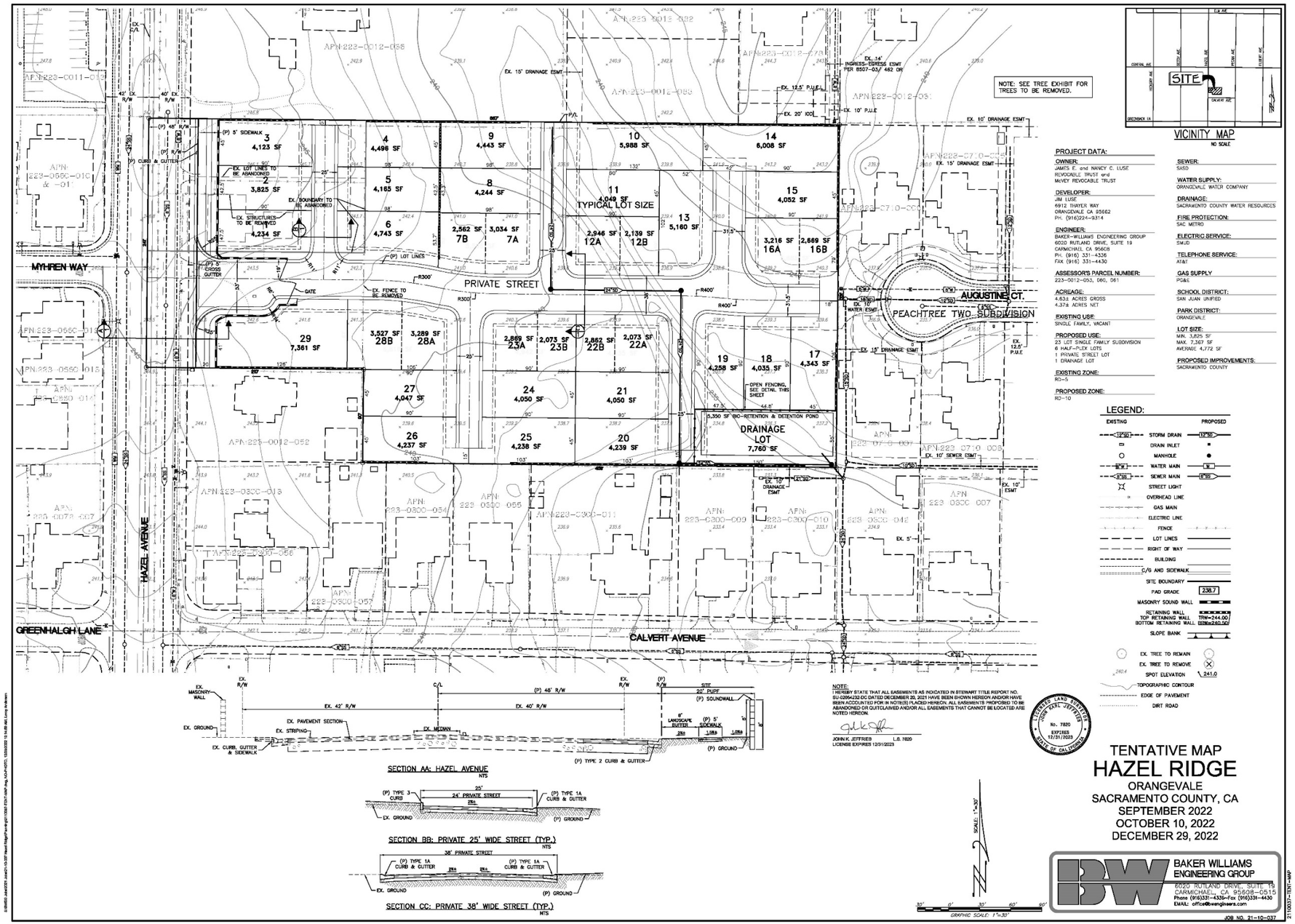


Plate IS-4: Proposed Subdivision Map



ENVIRONMENTAL EFFECTS

Appendix G of the California Environmental Quality Act (CEQA) provides guidance for assessing the significance of potential environmental impacts. Based on this guidance, Sacramento County has developed an Initial Study Checklist (located at the end of this report). The Checklist identifies a range of potential significant effects by topical area. The topical discussions that follow are provided only when additional analysis beyond the Checklist is warranted.

LAND USE

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

- Physically disrupt or divide an established community

SACRAMENTO COUNTY GENERAL PLAN

The existing General Plan land use designation for the parcel is Low Density Residential (LDR).

The LDR land use designation provides for areas of predominantly single-family housing with some attached housing units. It allows urban densities between 1 to 12 dwelling units per acre, resulting in population densities ranging from approximately 2.5 to 30 persons per acre. Typical low-density development includes detached single-family homes, duplexes, triplexes, fourplexes, townhomes lower density condominiums, cluster housing and mobile home parks.

The proposed tentative subdivision map is consistent with the LDR land use designation (see **Plate IS-5**). Impacts in regard to consistency with the General Plan are ***less than significant***.

ORANGEVALE COMMUNITY PLAN

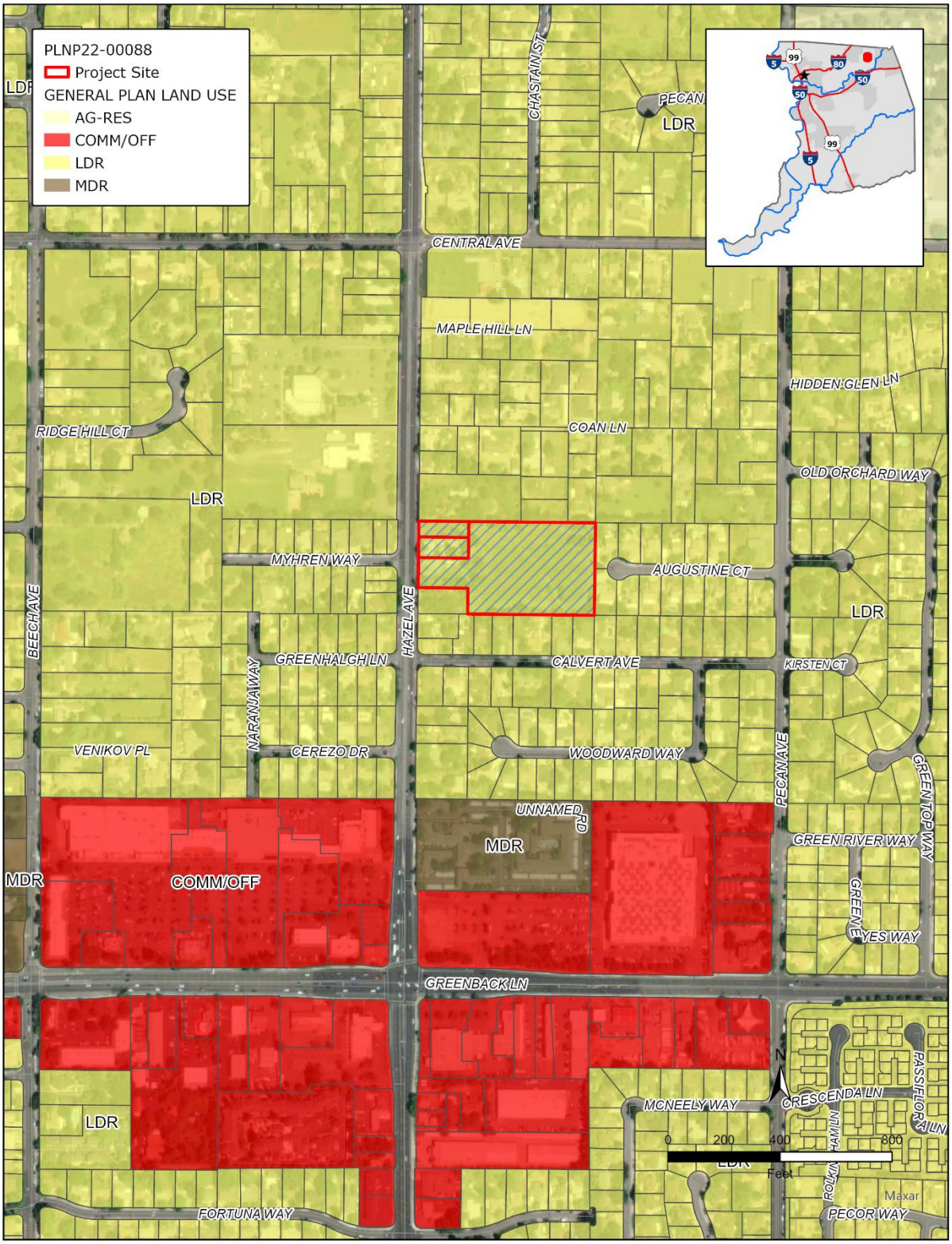
The project site is located within the Orangevale community of unincorporated Sacramento County. The County Board of Supervisors adopted the Orangevale Community Plan (Community Plan) in August 1976. The Community Plan identifies goals and objectives related to land use, population, housing, transportation, noise, utilities and community facilities in order to guide development within the Community Plan area. The Community Plan land use designation for all 4.63 acres of the subject parcel is Single Family Residential, 5 units per acre (RD-5). The project proposes a Community Plan Amendment to change the RD-5 land use designation to the proposed

RD-10 (Single-Family Residential, 10 units per acre) land use designation (reference **Plate IS-3**) for the entire project site.

Although the proposed tentative subdivision map and the associated densities are inconsistent with the RD-5 land use designation, they are compatible with the proposed designations. The change in the Community Plan land use designations would allow for residential infill development that complements the existing development in the vicinity. The densities associated with the proposed land use designations are similar to nearby, existing land uses and residential development in the area (reference **Plate IS-2**: Zoning Map).

Therefore, the requested Community Plan Amendment would not significantly disrupt or divide the community and the continued use of the site does not conflict with policies of the Community Plan. Impacts in regard to consistency with the Orangevale Community Plan are ***less than significant***.

Plate IS-5: Existing 2030 General Plan Land Use Designations



SACRAMENTO COUNTY ZONING CODE

The project site is zoned Residential Density-5 (RD-5)(reference **Plate IS-2**) which allows for development to be built at a maximum of five dwelling units per acre. The proposed project is requesting a rezone from RD-5 to RD-10 to allow for the construction of a total of 23 new single-family residences and 12 half-plex units. The proposed rezone density and acreages are identical to the proposed Community Plan Amendments.

Although the proposed tentative subdivision map and the associated densities are inconsistent with the RD-5 zoning district, they are compatible with the proposed zoning districts. The rezone requests would allow for residential infill development that compliments the existing development in the vicinity. The densities associated with the proposed rezone is similar to existing residential development in the area.

Impacts associated with the proposed rezone are ***less than significant***.

TRANSPORTATION/TRAFFIC

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) – measuring transportation impacts individually or cumulatively, using a vehicles miles traveled standard established by the County;
- Result in a substantial adverse impact to access and/or circulation; or,
- Result in a substantial adverse impact to public safety on area roadways.

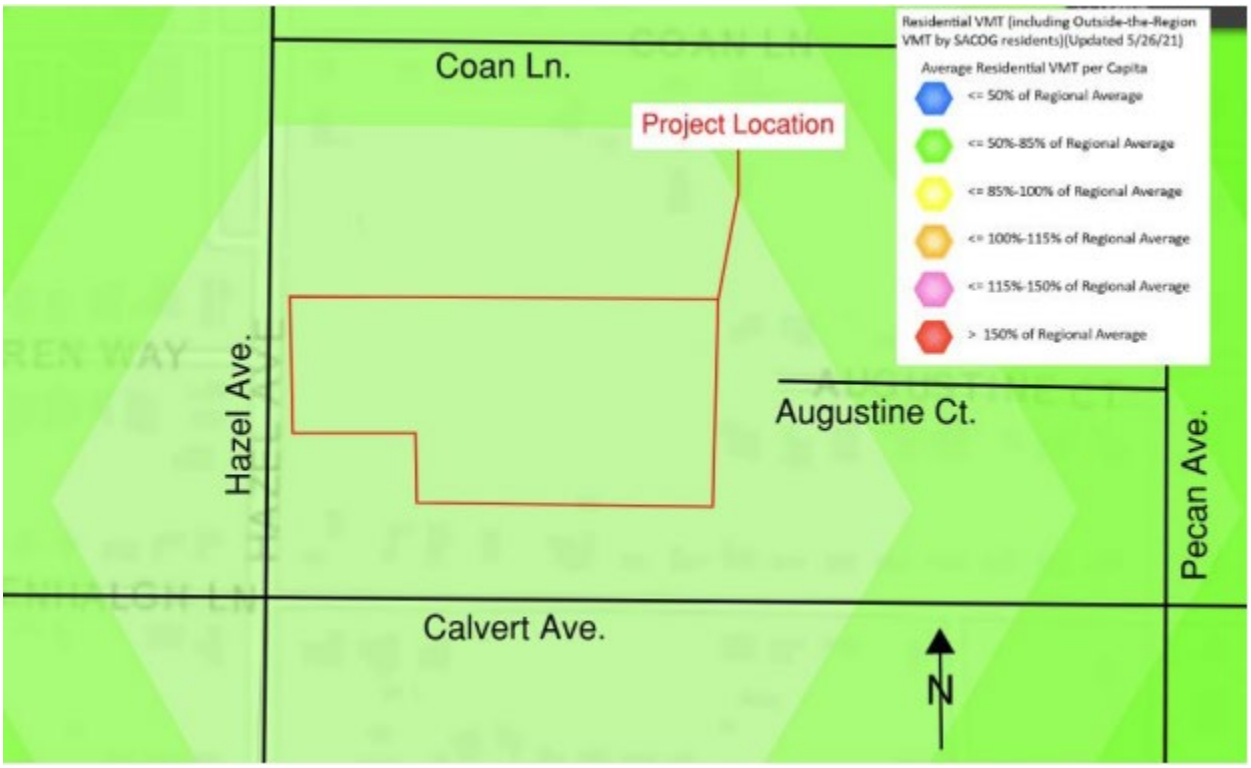
VEHICLE MILES TRAVELLED (VMT)

Senate Bill 743 (Steinberg, Chapter 386, Statutes of 2013; SB 743) modified how transportation impacts are evaluated under CEQA by requiring Lead Agencies to disclose how a project's transportation impacts affect greenhouse gas emissions rather than automobile delay. The intent of SB 743 is to bring CEQA transportation analyses into closer alignment with other statewide policies regarding greenhouse gas reduction, active transportation and complete streets, and smart growth. As a result, the Governor's Office of Planning and Research recommended the adoption of VMT as the metric to determine the significance of transportation impacts under CEQA. CEQA Guidelines §15064.3, which addresses the use of VMT as the metric for transportation analysis, indicates "beginning on July 1, 2020, the provisions of this section shall apply statewide" (see subdivision (c)).

The County of Sacramento Department of Transportation (DOT) reviewed the project and provided an expected trip generation table, which analyzes the estimated trips from the current RD-5 zoning to the proposed zoning districts. The project is estimated to result in 332 additional daily trips when compared to the existing use, which exceeds the screening criteria threshold of 237 daily trips to be considered a small project.

However, according to Table 3-1 in DOT's Transportation Analysis Guidelines, a residential project can be exempt from a VMT study if the site is located within a VMT efficient area based on an approved screening map. A VMT efficient area is defined as an area which produces less than 50-85% of the average regional VMT. As shown in **Plate IS-6**, the approved Sacramento Area Council of Governments (SACOG) Residential VMT Screening Map shows that the project site is located within a VMT efficient area. Therefore, a VMT analysis for the proposed project is not required. Impacts related to VMT are ***less than significant.***

Plate IS-6: SACOG Residential VMT Screening Map



Access and Circulation

The site currently has unimproved frontage along Hazel Avenue in the form of a dirt/gravel drive. The proposed subdivision has one, 53-foot wide, access road off of Hazel Avenue. The access road leads to two, 19-foot, wide gates that will swing to allow vehicles to enter and exit the subdivision (reference **Plate IS-7**).

DOT reviewed the proposed subdivision map and provided the following conditions of approval related to access and circulation:

- Prior to approval of the Improvement Plans, show on the plans the County right-of-way on Hazel Avenue based on a 96-foot standard thoroughfare pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation.

- Prior to approval of the Improvement Plans, show on the plans a 20-foot Easement for Public Utilities and Public Facilities on Hazel Avenue pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation.

- Prior to approval of the Improvement Plans, show on the plans all existing and proposed driveway locations. The size, number, and location of driveways shall be pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation.

1. The standard driveway width shall be 45 feet on arterial and thoroughfare roadways.

2. The width of the driveway may be increased by the width of the driveway median up to 10 feet. Note 3: Since a gated entrance is proposed, a 44-foot-wide turnaround onsite in front of the gate or other approved treatment shall be required.

- Prior to approval of the Improvement Plans, show on the plans all proposed gate locations. Any proposed project not incorporating an entry design that will accommodate access control gates pursuant to Sacramento County Code 17.04, (Section 503.6.1 of the International Fire Code, as amended by the County) shall be denied with respect to for future access control gates. Note: Gate plan submittal is a separate submittal process.

The proposed map was also reviewed by Sacramento Metropolitan Fire District (Metro Fire). Metro Fire provided the following conditions related to access:

Show the design for a fire access roadway of not less than 20-feet of unobstructed width, 13-feet, 6-inches of vertical clearance, and turning radii of 25 feet inside and 50 feet outside dimension on the improvement plans. The access roadway shall extend to within 150 feet of all portions of the exterior walls of the first story of any proposed building. The use of turf-block or Grass-Crete or similar alternate road surfaces is not approved for installation in fire apparatus access roadways.

- Show the design for an approved fire apparatus turnaround. Fire apparatus turnaround shall conform to Sacramento Metro Fire Districts Fire Prevention Standard #3. Fire access turn-around shall be located within 50 feet of the end of the access roadway.

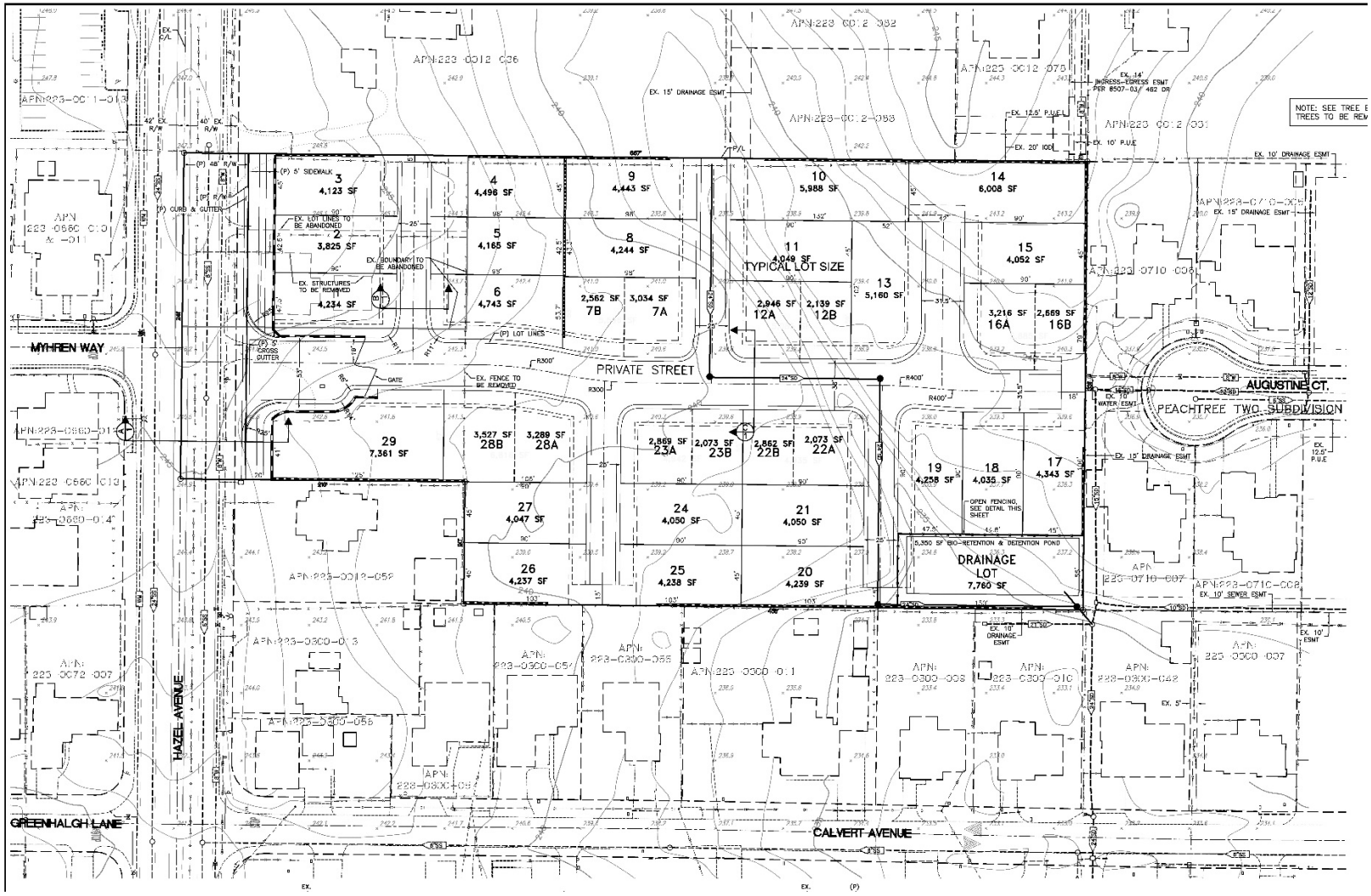
- Show on the plans how Fire Lanes will be marked. Fire Lane identification shall be provided along the required fire access roadway. Fire Lane identification shall Serving Sacramento and Placer Counties be in accordance with the Sacramento Metro Fire Districts Fire Prevention Standard #3 and the California Vehicle Code. Vehicle parking is prohibited on any street less than 28 feet in width. Vehicle parking is permitted on both sides of streets 36 feet or more in width. Roadway widths shall be measured between the gutter-line or edge of pavement on opposite sides of the road. Identification of fire apparatus access roadways may be required on private roads.

- Provide a note on the plan that reads, “Fire access roadways shall be built to bear a minimum of 80,000 pounds and meet the Sacramento County Public Works Standards for roadways. A report, prepared by a registered geotechnical engineer, verifying the ability of the road to bear the required minimum weight, shall be submitted with any plan indicating construction of roadway. Verification of constructed roadway shall be provided by a registered geotechnical engineer prior to final of the project.”

- Show the location of the required fire hydrants for this project on the improvement plans. Approved fire hydrants capable of providing the required fire flow for the protection of any and all structures shall be located along the fire apparatus access roadway. The required fire hydrants shall be installed and operational prior to any construction or on-site storage of combustible materials. The minimum required fire flow for the protection of residential developments with an area per building not exceeding 3,600 square feet is 1,000 gallons per minute (gpm) at a pressure of 20 pounds per square inch (psi) for a one-hour duration.

The addition of 35 homes and associated traffic would not result in a substantial adverse impact to access and circulation, nor would the project result in substantial adverse impacts to public safety. The project will be required to comply with the above conditions, as well as all applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Upon compliance, impacts are ***less than significant***.

Plate IS-7: Proposed Access and Circulation



NOISE

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Result in generation of a temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established by the local general plan, noise ordinance or applicable standards of other agencies.

- Result in a substantial temporary increase in ambient noise levels in the project vicinity.

Noise is often described as unwanted sound, and thus is a subjective reaction to the physical phenomenon of sound. Sound is variations in air pressure that the ear can detect. Sound levels are measured and expressed in decibels (dB), which is the unit for describing the amplitude of sound[1]. Because sound pressure levels are defined as logarithmic numbers, the values cannot be directly added or subtracted. For example, two sound sources, each producing 50 dB, will produce 53 dB when combined, not 100 dB. This is because two sources have two times the energy (not volume) of one source, which results in a 3 dB increase in noise levels.

Most environmental sounds consist of several frequencies, with each frequency differing in sound level. The intensities of each frequency combine to generate sound. Acoustical professionals quantify sounds by "weighting" frequencies based on how sensitive humans are to that particular frequency. Using this method, low and extremely high frequency sounds are given less weight, or importance, while mid-range frequencies are given more weight, because humans can hear mid-range frequencies much better than low and very high frequencies. This method is called "A" weighting, and the units of measurement are called dBA (A-weighted decibel level). In practice, noise is usually measured with a meter that includes an electrical "filter" that converts the sound to dBA. The threshold at which one hears sounds is considered to be zero (0) dBA. The range of sound in normal human experience is 0 to 140 dBA. Decibels and other technical terms are defined in **Table IS-1**. The ambient noise level is defined as the noise from all sources near and far and refers to the noise levels that are present before a noise source being studied is introduced. A synonymous term is pre-project noise level.

[1] Equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals.

Table IS-1: Acoustical Terminology

TERM	DEFINITION
Ambient Noise Level:	The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.
Intrusive Noise:	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.
Decibel, dB:	A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
Community Noise Equivalent Level, CNEL*:	The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening form 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.
Day/Night Noise Level, DNL or L_{dn}*:	The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.
Equivalent Noise Level, L_{eq}:	The average noise level during the measurement or sample period. L_{eq} is typically computed over 1, 8 and 24-hour sample periods.
L_{max}, L_{min}:	The maximum or minimum sound level recorded during a noise event.
L_n :	The sound level exceeded “n” per percent of the time during a sample interval. L_{10} equals the level exceeded 10 percent of the time (L_{90}, L_{50} , etc.)
Noise Exposure Contours:	Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and L_{dn} contours are frequently utilized to describe community exposure to noise.
Sound Exposure Level, SEL; or Single Event Noise Exposure Level, SENEL:	The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time integrated A-weighted squared sound pressure level for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.
Sound Level, dBA:	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

STATE OF CALIFORNIA

The California Department of Health Services (DHS) office of Noise Control has studied the relationship between noise levels and different land uses. As a result, the DHS has established four categories for judging the severity of noise intrusion on specified land use. Noise in the "normally acceptable" category places no undue burden on affected receptors and would need no mitigation. As noise rises into the "conditionally acceptable" range, some mitigation of exposure (as established by an acoustical study) would be warranted. At the next level, noise intrusion is so severe that it is classified "normally unacceptable" and would require extraordinary noise reduction measures to avoid disruption. Finally, noise in the "clearly unacceptable" category is so severe that it cannot be mitigated.

Title 24 of the California Administrative Code establishes standards governing interior noise levels that apply to all new multifamily residential units in California. The standards require that acoustical studies be performed prior to construction at building locations where the existing L_{dn} exceeds 60 dBA. Such acoustical studies are required to establish mitigation measures that will limit maximum L_{dn} noise levels to 45 dBA in any inhabitable room. The U.S. Department of Housing and Urban Development (HUD) has set an L_{dn} of 45 as its goal for interior noise in residential units built with HUD funding.

COUNTY GENERAL PLAN NOISE ELEMENT

The goals of the Sacramento County General Plan Noise Element are to: (1) protect the citizens of Sacramento County from exposure to excess noise and (2) protect the economic base of Sacramento County by preventing incompatible land uses from encroaching upon existing planned noise-producing uses. The General Plan defines a noise sensitive outdoor area as the primary activity area associated with any given land use at which noise sensitivity exists. Noise sensitivity generally occurs in locations where there is an expectation of relative quiet, or where noise could interfere with the activity which takes place in the outdoor area. An example is a backyard, where loud noise could interfere with the ability to engage in normal conversation.

The Noise Element of the Sacramento County General Plan establishes noise exposure criteria to aid in determining land use compatibility by defining the limits of noise exposure for sensitive land uses. There are policies for noise receptors or sources, transportation or non-transportation noise, and interior and exterior noise.

NO-1. The noise level standards for noise-sensitive areas of *new* uses affected by traffic or railroad noise sources in Sacramento County are shown by Table IS-2. Where the noise level standards of Table IS-2 are predicted to be exceeded at new uses proposed within Sacramento County which are affected by traffic or railroad noise, appropriate noise mitigation measures shall be included in the project design to reduce projected noise levels to a state of compliance with the Table 1 standards.

Table IS-2: Noise Element Table 1
Noise Standards for New Uses Affected by Traffic and Railroad Noise

New Land Use	Sensitive Outdoor Area – L_{dn}	Sensitive Interior Area – L_{dn}
All Residential[5]	65	45
Transient lodging[3,5]	65	45
Hospitals and nursing homes[3,4,5]	65	45
Theaters and auditoriums[3]	None	35
Churches, meeting halls, schools, libraries, etc.[3]	65	40
Office buildings[3]	65	45
Commercial buildings[3]	None	50
Playgrounds, parks, etc	70	None
Industry[3]	65	50

1. Sensitive areas are defined in acoustical terminology section.
2. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.
3. Where there are no sensitive exterior spaces proposed for these uses, only the interior noise level standard shall apply.
4. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation either by hospital staff or patients.
5. If this use is affected by railroad noise, a maximum (L_{max}) noise level standard of 70 dB shall be applied to all sleeping rooms to reduce the potential for sleep disturbance during nighttime train passages.

NO-7. The “last use there” shall be responsible for noise mitigation. However, if a noise-generating use is proposed adjacent to lands zoned for uses which may have sensitivity to noise, then the noise generating use shall be responsible for mitigating its noise generation to a state of compliance with the Table 2 standards at the property line of the generating use in anticipation of the future neighboring development.

NO-8. Noise associated with construction activities shall adhere to the County Code requirements. Specifically, Section 6.68.090(e) addresses construction noise within the County.

NO-12. All noise analyses prepared to determine compliance with the noise level standards contained within this Noise Element shall be prepared in accordance with Table NO-3.

The requirements as listed in Table 3 of the Noise Element are that an acoustical analysis shall:

1. Be the responsibility of the applicant.

2. Be prepared by qualified persons experienced in the fields of environmental noise assessment and architectural acoustics.

3. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

4. Estimate projected future (20 year) noise levels in terms of the Standards of Tables 1 and 2, and compare those levels to the adopted policies of the Noise Element.

5. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.

6. Estimate interior and exterior noise exposure after the prescribed mitigation measures have been implemented.

NO-13. Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, emphasis shall be placed on the use of setbacks and site design to the extent feasible, prior to consideration of the use of noise barriers.

SACRAMENTO COUNTY NOISE CONTROL ORDINANCE

The County's Noise Control Ordinance sets limits for exterior noise levels on some designated agricultural-residential and all residential properties. The Noise Ordinance does not apply to noise levels at agriculturally zoned properties. The standards found in the County's Noise Control Ordinance are based on the duration of noise on private property over one-hour periods. The ordinance is primarily concerned with regulating noise other than noise generated by transportation noise sources (e.g., passing cars or aircraft flyovers). The ordinance limits the duration of noise based on many factors, including the type of source, tonal characteristics of the source, ambient noise levels, time of day, etc., by utilizing a system of noise criteria not to be exceeded based on the duration of noise over any given hour. Construction noise is specifically exempted from the Noise Ordinance (Sacramento County Code Section 6.68). **Table IS-3** summarizes the Noise Ordinance standards.

In recognition of ambient noise, the ordinance allows the standards set forth in **Table IS-3** to be adjusted in 5 dBA increments to encompass the ambient noise level. For example, if the ambient noise level for a given hour was 57 dBA, the daytime L50 noise standard would be increased to 60 dBA. The Noise Control Ordinance also states that

each of the standards identified in **Table IS-3** should be reduced by 5 dBA for impulsive or simple tone noises[2], or for noises consisting of speech or music.

Table IS-3: Sacramento County Noise Ordinance

Cumulative Duration of the Intrusive Sound	Descriptor	Exterior Noise Standard, dB	
		Daytime (7am – 10pm)	Nighttime (10pm – 7am)
30 – 60 minutes per hour	L_{50}	55	50
15 – 30 minutes per hour	L_{25}	60	55
5 – 15 minutes per hour	L_{08}	65	60
1 – 5 minutes per hour	L_{02}	70	65
Level not to be exceeded at any time	L_{max}	75	70
Source: Sacramento County, Noise Control Ordinance. Chapter 6.68.070			

Subjective Reactions To Changes In Noise Levels

Another means of assessing noise impacts is to estimate public reaction to the change in noise levels which result from a given project; this is, in fact, how the General Plan has established significance for roadway projects (refer to Policy NO-9). Expected human reactions to changes in ambient noise levels have been quantified by metrics that define short-term exposure (e.g., hourly L_{eq}, L_{max} and L_n). These metrics are usually used to describe noise impacts due to industrial operations, machinery and other sources that are not associated with transportation. An increase of at least 3 dB is usually required before most people will perceive a change in noise levels, and an increase of 5 dB is required before the change will be clearly noticeable. **Table IS-4** is used to show expected public reaction to changes in environmental noise levels. This table was developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broad-band noise and to changes in levels of a given noise source.

Some additional guidance as to the significance of changes in ambient noise levels is provided by the 1992 findings of the Federal Interagency Committee of Noise (FICON), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON findings are based upon studies that relate aircraft

[2] "Impulsive noise" means a noise characterized by brief excursions of sound pressures whose peak levels are very much greater than the ambient noise level, such as might be produced by the impact of a pile driver, punch press or a drop hammer, typically with duration of one second or less. "Simple tone noise" or "pure tone noise" means a noise characterized by the presence of a predominant frequency or frequencies such as might be produced by a whistle or hum.

and traffic noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a summary measure of the general adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the FICON findings is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn} or CNEL. The changes in noise exposure that are shown in **Table IS-5** are expected to result in equal changes in annoyance at sensitive land uses. The rational for the criteria shown in **Table IS-5** is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant annoyance. Although the FICON findings were specifically developed to address aircraft noise impacts, they are considered as measures of potential noise impacts in the analysis of traffic noise.

Table IS-4: Subjective Reaction to Changes in Noise Levels

Change in Level	Subjective Reaction	Factor Change in Acoustical Energy
1 dB	Imperceptible (Except for tones)	1.3
3 dB	Just Barely Perceptible	2.0
5 dB	Clearly Noticeable	3.2
10 dB	About Twice (or Half) as loud	10.0
Source: Architectural Acoustics, M David Egan, 1988.		

Table IS-5: Significance of Changes in Noise Exposure

Ambient Noise Level Without the Project, L_{dn}	Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more
Source: Federal Interagency Committee on Noise (FICON)	

METHODOLOGY

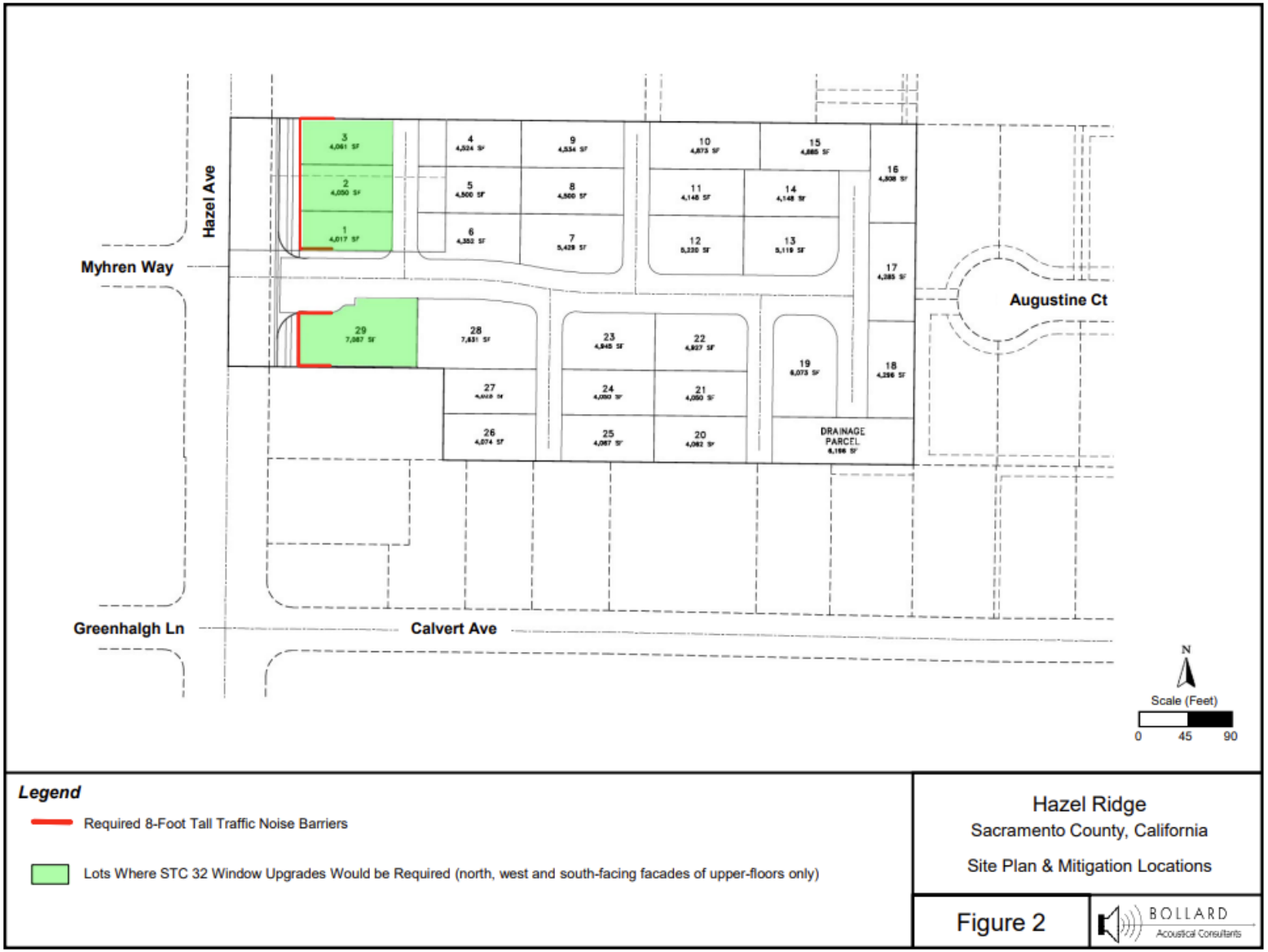
Bollard Acoustical Consultants (BAS) was hired by the project applicant to prepare a noise assessment (see Appendix B). Specifically, the purpose of this assessment was to quantify future noise levels associated with traffic on Hazel Avenue, and to compare those levels against the applicable Sacramento County standards for acceptable noise exposure for new residential uses.

The existing ambient noise environment at the project site is defined primarily by traffic on Hazel Avenue. To quantify the existing ambient noise level environment at the project site, BAC conducted a long-term (48-hour) noise level survey March 9-10, 2022. The noise survey location is identified on **Plate IS-8**. Photographs of the noise level

measurement location is provided in Appendix B. The long-term ambient noise level survey results are summarized in **Table IS-6**.

Plate IS-8: Noise analysis measurement location

Plate IS-9: Sound Wall Location for Noise Mitigation



EXISTING AMBIENT NOISE ENVIRONMENT AT THE PROJECT SITE

Table IS-6: Summary of Long-Term Noise Survey Measurement Results[1]

			Average Measured Hourly Noise Levels (dBA)			
			Daytime[3]		Nighttime[4]	
Site Description[2]	Date	DNL	Leq	Lmax	Leq	Lmax
Site 1: West side of project site, approximately 100' from centerline of Hazel Ave.	3/9/2022	70	66	81	63	77
	3/10/2022	69	66	81	62	78

1. Detailed summaries of the noise monitoring results are provided in Appendix B
2. Long-term noise survey locations are identified on **Plate IS-8**
3. Daytime hours: 7:00 AM to 10:00 PM
4. Nighttime hours: 10:00 PM to 7:00 AM

Source: Bollard Acoustical Consultants, Inc. (2022)

As showing in **Table IS-6**, measured day-night average noise levels at the project site exceed the applicable Sacramento Mento County General Plan exterior noise level standard for residential uses.

EVALUATION OF FUTURE TRAFFIC NOISE LEVELS AT THE PROJECT SITE

Traffic Noise Prediction Methodology The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to predict traffic noise levels at the project site. The FHWA 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. The FHWA Model was developed to predict hourly Leq values for free-flowing traffic conditions and is considered to be accurate within 1.5 dB in most situations. Predicted Future Exterior Traffic Noise Levels To predict future Hazel Avenue traffic noise level exposure at the project site, BAC adjusted the long-term ambient data (**Table IS-6**) to reflect future traffic conditions as well as the distances from the roadway centerline to the nearest backyard areas and building facades. Future traffic volumes on Hazel Avenue were conservatively assumed to increase by 50% in the future, resulting in a 2 dB increase in traffic noise levels relative to measured existing conditions. The predicted future Hazel Avenue traffic noise levels at the nearest proposed outdoor activity areas (backyards) and building facades of the development are summarized below in **Table IS-7**.

Table IS-7: Predicted Future Exterior Hazel Avenue Traffic Noise Levels at the Project Site

Roadway	Lots	Location Description	Predicted DNL (dB)1,2
Hazel Avenue	1-3&29	Backyards	73
		First-floor facades	72
		Upper-floor facades	74

1. Predicted future traffic noise levels based on a reference noise level of 72 dB DNL at 100' from centerline of Hazel Avenue, which includes a +2 dB increase to account for increased traffic volumes in the future.
2. An offset of +2 dB was applied at upper-floor building facades due to reduced ground absorption of sound at elevated positions. Source: Bollard Acoustical Consultants, Inc. (2022)

Source: Bollard Acoustical Consultants, Inc. (2022)

EXTERIOR NOISE COMPLIANCE EVALUATION

As indicated in **Table IS-7**, predicted future Hazel Avenue traffic noise level exposure is predicted to exceed the applicable Sacramento County General Plan 65 dB DNL exterior noise level standard at the nearest backyards to the roadway. As a result, additional consideration of exterior noise mitigation measures would be warranted for future Hazel Avenue traffic noise at the project site. To reduce future Hazel Avenue traffic noise exposure to a state of compliance with the General Plan 65dB DNL exterior noise level standard at the project site, a soundwall measuring 8-feet in height, should be constructed at the locations shown on **Plate IS-9**. The soundwall shall either be solid masonry/brick construction, or if alternative material is used it must meet the minimum density of 4 pounds per square foot, or a noise analysis is completed post wall construction, and the identified noise attenuation is achieved.

INTERIOR NOISE COMPLIANCE EVALUATION

After consideration of shielding that would be provided by the required 8-foot-tall traffic noise barriers as indicated in **Plate IS-9**, future Hazel Avenue traffic noise level exposure is predicted to be reduced to approximately 64 dB DNL or less at the nearest first-floor building facades to the roadway. Due to reduced ground absorption of sound at elevated positions, and lack of shielding provided by the recommended traffic noise barriers, noise levels at the upper-floor facades of those residences are predicted to be approximately 74 dB DNL. To satisfy the Sacramento County General Plan 45 dB DNL interior noise level standard, minimum noise reductions of 19 and 29 dB would be required of the first- and upper-floor building facades (respectively) of residences constructed nearest to Hazel Avenue (Lots 1-3 & 29).

To ensure compliance with the General Plan 45 dB DNL interior noise standard, upperfloor window assemblies of residences constructed adjacent to Hazel Avenue from which the roadway would be visible (north, west and south-facing windows) shall be upgraded to a minimum STC rating of 32. The lots with upper-floor window upgrade

recommendations are illustrated on **Plate IS-9**. Also, mechanical ventilation (air conditioning) shall be provided for all residences within this development to allow the occupants to close doors and windows as desired for additional acoustical isolation

CONCLUSION

The above discussion is included for reference only due to the fact that CEQA requires the analysis of the project's impact on the environment, and not the impact of the environment on the project (in this case, the impact of existing traffic noise on future sensitive receptors. However, the recommendations of the Noise Analysis will be included as Conditions of Approval for the project to ensure compliance with adopted General Plan policy.

The Hazel Ridge Residential Development is predicted to be exposed to future Hazel Avenue traffic noise level exposure in excess of the Sacramento County General Plan 65 dB DNL exterior noise level standard for residential uses. The proposed project will be subject to conditions of approval including: an 8-foot soundwall and specific building material requirements for second floor window on lots fronting Hazel avenue. These conditions will ensure exterior and interior noise levels can be reduced to below County General Plan 65 dB DNL and 45 dB DNL, respectively.

AIR QUALITY

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard

- The proposed project site is located in the Sacramento Valley Air Basin (SVAB). The SVAB's frequent temperature inversions result in a relatively stable atmosphere that increases the potential for pollution. Within the SVAB, the Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for ensuring that emission standards are not violated. Project related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation (Table IS-8). Moreover, SMAQMD has established significance thresholds to determine if a proposed project's emission contribution significantly contributes to regional air quality impacts (Table IS-9).

Table IS-8: Air Quality Standards Attainment Status

Pollutant	Attainment with State Standards	Attainment with Federal Standards
Ozone	Non-Attainment (1-hour Standard[1] and 8-hour standard)	Non-Attainment, Classification = Severe -15* (8 hour[3] Standards) Attainment (1-hour standard[2])
Particulate Matter 10 Micron	Non-Attainment (24-hour Standard and Annual Mean)	Attainment (24-hour standard)
Particulate Matter 2.5 Micron	Attainment (Annual Standard)	Non-Attainment (24-hour Standard) and Attainment (Annual)
Carbon Monoxide	Attainment (1 hour and 8-hour Standards)	Attainment (1 hour and 8-hour Standards)
Nitrogen Dioxide	Attainment (1 hour Standard and Annual)	Unclassified/Attainment (1 hour and Annual)
Sulfur Dioxide[4]	Attainment (1 hour and 24-hour Standards)	Attainment/unclassifiable[5]
Lead	Attainment (30 Day Standard)	Attainment (3-month rolling average)
Visibility Reducing Particles	Unclassified (8-hour Standard)	No Federal Standard
Sulfates	Attainment (24-hour Standard)	No Federal Standard
Hydrogen Sulfide	Unclassified (1 hour Standard)	No Federal Standard

1. Per Health and Safety Code (HSC) § 40921.59(c), the classification is based on 1989-1001 data, and therefore does not change.

2. Air Quality meets Federal 1-hour Ozone standard (77 FR 64036). EPA revoked this standard, but some associated requirements still apply. The SMAQMD attained the standard in 2009.

3. For 1997, 2008 and the 2015 Standard.

4. Cannot be classified

5. Designation was made as part of EPA's designations for the 2010 SO_2 Primary National Ambient Air Quality Standard – Round 3 Designation in December 2017

* Designations based on information from http://www.arb.ca.gov/desig/changes.htm#reports

Source: SMAQMD. "Air Quality Pollutants and Standards". Web. Accessed: March 11, 2024
http://airquality.org/air-quality-health/air-quality-pollutants-and-standards

Table IS-9: SMAQMD Significance Thresholds

	ROG[1] (lbs/day)	NO_x (lbs/day)	CO ($\mu g/m^3$)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Construction (short-term)	None	85	CAAQS[2]	80[3*]	82[3*]
Operational (long-term)	65	65	CAAQS	80[3*]	82[3*]

1. Reactive Organic Gas

2. California Ambient Air Quality Standards

3*. Only applies to projects for which all feasible best available control technology (BACT) and best management practices (BMPs) have been applied. Projects that fail to apply all feasible BACT/BMPs must meet a significance threshold of 0 lbs/day.

CONSTRUCTION EMISSIONS/SHORT-TERM IMPACTS

Short-term air quality impacts are mostly due to dust (PM_{10} and $PM_{2.5}$) generated by construction and development activities, and emissions from equipment and vehicle engines (NO_x) operated during these activities. Dust generation is dependent on soil type and soil moisture, as well as the amount of total acreage actually involved in clearing, grubbing and grading activities. Clearing and earthmoving activities comprise the major source of construction dust generation, but traffic and general disturbance of the soil also contribute to the problem. Sand, lime or other fine particulate materials may be used during construction and stored on-site. If not stored properly, such materials could become airborne during periods of high winds. The effects of construction activities include increased dust fall and locally elevated levels of suspended particulates. PM_{10} and $PM_{2.5}$ are considered unhealthy because the particles are small enough to inhale and damage lung tissue, which can lead to respiratory problems.

CONSTRUCTION PARTICULATE MATTER EMISSIONS

The SMAQMD Guide includes screening criteria for construction-related particulate matter. Projects that are 35 acres or less in size will generally not exceed the SMAQMD's construction PM_{10} or $PM_{2.5}$ thresholds of significance provided that the project does not:

- Include buildings more than 4 stories tall;
- Include demolition activities;
- Include significant trenching activities;
- Have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); or,
- Require import or export of soil materials that will require a considerable amount of haul truck activity.

Some PM_{10} and $PM_{2.5}$ emissions during project construction can be reduced through compliance with institutional requirements for dust abatement and erosion control. These institutional measures include the SMAQMD "District Rule 403-Fugitive Dust" and measures in the Sacramento County Code relating to land grading and erosion control [Title 16, Chapter 16.44, Section 16.44.090(K)].

The project involves minor demolition activities and cut-and-fill operations, and therefore, does not meet SMAQMD's screening criteria for construction-related particulate matter emissions and requires further analysis.

CalEEMod version 2022.1.1.20 was used to estimate construction-related emissions for demolition of two structures totaling approximately 2,700 square-feet, grading, utilities, paving, landscaping, and construction of the single-family residences (Appendix A). CalEEMod allows users to model construction criteria air pollutants and precursor emissions from demolition, site grading, asphalt paving, building construction, and architectural coating activities. The modeling assumed a construction duration of twelve months with some overlap of construction for the sub-grade utility extensions, drainage basin, and roads. The approximate 1800 cubic yards of fill to be removed for basin construction would not require substantial haul trips. The results from CalEEMod and the Roadway Construction Emissions Model are shown in **Table IS-10.**

Table IS-10: Construction-Related Emission Estimates

	Constituent in pounds per day			
	ROG	**NOx**	**PM_{10}**	**$PM_{2.5}$**
Thresholds	None	85	80	82
CalEEMod Emissions	32.2	36	9.44	5.45
Exceeds Thresholds?	**No**	**No**	**No**	**No**

Notes:

1. CalEEMod v2022.1.1.20
2. PM Thresholds only apply to projects for which all feasible best available control technology (BACT) and best management practices (BMPs) have been applied. Projects that fail to apply all feasible BACT/BMPs must meet a significance threshold of 0 lbs/day.

The combined emissions results shown in Table IS-10 demonstrate that the project is unlikely to exceed the daily thresholds of significance for NO_x, PM_{10}, and $PM_{2.5}$. Impacts related to construction-related emissions will be ***less than significant***.

OPERATIONAL EMISSIONS/LONG-TERM IMPACTS

Once a project is completed, additional pollutants are emitted through the use, or operation, of the site. Land use development projects typically involve the following sources of emissions: motor vehicle trips generated by the land use; fuel combustion from landscape maintenance equipment; natural gas combustion emissions used for space and water heating; evaporative emissions of ROG associated with the use of consumer products; and evaporative emissions of ROG resulting from the application of architectural coatings.

Typically, a project must be comprised of large acreages or intense uses in order to result in significant operational air quality impacts. For ozone precursor emissions, the screening table in the SMAQMD Guide allows users to screen out projects that include up to 485 new single-family dwelling units for residential projects. For particulate matter emissions, the screening table allows users to screen out projects that include up to 1,000 new single-family dwelling units for residential projects. The proposed project consists of 35 single-family dwelling units, and therefore falls below these screening thresholds. Impacts related to operational emissions are ***less than significant***.

CRITERIA POLLUTANT HEALTH RISKS

All criteria air pollutants can have human health effects at certain concentrations. Air districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations and attainment designations under the national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS). The NAAQS and CAAQS are informed by a wide range of scientific evidence, which demonstrates that there are known safe concentrations of criteria air pollutants. Because the NAAQS and CAAQS are based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of these standards, the thresholds established by air districts are also protective of human health. Sacramento County is currently in nonattainment of the NAAQS and CAAQS for ozone. Projects that emit criteria air pollutants in exceedance of Sacramento Metropolitan Air Quality Management District (SMAQMD) thresholds would contribute to the regional degradation of air quality that could result in adverse human health impacts.

Acute health effects of ozone exposure include increased respiratory and pulmonary resistance, cough, pain, shortness of breath, and lung inflammation. Chronic health effects include permeability of respiratory epithelia and the possibility of permanent lung impairment (EPA 2016).

HEALTH EFFECTS SCREENING

In order to estimate the potential health risks that could result from the operational emissions of ROG, NO_X, PM_{10} and $PM_{2.5}$, PER staff implemented the procedures within SMAQMD's Instructions for Sac Metro Air District Minor Project and Strategic Area Project Health Effects Screening Tools (SMAQMD's Instructions). To date, SMAQMD has published three options for analyzing projects: small projects may use the Minor Project Health Screening Tool, while larger projects may use the Strategic Area Project

Health Screening Tool, and practitioners have the option to conduct project-specific modeling.

Both the Minor Project Health Screening Tool and Strategic Area Project Health Screening Tool are based on the maximum thresholds of significance adopted within the five air district regions contemplated within SMAQMD's Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District (SMAQMD's Friant Guidance; October 2020). The air district thresholds considered in SMAQMD's Friant Guidance included thresholds from SMAQMD as well as the El Dorado County Air Quality Management District, the Feather River Air Quality Management District, the Placer County Air Pollution Control District, and the Yolo Solano Air Quality Management District. The highest allowable emission rates of NO_X, ROG, PM_{10}, and $PM_{2.5}$ from the five air districts is 82 pounds per day (lbs/day) for all four pollutants. Thus, the Minor Project Health Screening Tool is intended for use by projects that would result in emissions at or below 82 lbs/day, while the Strategic Area Project Health Screening Tool is intended for use by projects that would result in emissions between two and eight times greater than 82 lbs/day. The Strategic Area Project Screening Model was prepared by SMAQMD for five locations throughout the Sacramento region for two scenarios: two times and eight times the threshold of significance level (2xTOS and 8xTOS). The corresponding emissions levels included in the model for 2xTOS were 164 lb/day for ROG and NO_X, and 656 lb/day under the 8xTOS for ROG and NO_X (SMAQMD 2020).

As noted in SMAQMD's Friant Guidance, "each model generates conservative estimates of health effects, for two reasons: The tools' outputs are based on the simulation of a full year of exposure at the maximum daily average of the increases in air pollution concentration… [and] [t]he health effects are calculated for emissions levels that are very high" (SMAQMD 2020).

The model derives the estimated health risk associated with operation of the project based on increases in concentrations of ozone and $PM_{2.5}$ that were estimated using a photochemical grid model (PGM). The concentration estimates of the PGM are then applied to the U.S. Environmental Protection Agency's Benefits Mapping and Analysis Program (BenMAP) to estimate the resulting health effects from concentration increases. PGMs and BenMAP were developed to assess air pollution and human health impacts over large areas and populations that far exceed the area of an average land use development project. These models were never designed to determine whether emissions generated by an individual development project would affect community health or the date an air basin would attain an ambient air quality standard. Rather, they are used to help inform regional planning strategies based on cumulative changes in emissions within an air basin or larger geography.

It must be cautioned that within the typical project-level scope of CEQA analyses, PGMs are unable to provide precise, spatially defined pollutant data at a local scale. In addition, as noted in SMAQMD's Friant Guidance, "BenMAP estimates potential health effects from a change in air pollutant concentrations, but does not fully account for other factors affecting health such as access to medical care, genetics, income levels,

behavior choices such as diet and exercise, and underlying health conditions" (2020). Thus, the modeling conducted for the health risk analysis is based on imprecise mapping and only takes into account one of the main public health determinants (i.e., environmental influences).

DISCUSSION OF PROJECT IMPACTS: CRITERIA POLLUTANT HEALTH RISKS

Since the project was below the daily operational thresholds for criteria air pollutants, the Minor Project Health Screening Tool was used to estimate health risks. The results are shown in Table IS-11 and Table IS-12.

Table IS-11: $PM_{2.5}$ Health Risk Estimates

$PM_{2.5}$ Health Endpoint	Age Range[1]	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year)[2,5]	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year)[2]	Percent of Background Health Incidences Across the 5-Air-District Region[3]	Total Number of Health Incidences Across the 5-Air-District Region (per year)[4]
		(Mean)	(Mean)		
Respiratory					
Emergency Room Visits, Asthma	0 - 99	0.81	0.73	0.0039%	18419
Hospital Admissions, Asthma	0 - 64	0.050	0.045	0.0024%	1846
Hospital Admissions, All Respiratory	65 - 99	0.36	0.31	0.0016%	19644
Cardiovascular					
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.18	0.17	0.00070%	24037
Acute Myocardial Infarction, Nonfatal	18 - 24	0.000069	0.000061	0.0016%	4
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0057	0.0053	0.0017%	308
Acute Myocardial Infarction, Nonfatal	45 - 54	0.014	0.013	0.0018%	741

Acute Myocardial Infarction, Nonfatal	55 - 64	0.024	0.023	0.0018%	1239
Acute Myocardial Infarction, Nonfatal	65 - 99	0.11	0.10	0.0021%	5052
Mortality					
Mortality, All Cause	30 - 99	2.4	2.2	0.0048%	44766

Notes:

1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.
2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region.
3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.
4. The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.
5. The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District.*

Table IS-12: Ozone Health Risk Estimates

Ozone Health Endpoint	Age Range[1]	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year)[2,5] (Mean)	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year)[2] (Mean)	Percent of Background Health Incidences Across the 5-Air-District Region[3]	Total Number of Health Incidences Across the 5-Air-District Region (per year)[4]
Respiratory					
Hospital Admissions, All Respiratory	65 - 99	0.085	0.068	0.00035%	19644
Emergency Room Visits, Asthma	0 - 17	0.29	0.24	0.0041%	5859
Emergency Room Visits, Asthma	18 - 99	0.52	0.43	0.0034%	12560

Mortality					
Mortality, Non-Accidental	0 - 99	0.054	0.046	0.00015%	30386

Notes:

1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.
2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region.
3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.
4. The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.
5. The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District.*

Again, it is important to note that the "model outputs are derived from the numbers of people who would be affected by [the] project due to their geographic proximity and based on average population through the Five-District-Region. The models do not take into account population subgroups with greater vulnerabilities to air pollution, except for ages for certain endpoints" (SMAQMD 2020). Therefore, it would be misleading to correlate the levels of criteria air pollutant and precursor emissions associated with project implementation to specific health outcomes. While the effects noted above could manifest in individuals, actual effects depend on factors specific to each individual, including life stage (e.g., older adults are more sensitive), preexisting cardiovascular or respiratory diseases, and genetic polymorphisms. Even if this specific medical information was known about each individual, there are wide ranges of potential outcomes from exposure to ozone precursors and particulates, from no effect to the effects listed in the tables. Ultimately, the health effects associated with the project, using the SMAQMD guidance "are conservatively estimated, and the actual effects may be zero" (SMAQMD 2020).

CONCLUSION: CRITERIA POLLUTANT HEALTH RISKS

Neither SMAQMD nor the County of Sacramento have adopted thresholds of significance for the assessment of health risks related to the emission of criteria pollutants. Furthermore, an industry standard level of significance has not been adopted or proposed. Due to the lack of adopted thresholds of significance the health risks, this data is presented for informational purposes and does not represent an attempt to arrive at any level-of-significance conclusions.

HYDROLOGY AND WATER QUALITY

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Substantially alter the existing drainage pattern of the project area and/or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site

- Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems

- Create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality

DRAINAGE

The project site is located within the Fair Oaks Stream Group watershed. A drainage report (Appendix C) was prepared by Baker-Williams Engineering Group. The drainage report shows that the project site is roughly 10 percent impervious surfaces with an existing drainage swale running across the project site. The swale extends from the middle of the project site on the north down to the southeast corner, where it is picked up by an existing drainage system (See **Plate IS-10**). The site slopes at a three percent grade towards the existing swale, varying in elevation from 246 feet to 235 feet above mean sea level. The existing swale has an upstream watershed of 17.01 acres.

The proposed drainage improvements would be designed using Nolte Flows and will be in the private road system and drainage lot, not crossing any new or existing residential lots (see **Plate IS-11**). The outfall is a 24-inch pipe with a flow line of 229.97 feet, the length of pipe crossing the project site is 624 feet. The swale that flows onto the site enters the project at an elevation of 237 feet, putting in a 24-inch pipe with 3 feet of cover would put the flowline five feet deep at an elevation of 232 feet. The slope of the pipe would be 0.0032 foot/foot. The culvert that crosses Coan Lane has a flow line of 238.2 feet, six feet higher than the proposed flow line and is 600 feet north following property lines. The flow line of County structure 401 is 239.87 feet, eight feet higher than the proposed flow line and is 800 feet northwest following property lines. The five-foot depth of a 24-inch pipe requires a minimum easement width of 16 feet, the minimum road width is 25 feet.

The detention basin was designed using the SacCalc Hec 1 modeling section. The 2, 10 and 100 year 24-hour events were used to design the detention basin to reduce the downstream flows (see **Plate IS-4** “Drainage Lot”). The combination of the small watershed, longer water course and low infiltration rate of the soils makes the difference between the pre and post-development flows very small. The proposed detention basin significantly reduces the downstream flows to less than the existing flows, reducing the existing and future drainage impacts.

The project meets the Low Impact Development (LID) requirements by adding the following three conditions of approval to the project:

1. Plant 45 deciduous trees per tree planting plan.

2. The homes will be required to have disconnected roof drains.

3. Place amended soil in the front yard landscape areas.

The project is designed so the proposed drainage system will have the capacity and depth to serve the upstream properties. The project's private road system is designed to provide an overland release for the upstream properties. The proposed detention basin reduces the existing downstream flows for the 24-hour duration 2-year, 10 year, and 100 year storm events to significantly less than the existing conditions. The reduced flows reduce the existing and future downstream drainage impacts. The detention basin will be privately owned and maintained by the homeowners and only used as a detention basin. The through drainage pipe system will be maintained by the County, in a County easement.

The Sacramento County Department of Water Resources (DWR) reviewed the project and associated drainage study (dated 12/8/2023) and deemed the study technically sufficient to support the proposed subdivision map and provided conditions of approval.

The project will be required to comply with minimum building pad/floor elevations and installation of on-site drainage facilities in accordance with the latest version of the *Stormwater Quality Design Manual for the Sacramento Region*. Compliance with the Sacramento County Floodplain Management Ordinance, Sacramento County Water Agency Code, and Sacramento County Improvement Standard, and DWR's conditions will ensure that project impacts related to drainage are ***less than significant***.

Plate IS-10: Existing Watersheds Onsite

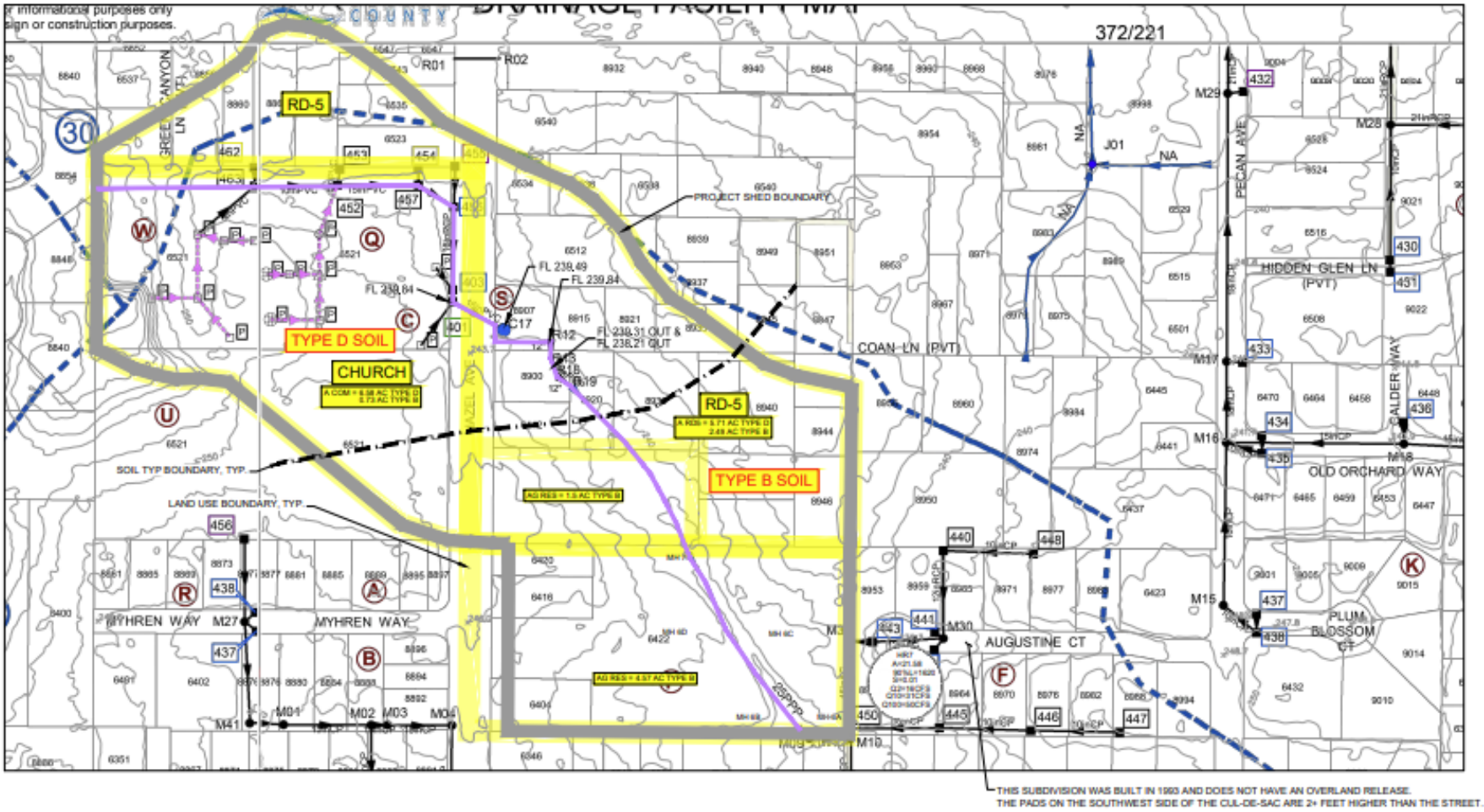
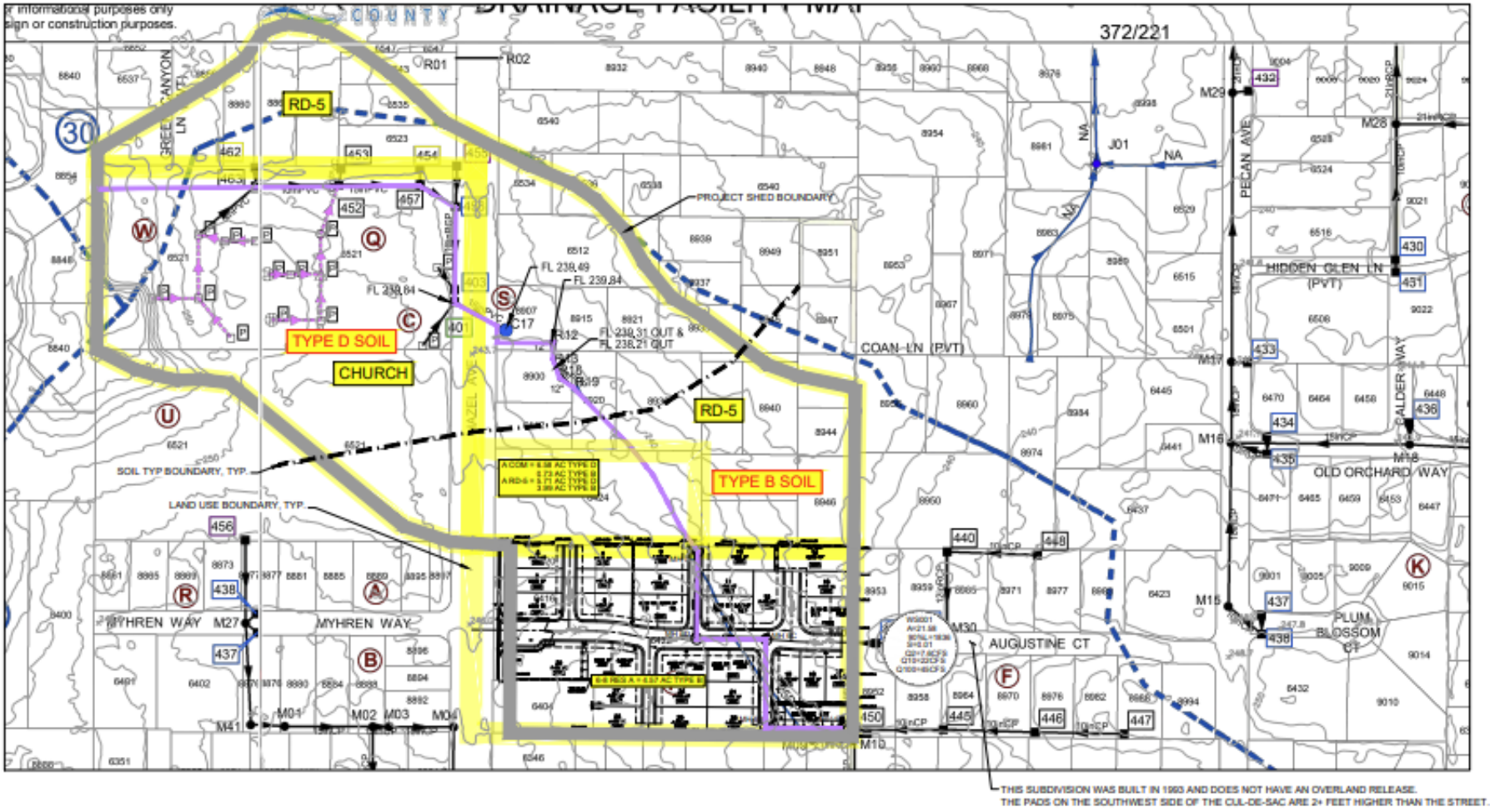


Plate IS-11: Proposed Post-Development Drainage



WATER QUALITY

CONSTRUCTION WATER QUALITY: EROSION AND GRADING

Construction on undeveloped land exposes bare soil, which can be mobilized by rain or wind and displaced into waterways or become an air pollutant. Construction equipment can also track mud and dirt onto roadways, where rains will wash the sediment into storm drains and thence into surface waters. After construction is complete, various other pollutants generated by site use can also be washed into local waterways. These pollutants include, but are not limited to, vehicle fluids, heavy metals deposited by vehicles, and pesticides or fertilizers used in landscaping.

Sacramento County has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Regional Water Board. The Municipal Stormwater Permit requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable and to effectively prohibit non-stormwater discharges. The County complies with this permit in part by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas of the County.

The County has established a Stormwater Ordinance (Sacramento County Code 15.12). The Stormwater Ordinance prohibits the discharge of unauthorized non-stormwater to the County's stormwater conveyance system and local creeks. It applies to all private and public projects in the County, regardless of size or land use type. In addition, Sacramento County Code 16.44 (Land Grading and Erosion Control) requires private construction sites disturbing one or more acres or moving 350 cubic yards or more of earthen material to obtain a grading permit. To obtain a grading permit, project proponents must prepare and submit for approval an Erosion and Sediment Control (ESC) Plan describing erosion and sediment control best management practices (BMPs) that will be implemented during construction to prevent sediment from leaving the site and entering the County's storm drain system or local receiving waters. Construction projects not subject to SCC 16.44 are subject to the Stormwater Ordinance (SCC 15.12) described above.

In addition to complying with the County's ordinances and requirements, construction sites disturbing one or more acres are required to comply with the State's General Stormwater Permit for Construction Activities (CGP). CGP coverage is issued by the State Water Resources Control Board (State Board) http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml and enforced by the Regional Water Board. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction and verified by receiving a WDID#. The CGP requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on site at all times for review by the State inspector.

Applicable projects applying for a County grading permit must show proof that a WDID # has been obtained and must submit a copy of the SWPPP. Although the County has no enforcement authority related to the CGP, the County does have the authority to ensure

sediment/pollutants are not discharged and is required by its Municipal Stormwater Permit to verify that SWPPPs include the minimum components.

The project must include an effective combination of erosion, sediment, and other pollution control BMPs in compliance with the County ordinances and the State's CGP.

Erosion controls should always be the *first line of defense*, to keep soil from being mobilized in wind and water. Examples include stabilized construction entrances, tackified mulch, 3-step hydroseeding, spray-on soil stabilizers and anchored blankets. Sediment controls are the *second line of defense*; they help to filter sediment out of runoff before it reaches the storm drains and local waterways. Examples include rock bags to protect storm drain inlets, staked or weighted straw wattles/fiber rolls, and silt fences.

In addition to erosion and sediment controls, the project must have BMPs in place to keep other construction-related wastes and pollutants out of the storm drains. Such practices include but are not limited to: filtering water from dewatering operations, providing proper washout areas for concrete trucks and stucco/paint contractors, containing wastes, managing portable toilets properly, and dry sweeping instead of washing down dirty pavement.

It is the responsibility of the project proponent to verify that the proposed BMPs for the project are appropriate for the unique site conditions, including topography, soil type and anticipated volumes of water entering and leaving the site during the construction phase. In particular, the project proponent should check for the presence of colloidal clay soils on the site. Experience has shown that these soils do not settle out with conventional sedimentation and filtration BMPs. The project proponent may wish to conduct settling column tests in addition to other soils testing on the site, to ascertain whether conventional BMPs will work for the project.

If sediment-laden or otherwise polluted runoff discharges from the construction site are found to impact the County's storm drain system and/or Waters of the State, the property owner will be subject to enforcement action and possible fines by the County and the Regional Water Board.

Project compliance with requirements outlined above, as administered by the County and the Regional Water Board will ensure that project-related erosion and pollution impacts are ***less than significant***.

OPERATION: STORMWATER RUNOFF

Development and urbanization can increase pollutant loads, temperature, volume, and discharge velocity of runoff over the predevelopment condition. The increased volume, increased velocity, and discharge duration of stormwater runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainage systems. Studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters. These

impacts must be mitigated by requiring appropriate runoff reduction and pollution prevention controls to minimize runoff and keep runoff clean for the life of the project.

The County requires that projects include source and/or treatment control measures on selected new development and redevelopment projects. Source control BMPs are intended to keep pollutants from contacting site runoff. Examples include "No Dumping-Drains to Creek/River" stencils/stamps on storm drain inlets to educate the public, and providing roofs over areas likely to contain pollutants, so that rainfall does not contact the pollutants. Treatment control measures are intended to remove pollutants that have already been mobilized in runoff. Examples include vegetated swales and water quality detention basins. These facilities slow water down and allow sediments and pollutants to settle out prior to discharge to receiving waters. Additionally, vegetated facilities provide filtration and pollutant uptake/adsorption. The project proponent should consider the use of "low impact development" techniques to reduce the amount of imperviousness on the site, since this will reduce the volume of runoff and therefore will reduce the size/cost of stormwater quality treatment required. Examples of low impact development techniques include pervious pavement and bioretention facilities.

The County requires developers to utilize the *Stormwater Quality Design Manual for the Sacramento Region, 2018* (Design Manual) in selecting and designing post-construction facilities to treat runoff from the project. Regardless of project type or size, developers are required to implement the minimum source control measures (Chapter 4 of the Design Manual). Low impact development measures and Treatment Control Measures are required of all projects exceeding the impervious surface threshold defined in Table 3-2 and 3-3 of the Design Manual. Further, depending on project size and location, hydromodification control measures may be required (Chapter 5 of the Design Manual).

Updates and background on the County's requirements for post-construction stormwater quality treatment controls, along with several downloadable publications, can be found at the following websites:

https://waterresources.saccounty.gov/stormwater/Pages/default.aspx

https://www.beriverfriendly.net/new-development/

The final selection and design of post-construction stormwater quality control measures is subject to the approval of the County Department of Water Resources; therefore, they should be contacted as early as possible in the design process for guidance. Project compliance with requirements outlined above will ensure that project-related stormwater pollution impacts are ***less than significant.***

BIOLOGICAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Have a substantial adverse effect on any special status species, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population

to drop below self-sustaining levels, or threaten to eliminate a plant or animal community

- Have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species

- Adversely affect or result in the removal of native or landmark trees

SURVEYS AND METHODOLOGY

Madrone Ecological Consulting prepared a Biological Inventory Report (Appendix D) for the Hazel Ridge project (Study Area). The report included information regarding the biological resources present within the Study Area, an assessment of special-status species that may occur or be affected by the project.

A list of special status species with potential to occur within the Study Area was developed by conducting a query of the following databases:

- California Natural Diversity Database (CNDDB) (CNDDB 2022) query of the Study Area and all areas within 5 miles of the Study Area (Figure 2 of Appendix D);

- USFWS Information for Planning and Conservation (IPaC) (USFWS 2022) query for the Study Area (Appendix D);

- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (CNPS 2022) query of the "Folsom, California" USGS topo quadrangle, and the eight surrounding quadrangles (Appendix D); and

- Western Bat Working Group (WBWG) Species Matrix (WBWG 2022)

In addition, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the Study Area.

For the purposes of this Initial Study, special-status species is defined as those species that are:

- listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service;

- listed as threatened or endangered and candidates for listing by CDFW;

- identified as Fully Protected species or species of special concern by CDFW;

- identified as Medium or High priority species by the WBWG (WBWG 2022); and plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW [California Rare Plant Rank (CRPR) 1, 2, and 3]:

- CRPR 1A: Plants presumed extinct.
- CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A: Plants extirpated in California, but common elsewhere.
- CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.

Special Status Species

The likelihood of a special status species to be present on the project site was determined using the technical studies/documents listed above, and topical literature as cited. Species considered for presence are those species with potential occurrence as indicated on the official USFWS species list, CNDDB quadrangle queries (Citrus Heights, Folsom, Clarksville, Carmichael, Buffalo Creek, and Folsom SE U.S. Geological Survey 7.5-minute quadrangles), CNPS queries. This is the basis for species outlined in **Table IS-13** and **Table IS-14** which report the likelihood of species occurrence based on habitat presence either on the site or in proximity of the site, survey results (if any), and nearby recorded species occurrences. The following set of criteria was used to determine each species potential for occurrence on the site:

- Present: Species occurs on the site based on CNDDB records, and/or was observed on the site during field surveys.
- High: The site is within the known range of the species and suitable habitat exists.
- Moderate: The site is within the known range of the species and very limited suitable habitat exists.
- Low: The site is within the known range of the species and there is marginally suitable habitat, or the species was not observed during protocol-level surveys conducted on-site.
- Absent/No Habitat Present: The site does not contain suitable habitat for the species, the species was not observed during protocol-level floristic surveys conducted on-site, or the site is outside the known range of the species.

Species with absent/no habitat Present are not expected to eccur and are not discussed further in subsequent analysis sections.

Special Status Plants

Table **Table IS-13** provides a list of the special status plant species with potential to occur based upon the available data from USFWS, IPac, CNDDB, and CNPS. The table describes their regulatory status, habitat, and potential for occurrence on the project site.

Table IS-13: Special Status Plants Species and Potential for Occurrence

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**CRPR**	**Habitat Requirements**	**Potential for Occurrence**
Plants					
Balsamorhiza macrolepis Big-scale balsamroot	--	CRPR 1B.2		Prefers chaparral, cismontane woodland, and valley and foothill grasslands. Often associated with serpentine soils.	**Not expected to occur.** No Habitat Present. There is no chaparral, woodland, or suitable grassland habitat and no serpentine or gabberonic soils located within the Study Area.
Calystegia stebbinsii Stebbin's morning-glory	FE	CE,	CRPR 1B.1	Gabberonic or serpentine soils within chaparral openings or cismontaine woodland.	**Not expected to occur.** No Habitat Present. No serpentine or gabberonic soils located within the Study Area.
Carex xerophila Chaparral sedge	--	--	CRPR 1B.2	Chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic or serpentine soils.	**Not expected to occur.** No Habitat Present. No serpentine or gabberonic soils located within the Study Area.
Ceanothus roderrickii Pine Hill ceanothus	FE	CR	CRPRB.1	Chaparral or cismontane woodland within gabberonic soils.	**Not expected to occur.** No Habitat Present**.** No serpentine or gabberonic soils located within the Study Area.
Chlorogalum grandiflorum Red Hills soaproot	--	--	CRPR1B.2	Chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic or serpentine soils.	**Not expected to occur.** No Habitat Present. No serpentine or gabberonic soils located within the Study Area.
Chloropyron molle ssp. *hispidum* Hispid bird's-beak	--	--	CRPR 1B.1	Prefers seasonally flooded , saline-alkali soils at elevations below 500 feet.	**Not expected to occur.** No Habitat Present. No saline-alkali soils are present within the Study Area.

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	CRPR	**Habitat Requirements**	**Potential for Occurrence**
Downingia pusilla Dwarf downingia	--		CRPR 2B.2	Vernal pools and other depressional wetlands	**Not expected to occur.** No Habitat Present. There are no vernal pools or other mesic areas within the Study Area.
Eryngium pinnatisectum Tuolumne button-celery	--		CRPR 1B.2	Found in vernal pools and other mesic areas in cismontane woodland and lower montane coniferous forests between 230 and 3,000 ft.	**Not expected to occur.** Not expected to occur. No Habitat Present. There are no vernal pools or other mesic areas within the Study Area.
Fremontodendron decumbens Pine Hill flannelbush	FE		CR, CRPR 1B.2	Foothill chaparral and cismontane woodland. Rocky ridges; gabbro or serpentine endemic; often among rocks and boulders. 425-770 m.	**Not expected to occur.** No Habitat Present**.** There is no chaparral, woodland, or suitable grassland habitat and no serpentine or gabberonic soils located within the Study Area.
Galium californicum ssp. *sierrae* El Dorado bedstraw	FE		CR, CRPR 1B.2	Chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic soils.	**Not expected to occur.** No Habitat Present. No serpentine or gabberonic soils located within the Study Area.
Gratiola heterosepala Bogg's Lake hedge-hyssop	--		CE, CRPR 1B.2	Vernal pools and margins of lakes/ponds	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	--		CRPR 1B.2	Edges of vernal pools and other seasonally ponded features.	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	--		CRPR 1B.1	Occurs in vernal mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools between 100' and 4,100' elevation	**Not expected to occur.** No Habitat Present. There are no vernal pools or other mesic areas within the Study Area.
Legenere limosa Legenere	--		CRPR 1B.1	Vernal pools	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.

Scientific Name **(Common Name)**	**Federal Status**	**Status tatus**	**CRPR**	**Habitat Requirements**	**Potential for Occurrence**
Navarretia myersii ssp. *myersii* Pincushion navarretia	--	--	CRPR 1B.1	Vernal pools	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.
Orcuttia tenius Slender Orcutt grass	FT	CE	CE	Vernal pools	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.
Orcuttia viscida Sacramento Orcutt grass	FE	CE	CE	Vernal pools	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.
Packera layneae Layne's ragwort	FT	CR,	CR, CRPR 1B.2	Chaparral or cismontane woodland within rocky serpentine or gabberonic soils	**Not expected to occur.** No Habitat Present. No serpentine or gabberonic soils located within the Study Area.
Sagittaria sanfordii Sanford's arrowhead	--	--	CRPR 1B.2	Emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches.	**Not expected to occur.** No Habitat Present**.** There are no marsh, canal, ditch, or drainage habitat within the Study Area. The upland swale within the Study Area does not support wetland plant species.
Wyethia reticulata El Dorado County mule ears	--	--	CRPR 1B.2	Clay or gabberonic soils within chaparral, cismontane woodland,	**Not expected to occur.** No Habitat Present. No gabberonic clay soils are present within the Study Area.

Table IS-14: Special Status Wildlife and Potential for Occurrence

***Scientific Name* (Common Name)**	**Federal Status**	**State Status**	**SSHCP**	**Habitat Requirements**	**Potential for Occurrence**
Invertebrates					
Branchinecta conservatio Conservancy fairy shrimp	FE	--	Yes	Large playa vernal pools.	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.
Branchinecta lynchi Vernal pool fairy shrimp	FT	--	Yes	Vernal pools.	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.
Danaus plexippus Monarch Butterfly	FC	--	Yes	During the breeding season Monarch's lay their eggs on their obligate milkweed host plant (primarily Asclepias spp.)	**Not expected to occur.** No Habitat Present. The Study Area lacks host plants (Milkweed) and overwintering groves of eucalyptus trees.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT	--	Yes	Dependent upon elderberry (Sambucus species) shrubs as primary host species.	**Not expected to occur.** No Habitat Present. No elderberry shrubs are located within the Study Area.
Lepidurus packardi Vernal pool tadpole shrimp	FE	--	Yes	Vernal pools.	**Not expected to occur.** No Habitat Present. There are no vernal pools or depressional wetlands within the Study Area.
Fish					
Hypomesus transpacificus Delta smelt	FT	CE	No	Adults are found in the brackish open surface waters of the Delta and Suisun Bay. Though spawning has never been observed, it is believed to occur in tidally influenced sloughs and drainages on the freshwater side of the mixing zone.	**Not expected to occur.** No Habitat Present. No tidally influenced sloughs or drainages are present within the Study Area.

Oncorhynchus mykiss irideus Central Valley steelhead	FE	--	No	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas	**Not expected to occur.** No Habitat Present. There are no streams or rivers located within the Study Area.
Amphibians					
Spea hammondii Western spadefoot	--	CSC	Yes	Breeds in vernal pools, seasonal ponds, seasonal wetlands and associated swales. Forages and aestivates in adjacent grasslands and oak woodlands.	**Not expected to occur.** No Habitat Present. There are no vernal pools, seasonal wetlands, or other potential breeding habitat located within the Study Area or within the vicinity of the Study Area.
Ambystoma californiense California tiger salamander	FT	CT, CSC	Yes	Breeds in ponds or other deeply ponded wetlands, and uses gopher holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	**Not expected to occur.** No Habitat Present. There are no vernal pools, seasonal wetlands, or other potential breeding habitat located within the Study Area or within the vicinity of the Study Area.
Reptiles					
Actinemys marmorata Western pond turtle	--	CSC	Yes	Ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	**Not expected to occur. No Habitat Present.** There is no suitable aquatic habitat for this species within the Study Area.
Birds					
Colonial nesting water birds	None	None		Water birds such as great blue heron (*Ardea herodias*), great egret (*Ardea alba*), and double- crested cormorant (*Phalacrocorax auritus*) nest colonially in large groups known as "rookeries". Some of these species nest in large trees near perennial water, while others prefer to nest in or adjacent to dense emergent marsh.	**Not expected to occur.** No Habitat Present. There are no perennial water sources or marsh habitat within the vicinity of the Study Area.
Agelaius tricolor Tricolored blackbird	--	CT, CSC	Yes	Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	**Not expected to occur.** No Habitat Present. There is no march or bramble nesting habitat within the Study Area.

Athene cunicularia Burrowing owl	--	CSC	Yes	Nests in abandoned ground squirrel burrows associated with open grassland habitats.	**Not expected to occur.** No Habitat Present**.** No suitable burrows for the species were observed within the Study Area. Additionally, there is not sufficient open grassland within the Study Area to provide suitable habitat.
Buteo swainsoni Swainson's hawk	--	CT	Yes	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	**Low.** The large trees within the Study Area represent suitable nesting habitat. However, the Study Area is not near any large rivers or streams or high-quality foraging habitat for the species. The Study Area contains low potential foraging habitat for the species.
Elanus leucurus *White-tailed kite*	--	CFP	Yes	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	**Low.** The trees within the Study Area represent potential nesting habitat for white- tailed kite. However, there is very little suitable foraging habitat for the species (open fields) within the vicinity of the Study Area. This species has been observed flying overhead near the Study Area by the Madrone biologist.
Riparia riparia *Bank swallow*	None	CT		Colonial nester preferring vertical cliffs and banks with fine textured/sandy soils associated with riparian zones along	**Not expected to occur.** No Habitat Present. There are no riverbanks with sandy soil located within the Study Area.
Mammals					
Antrozous pallidus Pallid bat	--	CSC, WBWG H	No	Roosts in crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating bark, deciduous trees in riparian areas, and fruit trees in orchards), bridges, barns, porches, bat boxes, and human- occupied as well as vacant buildings (WBWG 2022).	**Not expected to occur.** No Habitat Present. No caves or cave analogues present on-site. No large hollows were observed within the trees within the Study Area.

Corynorhinus townsendii townsendii Townsend's big-eared bat	--	CC, WBWG H	No	Roosts in caves and cave analogues, such as abandoned mines, buildings, bridges, rock crevices and large basal hollows of coast redwoods and giant sequoias. Extremely sensitive to human disturbance.	**Not expected to occur.** No Habitat Present. No caves or cave analogues present on-site. No large hollows were observed within the trees within the Study Area.
Lasionycteris noctivagans Silver-haired bat	--	WBWG M	No	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. It forages in open wooded areas near water features. (WBWG 2022)	**Low.** Trees within the Study Area represent potential roosting habitat for this species. The only areas of ponded water within the vicinity of the Study Area are residential backyard pools, which are low quality sources of water. Thus, there is a low potential for roosting silver-haired bats to be present within the Study Area.
Lasiurus blossevillii Western red bat	--	CSC, WBWG H	Yes	Roosts primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat. (WBWG 2022)	**Low.** Trees within the Study Area represent potential roosting habitat for this species. The only areas of ponded water within the vicinity of the Study Area are residential backyard pools, which are low quality sources of water. Thus, there is a low potential for roosting western red bats to be present within the Study Area.
Taxidea taxus American badger	--	CSC	Yes	Drier open areas with shrub, forest, and herbaceous habitats with friable soils.	**Not expected to occur.** No Habitat Present. The Study Area lacks the open spaces needed to support this species.

Status Codes:

CC - CDFW Candidate for Listing

CE - CDFW Endangered

CFP - CDFW Fully Protected

CRPR - California Rare Plant Rank

CSC - CDFW Species of Concern

CR - California Rare

CT - CDFW Threatened

FE - Federally Endangered

FT - Federally Threatened

FC - Candidate for Federal Listing

WBWG M - Western Bat Working Group Medium Threat Rank

WBWG H - Western Bat Working Group High Threat Rank

As noted in **Table IS-14**, two special status species have the potential to occur on the project site. Species not expected to occur are not discussed further.

SWAINSON'S HAWK

The Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species by the State. It is a migratory raptor typically nesting in or near valley floor riparian habitats during spring and summer months. Swainson's hawks were once common throughout the state, but various habitat changes, including the loss of nesting habitat (trees) and the loss of foraging habitat through the conversion of native Central Valley grasslands to certain incompatible agricultural and urban uses has caused an estimated 90% decline in their population.

CDFW recommends the use of the Swainson's Hawk Technical Advisory Committee's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (2000). The document recommends that surveys be completed for at least two survey periods prior to a project's initiation. The purpose of the survey requirement is to ensure that construction activities do not agitate nesting hawks, potentially resulting in nest abandonment or other harm to nesting success. If Swainson's hawk nests are found, the project proponent is required to contact California Fish and Wildlife to determine what measures need to be implemented in order to ensure that nesting hawks remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest, the types of activities, and whether the landform between the nest and activities provides any kind of natural screening.

DISCUSSION OF PROJECT IMPACTS: SWAINSON'S HAWK

The site contains marginal foraging habitat but has numerous trees surrounding the property that could provide nesting habitat. There are 12 occurrences within the CNDDB search area; the nearest occurrence is located 2.20 miles east of the site along the American River.

To avoid impacts to nesting Swainson's hawks, mitigation involves pre-construction nesting surveys to identify any active nests and to implement avoidance measures if nests are found. For determining impacts to and establishing mitigation for nesting Swainson's hawks in Sacramento County, CDFW recommends utilizing the methodology set forth in the Recommended Timing and Methodology for Swainson's Hawk nesting Surveys in California's Central Valley (Swainson's Hawk TAC 2000). The document recommends that surveys be conducted for the two survey periods immediately prior to the **start of construction**. The five survey periods are defined by the timing of migration, courtship, and nesting in a typical year (reference **Table IS-15: Recommended Survey Periods for Swainson's Hawk (TAC 2000)Table IS-15**). Surveys should extend a ½ mile radius around all project activities, and if active nesting is identified, CDFW should be contacted. Given the urbanized surroundings of the project site, and likelihood that Swainson's hawks inhabiting the vicinity of the project site area being accustomed to disturbances, it is reasonable to reduce the radius for surveys from ½ mile to ¼ mile. The purpose of the survey requirement is to ensure that

construction activities do not agitate nesting hawks, potentially resulting in nest abandonment or other harm to nesting success. If Swainson's hawk nests are found, the applicant is required to contact CDFW to determine what measures need to be implemented in order to ensure that nesting hawks remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest, the types of activities, and whether the landform between the nest and activities provides any kind of natural screening.

Table IS-15: Recommended Survey Periods for Swainson's Hawk (TAC 2000)

Period #	Timeframe	# of surveys required	Notes
I.	Jan. 1 – Mar. 20	1	Optional, but recommended
II.	Mar. 20 – Apr. 5	3	
III.	Apr. 5 – Apr. 20	3	
IV.	Apr. 21 – June 10	N/A	Initiating surveys is not recommended during this period
V.	June 10 – July 30	3	

For example, if a project is scheduled to begin on June 20, three surveys should be completed in Period III and three surveys in Period V, as surveys should not be initiated in Period IV. It is always recommended that surveys be completed in Periods II, III and V.

With mitigation, impacts to Swainson's hawk nesting habitat are ***less than significant.***

NESTING RAPTORS

This section addresses raptors that are not listed as endangered, threatened, or of special concern, but are nonetheless afforded general protections by the Fish and Game Code. Raptors and their active nests are protected by the California Fish and Game Code Section 3503.5, which states: It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey, or raptors) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Section 3(19) of the Federal Endangered Species Act (FESA) defines the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Causing a bird to abandon an active nest may cause harm to egg(s) or chick(s) and is therefore considered "take." Thus, take may occur both as a result of cutting down a tree or as a result of activities nearby an active nest which cause nest abandonment.

Raptors within the Sacramento region include tree-nesting species such as the red-tailed hawk and red-shouldered hawk, as well as ground-nesting species such as the northern harrier. The following raptor species are identified as "special animals" due to concerns over nest disturbance: Cooper's hawk, sharp-shinned hawk, golden eagle, northern harrier, and white-tailed kite.

Although no nests of nesting raptors were identified during the survey, general mitigation for nesting raptors has been included out of an abundance of caution. To avoid impacts to nesting raptors, mitigation involves pre-construction nesting surveys to identify any active nests and to implement avoidance measures if nests are found – if construction will occur during the nesting season of March 1 to September 15. The purpose of the survey requirement is to ensure that construction activities do not agitate or harm nesting raptors, potentially resulting in nest abandonment or other harm to nesting success. If nests are found, the developer is required to contact California Department of Fish and Wildlife to determine what measures need to be implemented in order to ensure that nesting raptors remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest, the types of activities, and whether the landform between the nest and activities provides any kind of natural screening. If no active nests are found during the focused survey, no further mitigation will be required.

Impacts to nesting raptors are ***less than significant***.

MIGRATORY NESTING BIRDS

The Migratory Bird Treaty Act of 1918, which states "unless and except as permitted by regulations, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird. Section 3(18) of FESA defines the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Causing a bird to abandon an active nest may cause harm to egg(s) or chick(s) and is therefore considered "take." To avoid take of nesting migratory birds, minimization measures have been included to require that activities, either occur outside of the nesting season, or to require that nests be buffered from construction activities until the nesting season is concluded.

Suitable nesting habitat is present throughout the project site and adjacent properties. Preconstruction surveys for migratory nesting birds will be required if work is to commence between February 1 and September 15. The purpose of the survey requirement is to ensure that construction activities do not agitate or harm nesting migratory birds, potentially resulting in nest abandonment or other harm to nesting success.

Impacts to migratory nesting birds are ***less than significant***.

SPECIAL STATUS BATS

There are many bat species which can be found in Sacramento County, the following of which are listed as special animals: pallid bat (Antrozous pallidus), western red bat

(Lasiurus blossevillii), and Yuma myotis bat (Myotis yumanensis). The pallid bat and western red bat are state-listed Species of Special Concern, while the Yuma myotis is a special animal. All three bat species roost within either natural or human-made structures, such as caves, mines, crevices (including under bridges), hollow trees, and in abandoned or seldom-used buildings. Young are born to the species in the spring and early summer (maternity colonies typically begin to form in April, and births occur from May through early July, depending on the species). Threats to the species include loss of foraging and roosting habitat, and disruption of maternity colonies.

County policies and ordinances already require one-to-one replacement of most large-scale grassland habitat (for the Swainson's hawk) and for wetland habitats, which will also act to conserve bat foraging habitat. Given the wide range of habitats suitable for foraging and the presence of County policies which will continue to ensure the mitigation of the most common types of foraging habitat in the County, the loss of this habitat is of less concern than would be the loss of the more specialized roosting habitat or the disruption of maternity colonies.

The Project site and surround parcels contain a number of mature trees that may be suitable for tree roosting bats. Disturbance of roost sites during the maternity and hibernation seasons are considered primary factors that may negatively impact bats and have the potential to result in take. During the hibernation period, bats are very slow to respond to disturbance during torpor and can lose fat stores needed to survive the winter while pups in the maternity colony may not have the ability to fly. The disturbance and removal of roost sites may have a significant adverse effect on bats. Heavy machinery on site has the potential to disturb roosting bats, if present. Therefore, mitigation has been incorporated into the project requirements that involves pre-construction surveys to determine bat presence, and implementation of avoidance and minimization measures, if necessary. With implementation of mitigation, impacts to special status bats are ***less than significant***.

Native Trees

Sacramento County has identified the value of its native and landmark trees and has adopted measures for their preservation. The Tree Ordinance (Chapter 19.04 and 19.12 of the County Code) provides protections for landmark trees and heritage trees. The County Code defines a landmark tree as "an especially prominent or stately tree on any land in Sacramento County, including privately owned land" and a heritage tree as "native oak trees that are at or over 19" diameter at breast height (dbh)." Chapter 19.12 of the County Code, titled Tree Preservation and Protection, defines native oak trees as valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), or oracle oak (*Quercus morehus*) and states that "it shall be the policy of the County to preserve all trees possible through its development review process." It should be noted that to be considered a tree, as opposed to a seedling or sapling, the tree must have a diameter at breast height (dbh) of at least 6 inches or, if it has multiple trunks of less than 6 inches each, a combined dbh of 10 inches. The Sacramento County General Plan Conservation Element policies CO-138 and CO-139 also provide protections for native trees:

> CO-138. Protect and preserve non-oak native trees along riparian areas if used by Swainson's Hawk, as well as landmark and native oak trees measuring a minimum of 6 inches in diameter or 10 inches aggregate for multi-trunk trees at 4.5 feet above ground.
>
> CO-139. Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.

Native trees other than oaks include Fremont cottonwood (*Populus fremontii*), California sycamore (*Platanus racemosa*), California black walnut (*Juglans californica*), Oregon ash (*Fraxinus latifolia*), western redbud (*Cercis occidentalis),* gray pine (*Pinus sabiniana*), California white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), narrowleaf willow (*Salix exigua*), Gooding's willow (*Salix gooddingii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), shining willow (*Salix lucida*), Pacific willow (*Salix lasiandra*), and dusky willow (*Salix melanopsis*).

DISCUSSION OF PROJECT IMPACTS

An arborist report was prepared by Acorn Arboricultural Services, Inc. (Appendix E). There are a total of 119 trees on the project site or with driplines overhanging the project site. Of the 119 trees, 63 are native and 56 are non-native. Of the 63 native trees on or with driplines overhanging the project site, 23 of which do not meet the 6-inch (dbh) or 10-inch aggregate for multi-trunk trees minimum for protection under General Plan policy CO-138. All trees on the project site are slated for removal. Off-site trees with driplines overhanging the project site are to be retained with encroachment impacts assessed below.

ONSITE PROTECTED NATIVE TREES TO BE REMOVED

Construction of the proposed project would result in the removal of 32 County protected trees. These include: 29 native oaks, three California black walnuts, and one Fremont cottonwood (reference **Table IS-16** and **Plate IS-12**)

Plate IS-12: Tree Location Exhibit from Arborist Report

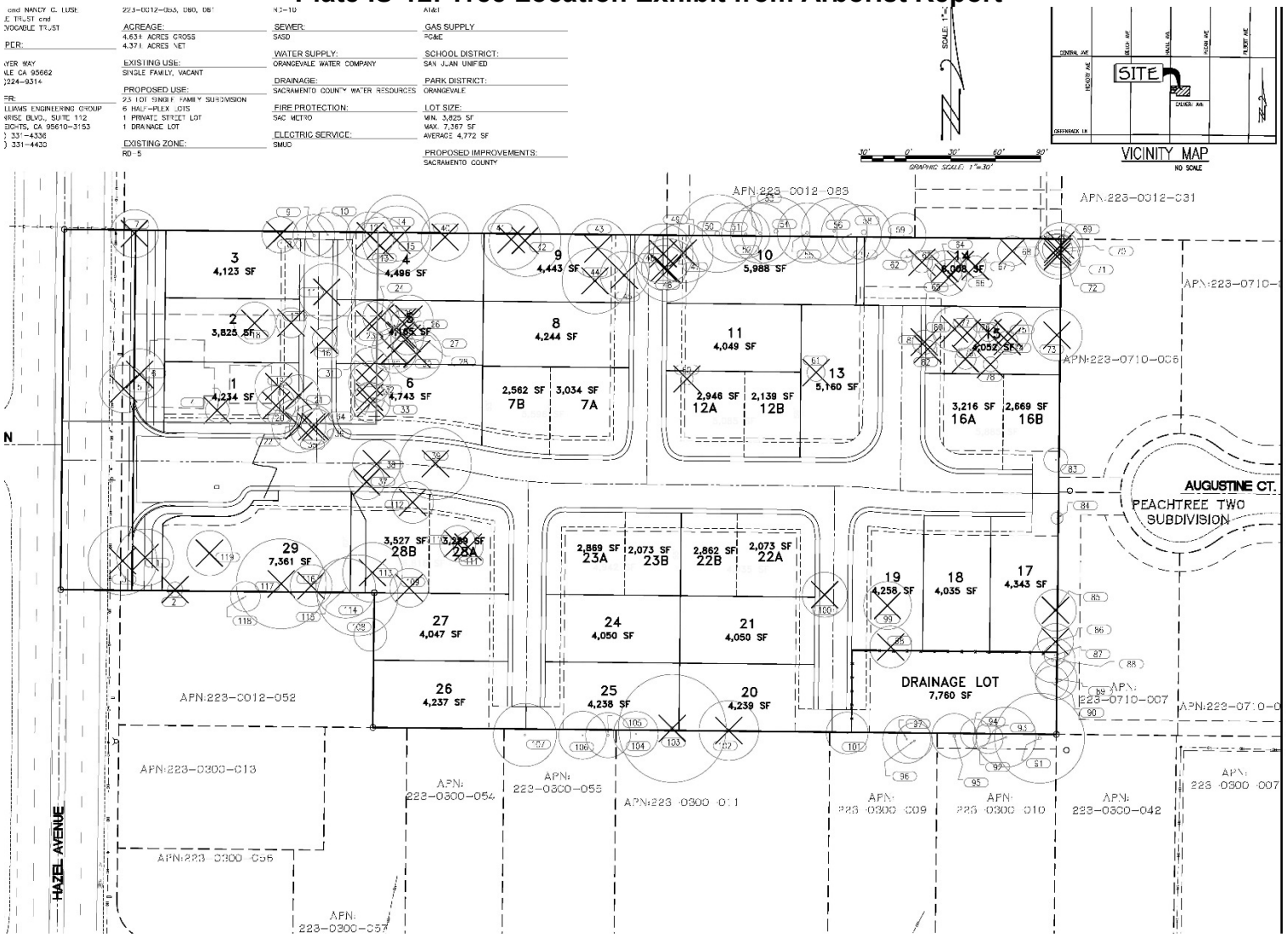


Table IS-16: Tree removals

Tree Number	Common name	Scientific Name	Mutli-stems (inches)	Total DBH (inches)	Dripline Radius (feet)
1	Interior live oak	*Quercus wislizenii*		11.0	19.0
7	Blue oak	*Quercus douglasii*		17.0	16.0
8	Fremont cottonwood	*Populus fremontii*		10.0	12.0
9	California black walnut	*Juglans hindsii*	9,10	13.5	14.0
12	Valley oak	*Quercus lobata*		10.0	16.0
13	Valley oak	*Quercus lobata*		9.0	19.0
14	Interior live oak	*Quercus wislizenii*	9,10	13.5	22.0
15	Interior live oak	*Quercus wislizenii*		14.0	23.0
25	Valley oak	*Quercus lobata*		10.0	16.0
27	Valley oak	*Quercus lobata*		11.4	4.0
28	Valley oak	*Quercus lobata*		7.0	11.0
29	Valley oak	*Quercus lobata*		13.0	15.0
30	Valley oak	*Quercus lobata*		14.0	17.0
37	California black walnut	*Juglands hindsii*		9.0	12.0
38	Valley oak	*Quercus lobata*	7,8	10.6	16.0
39	Valley oak	*Quercus lobata*	11,21	23.7	24.0
40	Valley oak	*Quercus lobata*	8,9	12.0	16.0
41	Interior live oak	*Quercus wislizenii*		9.0	20.0
42	Interior live oak	*Quercus wislizenii*		15.0	24.0
47	Valley oak	*Quercus lobata*		9.3	15.0
61	Valley oak	*Quercus lobata*		8.5	6.0
73	Valley oak	*Quercus lobata*		10.8	17.0
75	Interior live oak	*Quercus wislizenii*	5,5,6	9.3	14.0
79	Valley oak	*Quercus lobata*	6,6	8.5	7.0
81	Valley oak	*Quercus lobata*		7.0	8.0
82	Valley oak	*Quercus lobata*	2,6	6.3	6.0
98	Valley oak	*Quercus lobata*		11.0	14.0
99	Interior live oak	*Quercus wislizenii*	6,9	10.8	16.0
100	Interior live oak	*Quercus wislizenii*	7,8	10.6	15.0
103	Interior live oak	*Quercus wislizenii*		26.0	36.0
109	Valley oak	*Quercus lobata*	3,7	7.6	13.0
117	California black walnut	*Juglans hindsii*		19.0	30.0
			Total	**377.7**	

The 32 trees proposed for removal total 377.7 inches (dbh). The arborists' conditions for these trees ranged from "fair" to "poor to fair". If additional trees are removed, equivalent

compensatory planting shall be required. Equivalent compensation, totaling 377.7 inches (dbh) shall be satisfied using the following ratios:

- one D-pot seedling (40 cubic inches or larger) = 1-inch dbh
- one 15-gallon tree = 1-inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

With mitigation, impacts associated with native tree removal is ***less than significant***

OFF-SITE NATIVE TREE ENCROACHMENT

The proposed development could result in encroachment to eight, off-site, native oak trees which have driplines that extend over the project site (**Table IS-17**). Partial mitigation is applied to 6-inch or larger native oak trees when encroachment exceeds 20 percent of the dripline protection area, as defined by a circle using the distance from the trunk to the tip of the longest limb as a radius. The concept of partial mitigation stems from the fact that removal of more than 25-30 percent of a tree's root system or live canopy can result in early decline, if not death. The dripline protection area is the minimum protected area for a tree. A 20 percent encroachment threshold is utilized because of the difference between the extent of root systems and the minimum protected area. An encroachment of 20 percent of the dripline protection area will likely impact 25-30 percent of the root system, if not more. Therefore the following encroachment thresholds are applied:

- Encroachment of 20 percent or less is considered a minor impact, and does not require mitigation.
- Encroachment of more than 20 percent and less than 50 percent requires partial mitigation based on the percentage of encroachment multiplied by the impacted tree's dbh.
- Encroachment of 50 percent or more requires full mitigation for the tree.

Tree encroachment was determined using ESRI ArcPro software, data from the arborist report, and the project site plans. Encroachment was assumed if minimum lot setback were within the driplines of protected trees.

Table IS-17: Off-site Protected Trees with Encroachment

Tree number	Common Name	DBH	Encroachment percentage	Mitigation required	Mitigation inches
83	Valley oak	7	45%	Yes	3
88	Interior live oak	19	30%	Yes	6
89	Valley oak	14	39%	Yes	5
92	Interior Live oak	15	12%	No	NA
101	Valley Oak	8	1%	No	NA
104	Interior live oak	8	5%	No	NA
106	Valley oak	10	16%	No	NA
107	Valley oak	14	38%	Yes	5
					Total mitigation inches: 19

The proposed development would encroach on the driplines of these eight trees with encroachment values ranging from 1% to 45%. Trees: 92, 101, 104, and 106 do not require mitigation because each is under the 20% encroachment threshold. Mitigation is recommended for the partial encroachment to trees which exceed 20% (83, 88, 89, and 107), equaling a total of 19 inches of native tree mitigation, utilizing the methodology described above.

In addition to permanent encroachment impacts from the proposed project, there could be temporary encroachment of protected trees during the construction phase. These could include construction equipment traveling over or parking withing the trees drip line area. Mitigation has been included to ensure that protective measures are in place during construction. Impacts to native trees due to potential encroachment are ***less than significant.***

NON-NATIVE TREE CANOPY

The Sacramento County General Plan Conservation Element contains several policies aimed at preserving tree canopy within the County. These are:

> CO-145. Removal of non-native tree canopy for development shall be mitigated by creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. New tree canopy acreage shall be calculated using the 15-year shade cover values for tree species.
>
> CO-146. If new tree canopy cannot be created onsite to mitigate for the non-native tree canopy removed for new development, project proponents (including

public agencies) shall contribute to the Greenprint funding in an amount proportional to the tree canopy of the specific project.

CO-147. Increase the number of trees planted within residential lots and within new and existing parking lots.

The 15-year shade cover values for tree species referenced in policy CO-145 are also referenced by the Sacramento County Zoning Code, Chapter 30, Article 4, and the list is maintained by the Sacramento County Department of Transportation, Landscape Planning and Design Division. The list includes more than seventy trees. Policy CO-146 references the Greenprint program, which is run by the Sacramento Tree Foundation and has a goal of planting five million trees in the Sacramento region.

DISCUSSION OF PROJECT IMPACTS

The arborist report (Appendix E) prepared for the project identified a total of 56, non-native trees measuring a minimum of 4 inches in diameter at breast height (DBH) within or with canopies overhanging the project site (**Plate IS-12**). Of the 56 trees, only 30 trees have canopies which contribute to the urban tree canopy and are proposed for removal. The remaining 26 trees are either in such poor condition that they do not contribute significantly to the urban canopy, or the tree is located off-site. Project implementation would result in the removal of 17,906 square feet (0.41 acres) of tree canopy.

The removal of a non-native tree canopy requires the replacement of the canopy area lost pursuant to General Plan policy CO-145. Therefore, the removal of 17,906 square feet of canopy will need to be replaced with an equivalent amount of new tree canopy. Pursuant to the Countywide Design Guidelines, all new residential lots must have one new tree planted and corner lots require two trees. A total of approximately 46 new trees will be planted within the development. If tree species with larger mature canopies (valued at 962 square feet) are planted, the canopy of all new trees would equal 44,252 square feet, which would meet the mitigation requirements. Mitigation has been included requiring the creation of new canopy equivalent to the area of non-native tree canopy removed. With mitigation, impacts to non-native tree canopy removal are ***less than significant.***

CULTURAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource
- Have a substantial adverse effect on an archaeological resource
- Disturb any human remains, including those interred outside of formal cemeteries

Under CEQA, lead agencies must consider the effects of projects on historical resources and archaeological resources. A “historical resource” is defined as a resource

listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, and any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5[a] of the Guidelines). Public Resources Code (PRC) Section 5042.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for CRHR eligibility. Impacts to historical resources that materially impair those characteristics that convey its historical significance and justify its inclusion or eligibility for the NRHP or CRHR are considered a significant effect on the environment (CEQA guidelines 15064.5)).

In addition to historically significant resources, an archeological site may meet the definition of a “unique archeological resource” as defined in PRC Section 21083.2(g). If unique archaeological resources cannot be preserved in place or left in an undisturbed state, mitigation measures shall be required (PRC Section 21083.2 (c)).

CEQA Guidelines Section 15064.5 (e) outlines the steps the lead agency shall take in the event of an accidental discovery of human remains in any location other than a dedicated cemetery.

CULTURAL SETTING

A Cultural Resources Assessment was prepared for the project by Peak and Associates. The following information and analysis are based on these reports.

A search of records and historical information on file at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) was conducted on August 3, 2022, for the project area and 0.25-mile radius of the project site.

No previously recorded resources were identified within the record search project area.

On August 5, 2022, consultants from Peak and Associates conducted a field survey of the project site. The archaeologists walked parallel transects of five-meter separation.

No historical or prehistoric features, artifacts or resources were observed during the survey.

PROJECT IMPACTS

The archival and field surveys of the project site did not identify any archeological sites or isolates. Due to the highly disturbed nature of the project site, it is unlikely to encounter potentially significant resources during construction. However, any time that soil is excavated archeological materials could be uncovered. Mitigation is recommended to ensure proper treatment and protection of unanticipated archeological discoveries during ground disturbance. With implementation of recommended mitigation, impacts to cultural resources are considered ***less than significant***.

The project is unlikely to impact human remains buried outside of formal cemeteries; however, if human remains are encountered during construction, mitigation is included specifying how to comply with CEQA Guidelines Section 15064.5 (e), Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code. Therefore, with mitigation, project impacts to cultural resources will be ***less than significant.***

GREENHOUSE GAS EMISSIONS

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

REGULATORY BACKGROUND

California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this establishes a broad framework for the State's long-term GHG reduction and climate change adaptation program. Of particular importance is AB 32, which establishes a statewide goal to reduce GHG emissions back to 1990 levels by 2020, and Senate Bill (SB) 375 supports AB 32 through coordinated transportation and land use planning with the goal of more sustainable communities. SB 32 extends the State's GHG policies and establishes a near-term GHG reduction goal of 40% below 1990 emissions levels by 2030. Executive Order (EO) S-03-05 identifies a longer-term goal for 2050.[3]

COUNTY OF SACRAMENTO CLIMATE ACTION PLANNING

In November of 2011, Sacramento County approved the Phase 1 Climate Action Plan Strategy and Framework document (Phase 1 CAP), which is the first phase of developing a community-level Climate Action Plan. The Phase 1 CAP provides a framework and overall policy strategy for reducing greenhouse gas emissions and managing our resources in order to comply with AB 32. It also highlights actions already taken to become more efficient, and targets future mitigation and adaptation strategies. This document is available at http://www.green.saccounty.net/Documents/sac_030843.pdf. The CAP contains policies/goals related to agriculture, energy, transportation/land use, waste, and water.

Goals in the section on agriculture focus on promoting the consumption of locally grown produce, protection of local farmlands, educating the community about the intersection of agriculture and climate change, educating the community about the importance of open space, pursuing sequestration opportunities, and promoting water conservation in agriculture. Actions related to these goals cover topics related to urban forest

[3] EO S-03-05 has set forth a reduction target to reduce GHG emissions by 80 percent below 1990 levels by 2050. This target has not been legislatively adopted.

management, water conservation programs, open space planning, and sustainable agriculture programs.

Goals in the section on energy focus on increasing energy efficiency and increasing the usage of renewable sources. Actions include implementing green building ordinances and programs, community outreach, renewable energy policies, and partnerships with local energy producers.

Goals in the section on transportation/land use cover a wide range of topics but are principally related to reductions in vehicle miles traveled, usage of alternative fuel types, and increases in vehicle efficiency. Actions include programs to increase the efficiency of the County vehicle fleet, and an emphasis on mixed use and higher density development, implementation of technologies and planning strategies that improve non-vehicular mobility.

Goals in the section on waste include reductions in waste generation, maximizing waste diversion, and reducing methane emissions at Kiefer landfill. Actions include solid waste reduction and recycling programs, a regional composting facility, changes in the waste vehicle fleet to use non-petroleum fuels, carbon sequestration at the landfill, and methane capture at the landfill.

Goals in the section on water include reducing water consumption, emphasizing water efficiency, reducing uncertainties in water supply by increasing the flexibility of the water allocation/distribution system, and emphasizing the importance of floodplain and open space protection as a means of providing groundwater recharge. Actions include metering, water recycling programs, water use efficiency policy, water efficiency audits, greywater programs/policies, river-friendly landscape demonstration gardens, participation in the water forum, and many other related measures.

The Phase 1 CAP is a strategy and framework document. The County adopted the Phase 2A CAP (Government Operations) on September 11, 2012. Neither the Phase 1 CAP nor the Phase 2A CAP are “qualified” plans through which subsequent projects may receive CEQA streamlining benefits. The Communitywide CAP (Phase 2B) has been in progress for some time (https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/CAP.aspx) but was placed on hold in late 2018 pending in-depth review of CAP-related litigation in other jurisdictions.

The commitment to a Communitywide CAP is identified in General Plan Policy LU-115 and associated Implementation Measures F through J on page 117 of the General Plan Land Use Element. This commitment was made in part due to the County’s General Plan Update process and potential expansion of the Urban Policy Area to accommodate new growth areas. General Plan Policies LU-119 and LU-120 were developed with SACOG to be consistent with smart growth policies in the SACOG Blueprint, which are intended to reduce VMT and GHG emissions. This second phase CAP is intended to flesh out the strategies involved in the strategy and framework CAP, and will include economic analysis, intensive vetting with all internal departments, community outreach/information sharing, timelines, and detailed performance measures.

The Phase 2B CAP was re-initiated in early 2020. In March of 2021, the draft Phase 2B CAP was released by the County for public review. On September 7, 2021, a Final Draft CAP and Addendum to the 2030 General Plan EIR was released for public review. The County revised the CAP a second time and released the Revised Final Draft CAP and Revised Addendum to the 2030 General Plan EIR on February 17, 2022. These documents were presented at a Board of Supervisors workshop on March 23, 2022. The County received more than 85 comment letters on the Revised Final Draft CAP leading up to the Board workshop on March 23, 2022. Based on input from the Board of Supervisors during the September 27, 2022, hearing on the CAP, County staff are reviewing the numerous comments received and preparing another revision to the CAP. Sacramento County will be preparing a Subsequent Environmental Impact Report to analyze the potential impacts of the revised CAP and it is anticipated that a draft of the report will be distributed for public review in 2024.

Thresholds of Significance

Addressing GHG generation impacts requires an agency to make a determination as to what constitutes a significant impact. Governor's Office of Planning and Research's (OPR's) Guidance does not include a quantitative threshold of significance to use for assessing a proposed development's GHG emissions under CEQA. Moreover, CARB has not established such a threshold or recommended a method for setting a threshold for proposed development-level analysis.

In April 2020, SMAQMD adopted an update to their land development project operational GHG threshold, which requires a project to demonstrate consistency with CARB's 2017 Climate Change Scoping Plan. The Sacramento County Board of Supervisors adopted the updated GHG threshold in December 2020. SMAQMD's technical support document, "Greenhouse Gas Thresholds for Sacramento County", identifies operational measures that should be applied to a project to demonstrate consistency.

All projects must implement Tier 1 Best Management Practices to demonstrate consistency with the Climate Change Scoping Plan. After implementation of Tier 1 Best Management Practices, project emissions are compared to the operational land use screening levels table (equivalent to 1,100 metric tons of CO2e per year). If a project's operational emissions are less than or equal to 1,100 metric tons of CO2e per year after implementation of Tier 1 Best Management Practices, the project will result in a less than cumulatively considerable contribution and has no further action. Tier 1 Best Management Practices include:

- BMP 1 – no natural gas: projects shall be designed and constructed without natural gas infrastructure.
- BMP 2 – electric vehicle (EV) Ready: projects shall meet the current CalGreen Tier 2 standards.
    - EV Capable requires the installation of "raceway" (the enclosed conduit that forms the physical pathway for electrical wiring to protect it from

damage) and adequate panel capacity to accommodate future installation of a dedicated branch circuit and charging station(s)

- EV Ready requires all EV Capable improvements plus installation of dedicated branch circuit(s) (electrical pre-wiring), circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or blank cover needed to support future installation of one or more charging stations

Projects that implement BMP 1 and BMP 2 can utilize the screening criteria for operation emissions outlined in **Table IS-18**. Projects that do not exceed 1,100 metric tons per year are then screened out for further requirements. For projects that exceed 1,100 metric tons per year, then compliance with BMP 3 is also required:

- BMP 3 – Reduce applicable project VMT by 15% residential and 15% worker relative to Sacramento County targets, and no net increase in retail VMT. In areas with above-average existing VMT, commit to provide electrical capacity for 100% electric vehicles.

SMAQMD's GHG construction and operational emissions thresholds for Sacramento County are shown in Table IS-7.

Table IS-18: SMAQMD Thresholds of Significance for Greenhouse Gases

Land Development and Construction Projects		
	Construction Phase	Operational Phase
Greenhouse Gas as CO_2e	1,100 metric tons per year	1,100 metric tons per year
Stationary Source Only		
	Construction Phase	Operational Phase
Greenhouse Gas as CO_2e	1,100 metric tons per year	10,000 metric tons per year

PROJECT IMPACTS

CONSTRUCTION-GENERATED GREENHOUSE GAS EMISSIONS

GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. The project is within the screening criteria for construction related impacts related to air quality. Therefore, construction related GHG impacts are considered ***less than significant***.

OPERATIONAL PHASE GREENHOUSE GAS EMISSIONS

The project will implement BPM 1 and BMP 2 in its entirety. The operational emissions associated with the project are estimated to generate 269 MT of CO_2e per year, which is less than 1,100 MT of CO_2e per year threshold (refer to Appendix A). Mitigation has been included to implement BMP 1 and BMP 2. The impacts from GHG emissions are ***less than significant with mitigation***.

ENVIRONMENTAL MITIGATION MEASURES

Mitigation Measures A-J are critical to ensure that identified significant impacts of the project are reduced to a level of less than significant. Pursuant to Section 15074.1(b) of the CEQA Guidelines, each of these measures must be adopted exactly as written unless both of the following occur: (1) A public hearing is held on the proposed changes; (2) The hearing body adopts a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.

As the applicant, or applicant's representative, for this project, I acknowledge that project development creates the potential for significant environmental impact and agree to implement the mitigation measures listed below, which are intended to reduce potential impacts to a less than significant level.

Applicant _____ Date: _____

MITIGATION MEASURE A: BASIC CONSTRUCTION EMISSIONS CONTROL PRACTICES

The following Basic Construction Emissions Control Practices are considered feasible for controlling fugitive dust from a construction site. The practices also serve as best management practices (BMPs), allowing the use of the non-zero particulate matter significance thresholds. Control of fugitive dust is required by District Rule 403 and enforced by District staff.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.

- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.

- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).

- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board (CARB) enforces idling limitations and compliance with diesel fleet regulations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.

- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic.

MITIGATION MEASURE B: SWAINSON'S HAWK NEST PROTECTION

If construction, grading, or project-related improvements are to commence between February 1 and September 15, focused surveys for Swainson's hawk nests shall be conducted by a qualified biologist within a ¼-mile radius of project activities, in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk TAC 2000). To meet the minimum level of protection for the species, surveys should be completed before the two survey periods immediately prior to commencement of construction activities in accordance with the 2000 TAC recommendations (see **Table IS-13**). If active nests are found, County Planning and Environmental review shall be contacted and will coordinate with CDFW to determine appropriate protective measures, and these measures shall be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, no further mitigation will be required.

MITIGATION MEASURE C: RAPTOR NEST PROTECTION

If construction activity (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat between February 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree and ground nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. The biologist shall

supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required. If any active nests are found, the Environmental Coordinator and California Fish and Wildlife shall be contacted to determine appropriate avoidance/protective measures. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest.

MITIGATION MEASURE D: MIGRATORY BIRD NEST PROTECTION

To avoid impacts to nesting migratory birds the following shall apply:

1. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and September 15, a survey for active migratory bird nests shall be conducted no more than 14 days prior to construction by a qualified biologist.

2. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through September, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.

If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged.

MITIGATION MEASURE E: BATS

To avoid impacts to day roosting bats the following shall apply:

1. Habitat Assessment: A qualified biologist with education and experience in bat biology and identification, shall conduct a habitat assessment for potentially suitable bat habitat within six months of Project activities. If the habitat assessment reveals suitable bat habitat, then a qualified bat biologist shall do a presence/absence survey during the peak activity periods. If bats are present, then the qualified biologist shall submit a bat avoidance plan to CDFW for review and approval.

2. Bat Avoidance Plan: The bat avoidance plan should identify: 1) the location of the roosting sites; 2) the number of bats present at the time of assessment (count or estimate); 3) species of bats present; 4) the type of roost (e.g. day/night, maternity, hibernaculum, bachelor); and 5) species specific measures to avoid and minimize impacts to bats. The bat avoidance plan shall evaluate the length of time of disturbance, equipment noise, and type of habitat present at the Project.

3. No Disturbance Buffer. If during the habitat assessment the qualified bat biologist identifies a bat roost within the Project boundary that is not proposed for demolition or removal, then a no disturbance buffer shall be established around the roost in consultation with CDFW. The width of the buffer should be determined by the qualified bat biologist based on the bat species, specific site conditions, and level of disturbance. The buffer should be maintained until the qualified bat biologist determines that the roost is no longer occupied.

4. Replacement Structures. If the bat roost cannot be avoided, replacement roost structures (bat houses or other structures) shall be designed to accommodate the bat species they are intended for. Replacement roost structures shall be in place for a minimum of one full year prior to implementing the Project. The replacement structures should be monitored to document bat use. Ideally, the Project would not be implemented unless and until replacement roost structures on site are documented to be acceptable and used by the bat species of interest.

5. Roost Removal Timing. The Project that results in the loss or modification of the original roost structure should be implemented outside hibernation and maternity seasons, Nov 1 – Feb 1 and April 1 – August 31 respectively.

6. Bat Exclusion. If an active bat roost is found in a tree or structure that must be removed, the qualified bat biologist should prepare a Bat Exclusion Plan for the passive exclusion of the bats from the roost. Exclusion shall be scheduled either (1) between March 1 and March 31, prior to parturition of pups; or (2) between September 1 and October 31 prior to hibernation (or prior to evening temperatures dropping below 45°F and onset of rainfall greater than ½ inch in 24 hours). The qualified bat biologist shall confirm the absence of bats prior to the start of construction. The Bat Exclusion Plan shall be submitted to CDFW for review and approval a minimum of 10 days prior to the installation of exclusion devices. CDFW does not support eviction of bats during the maternity or hibernation periods.

7. Tree Removal. Tree removal shall be scheduled either (1) between approximately March 1 and March 31, prior to parturition of pups; or (2) between September 1 and October 31 prior to hibernation (or prior to evening temperatures dropping below 45°F and onset of rainfall greater than ½ inch in 24 hours). Removal of trees containing suitable bat habitat should be conducted under the supervision of a qualified bat biologist.

MITIGATION MEASURE F: NATIVE TREE REMOVAL AND ENCROACHMENT

The removal of **377.7** inches dbh of native trees (see **Table IS-14** for tree numbers) and **19** inches of offsite dripline encroachment, shall be compensated for by planting in-kind native trees equivalent **396.7** inches dbh, based on the ratios listed below, at locations that are authorized by the Environmental Coordinator. On-site preservation of native trees that are less than 6 inches (<6 inches) dbh, may also be used to meet this compensation requirement. Native trees include: valley oak (*Quercus lobata*), interior

live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), or oracle oak (*Quercus morehus*), California sycamore (*Platanus racemosa*), California black walnut (*Juglans californica*, which is also a List 1B plant), Oregon ash (*Fraxinus latifolia*), western redbud (*Cercis occidentalis),* gray pine (*Pinus sabiniana*), California white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), narrowleaf willow (*Salix exigua*), Gooding's willow (*Salix gooddingii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), shining willow (*Salix lucida*), Pacific willow (*Salix lasiandra*), and dusky willow (*Salix melanopsis*).

Replacement tree planting shall be completed prior to approval of grading or improvement plans, whichever comes first. A total of **396.7**inches will require compensation.

Equivalent compensation based on the following ratio is required:

- one D-pot seedling (40 cubic inches or larger) = 1-inch dbh
- one 15-gallon tree = 1-inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Prior to the approval of Improvement Plans or Building Permits, whichever occurs first, a Replacement Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings
2. Method of irrigation
3. If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot-deep boring hole to provide for adequate drainage
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement trees which do not survive during that period.

No replacement tree shall be planted within 15 feet of the driplines of existing native trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement native trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing).

Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single-family lots (including front yards), and roadway medians.

If tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of $325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

MITIGATION MEASURE G: NON-NATIVE TREE CANOPY REPLACEMENT

Removal of 17,906 square feet of non-native tree canopy for development shall be mitigated by creation of new tree canopy equivalent to the area of non-native tree canopy removed. New tree canopy area shall be calculated using the Sacramento County Department of Transportation 15-year shade cover values for tree species. Preference is given to on-site mitigation, but if this is infeasible, then funding shall be contributed to the Sacramento Tree Foundation's Greenprint Program in an amount proportional to the tree canopy lost.

MITIGATION MEASURE H: CONSTRUCTION PROTECTION FOR NATIVE TREES

With the exception of the trees removed and compensated for through Mitigation Measure G, above, all native trees with a minimum 6-inch trunk diameter at breast height (dbh) on the project site, all portions of adjacent off-site native trees which have driplines that extend onto the project site, and all off-site native trees which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.

2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system.

3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the native trees.

4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of the native trees.

5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.

6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.

7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of six inches of mulch or gravel shall be created to protect the root zone. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.

8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees.

9. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.

10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) “Tree Pruning Guidelines”.

11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

12. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.

13. For a project constructing during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to a trickle) that slowly applies water to the soil until water has penetrated at least one foot in depth. Sprinklers may be used to water deeply by watering until water begins to run off, then waiting at least an hour or two to resume watering

(provided that the sprinkler is not wetting the tree's trunk. Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1 inch or more.

MITIGATION MEASURE I: INADVERTENT DISCOVERY OF CULTURAL RESOURCES

In the event that human remains are discovered in any location other than a dedicated cemetery, work shall be halted, and the County Coroner contacted. For all other potential cultural resources discovered during project's ground disturbing activities, work shall be halted until a qualified archaeologist may evaluate the resource.

1. **Unanticipated human remains**. Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop, and the County Coroner and the Planning and Environmental Review shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.

2. **Unanticipated cultural resources**. In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.

    a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.

If a potentially eligible resource is encountered, then the archaeologist and/or tribal monitor, Planning and Environmental Review staff, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing

and submitted to the County Environmental Coordinator as verification that the provisions of CEQA for managing unanticipated discoveries have been met.

MITIGATION MEASURE J: GREENHOUSE GASES TIER 1 BMPS

The project is required to incorporate the Tier 1 Best Management Practices or propose Alternatives that demonstrate the same level of GHG reductions as BMPs 1 and 2, listed below. At a minimum, the project must mitigate natural gas emissions and provide necessary wiring for an all-electric retrofit to accommodate future installation of electric space heating, water heating, drying, and cooking appliances.

Tier 1: Best Management Practices (BMP) required for all Projects

- BMP 1: No natural gas: Projects shall be designed and constructed without natural gas infrastructure.

- BMP 2: Electric vehicle ready: Projects shall meet the current CalGreen Tier 2 standards, except all EV Capable spaces shall instead be EV Ready. CalGreen Tier 2 standards for multi-family residential projects require 20% of parking to be made EV Ready. The project proponent shall provide a minimum of two EV Ready parking spaces.

    - EV Capable requires the installation of “raceway” (the enclosed conduit that forms the physical pathway for electrical wiring to protect it from damage) and adequate panel capacity to accommodate future installation of a dedicated branch circuit and charging station(s).

EV Ready requires all EV Capable improvements plus installation of dedicated branch circuit(s) (electrical pre-wiring), circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or blank cover needed to support future installation of one or more charging stations.

MITIGATION MEASURE COMPLIANCE

Comply with the Mitigation Monitoring and Reporting Program (MMRP) for this project as follows:

1. The proponent shall comply with the MMRP for this project, including the payment of a fee to cover the Office of Planning and Environmental Review staff costs incurred during implementation of the MMRP. The MMRP fee for this project is $10,100.00. This fee includes administrative costs of $1,103.00.

2. Until the MMRP has been recorded and the administrative portion of the MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved. Until the balance of the MMRP fee has been paid, no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved.

INITIAL STUDY CHECKLIST

Appendix G of the California Environmental Quality Act (CEQA) provides guidance for assessing the significance of potential environmental impacts. Based on this guidance, Sacramento County has developed the following Initial Study Checklist. The Checklist identifies a range of potential significant effects by topical area. The words "significant" and "significance" used throughout the following checklist are related to impacts as defined by the California Environmental Quality Act as follows:

1 Potentially Significant indicates there is substantial evidence that an effect MAY be significant. If there are one or more “Potentially Significant” entries an Environmental Impact Report (EIR) is required. Further research of a potentially significant impact may reveal that the impact is actually less than significant or less than significant with mitigation.

2 Less than Significant with Mitigation applies where an impact could be significant but specific mitigation has been identified that reduces the impact to a less than significant level.

3 Less than Significant or No Impact indicates that either a project will have an impact, but the impact is considered minor or that a project does not impact the particular resource.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
1. **LAND USE** - Would the project:					
a. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X		The current application and future improvements are not consistent with the existing General Plan and Orangevale Community Plan land use designations nor are they consistent with Sacramento County Zoning Code; however, they would be consistent upon approval of the requested entitlements.
b. Physically disrupt or divide an established community?			X		The project will not create physical barriers that substantially limit movement within or through the community.
2. **POPULATION/HOUSING -** Would the project:					
a. Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of infrastructure)?			X		The proposal will result in some increases in density above existing designations but is within an area designated for urban growth and uses.
b. Displace substantial amounts of existing people or housing, necessitating the construction of replacement housing elsewhere?				X	The project will demolish the existing single-family residence that is on the project site. However, a total of 35 single-family residences will be constructed on the project site.
3. **AGRICULTURAL RESOURCES** - Would the project:					
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance or areas containing prime soils to uses not conducive to agricultural production?				X	The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the current Sacramento County Important Farmland Map published by the California Department of Conservation. The site does not contain prime soils.
b. Conflict with any existing Williamson Act contract?				X	No Williamson Act contracts apply to the project site.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
c. Introduce incompatible uses in the vicinity of existing agricultural uses?				X	The project does not occur in an area of agricultural production. The 4.63-acre project site is surrounded by urban development and residential uses on all sides and the proposed residential development is consistent with those uses.
4. **AESTHETICS -** Would the project:					
a. Substantially alter existing viewsheds such as scenic highways, corridors or vistas?			X		The project does not occur in the vicinity of any scenic highways, corridors, or vistas.
b. In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings?			X		The project is not located in a non-urbanized area.
c. If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X		It is acknowledged that aesthetic impacts are subjective and may be perceived differently by various affected individuals. Nonetheless, given the urbanized environment in which the project is proposed, it is concluded that the project would not substantially degrade the visual character or quality of the project site or vicinity
d. Create a new source of substantial light, glare, or shadow that would result in safety hazards or adversely affect day or nighttime views in the area?			X		The project will not result in a new source of substantial light, glare or shadow that would result in safety hazards or adversely affect day or nighttime views in the area.
5. **AIRPORTS -** Would the project:					
a. Result in a safety hazard for people residing or working in the vicinity of an airport/airstrip?				X	The project occurs outside of any identified public or private airport/airstrip safety zones.
b. Expose people residing or working in the project area to aircraft noise levels in excess of applicable standards?				X	The project occurs outside of any identified public or private airport/airstrip noise zones or contours.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
c. Result in a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft?				X	The project does not affect navigable airspace.
d. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X	The project does not involve or affect air traffic movement.
6. **PUBLIC SERVICES -** Would the project:					
a. Have an adequate water supply for full buildout of the project?			X		The water service provider has adequate capacity to serve the water needs of the proposed project.
b. Have adequate wastewater treatment and disposal facilities for full buildout of the project?			X		The Sacramento Regional County Sanitation District has adequate wastewater treatment and disposal capacity to service the proposed project.
c. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X		The Kiefer Landfill has capacity to accommodate solid waste until the year 2050.
d. Result in substantial adverse physical impacts associated with the construction of new water supply or wastewater treatment and disposal facilities or expansion of existing facilities?			X		Minor extension of infrastructure would be necessary to serve the proposed project. Existing service lines are located within existing roadways and other developed areas, and the extension of lines would take place within areas already proposed for development as part of the project. No significant new impacts would result from service line extension.
e. Result in substantial adverse physical impacts associated with the provision of storm water drainage facilities?			X		Minor extension of infrastructure would be necessary to serve the proposed project. Existing stormwater drainage facilities are located within existing roadways and other developed areas, and the extension of facilities would take place within areas already proposed for development as part of the project. No significant new impacts would result from stormwater facility extension.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
f. Result in substantial adverse physical impacts associated with the provision of electric or natural gas service?			X		Minor extension of utility lines would be necessary to serve the proposed project. Existing utility lines are located along existing roadways and other developed areas, and the extension of lines would take place within areas already proposed for development as part of the project. No significant new impacts would result from utility extension.
g. Result in substantial adverse physical impacts associated with the provision of emergency services?			X		The project would incrementally increase demand for emergency services but would not cause substantial adverse physical impacts as a result of providing adequate service.
h. Result in substantial adverse physical impacts associated with the provision of public-school services?			X		The project would result in minor increases to student population; however, the increase would not require the construction/expansion of new unplanned school facilities. Established case law, *Goleta Union School District v. The Regents of the University of California* (36 Cal-App. 4th 1121, 1995), indicates that school overcrowding, standing alone, is not a change in the physical conditions, and cannot be treated as an impact on the environment.
i. Result in substantial adverse physical impacts associated with the provision of park and recreation services?			X		The project will result in increased demand for park and recreation services, but meeting this demand will not result in any substantial physical impacts.
7. **TRANSPORTATION** - Would the project:					
a. Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) – measuring transportation impacts individually or cumulatively, using a vehicles miles traveled standard established by the County?			X		The project is in an area that produces VMT that is 85% or less than the regional average, as shown in the approved SACOG Residential VMT Screening Map and is therefore, presumed to have a less than significant impact. Refer to the Transportation discussion in the Environmental Effects section above.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Result in a substantial adverse impact to access and/or circulation?			X		The project would not result in a substantial adverse impact to access and/or circulation. The project will be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Upon compliance, impacts are less than significant.
c. Result in a substantial adverse impact to public safety on area roadways?			X		The project would not result in a substantial adverse to public safety on area roadways. The project will be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Upon compliance, impacts are less than significant.
d. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X		The project does not conflict with alternative transportation policies of the Sacramento County General Plan, with the Sacramento Regional Transit Master Plan, or other adopted policies, plans or programs supporting alternative transportation.
8. **AIR QUALITY** - Would the project:					
a. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?			X		The project does not exceed the screening thresholds established by the Sacramento Metropolitan Air Quality Management District and will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment. Compliance with existing dust abatement rules and standard construction mitigation for vehicle particulates will ensure that construction air quality impacts are less than significant. The California Emissions Estimator Model (CalEEMod) was used to analyze ozone precursor emissions; the project will not result in emissions that exceed standards.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Expose sensitive receptors to pollutant concentrations in excess of standards?			X		There are no sensitive receptors (i.e., schools, nursing homes, hospitals, daycare centers, etc.) adjacent to the project site. See Response 8.a.
c. Create objectionable odors affecting a substantial number of people?				X	The project will not generate objectionable odors.
9. **NOISE -** Would the project:					
a. Result in generation of a temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established by the local general plan, noise ordinance or applicable standards of other agencies?			X		The Hazel Ridge Residential Development is predicted to be exposed to future Hazel Avenue traffic noise level exposure in excess of the Sacramento County General Plan 65 dB DNL exterior noise level standard for residential uses. The proposed project will be subject to conditions of approval including: an 8-foot soundwall and specific building material requirements for second floor window on lots fronting Hazel avenue. These conditions will ensure exterior and interior noise levels can be reduced to below County General Plan 65 dB DNL and 45 dB DNL, respectively.
b. Result in a substantial temporary increase in ambient noise levels in the project vicinity?			X		Project construction will result in a temporary increase in ambient noise levels in the project vicinity. This impact is less than significant due to the temporary nature of these activities, limits on the duration of noise, and evening and nighttime restrictions imposed by the County Noise Ordinance (Chapter 6.68 of the County Code).
c. Generate excessive groundborne vibration or groundborne noise levels?			X		The project will not involve the use of pile driving or other methods that would produce excessive groundborne vibration or noise levels at the property boundary.
10. **HYDROLOGY AND WATER QUALITY** - Would the project:					
a. Substantially deplete groundwater supplies or substantially interfere with groundwater recharge?			X		The project will not substantially increase water demand over the existing use.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Substantially alter the existing drainage pattern of the project area and/or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X		The project does not involve any modifications that would substantially alter the existing drainage pattern and or/increase the rate or amount of surface runoff in a manner that would lead to flooding. Compliance with applicable requirements of the Sacramento County Floodplain Management Ordinance, Sacramento County Water Agency Code, and Sacramento County Improvement Standards will ensure that impacts are less than significant. Refer to the Hydrology discussion in the Environmental Effects section above.
c. Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area?				X	The project is not within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map, nor is the project within a local flood hazard area.
d. Place structures that would impede or redirect flood flows within a 100-year floodplain?				X	The project site is not within a 100-year floodplain.
e. Develop in an area that is subject to 200-year urban levels of flood protection (ULOP)?				X	The project is not located in an area subject to 200-year urban levels of flood protection (ULOP).
f. Expose people or structures to a substantial risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X		The project will not expose people or structures to a substantial risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.
g. Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems?			X		The project will not create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems. Adequate on-site drainage improvements will be required pursuant to the Sacramento County Floodplain Management Ordinance and Improvement Standards. . Refer to the Hydrology discussion in the Environmental Effects section above.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
h. Create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality?			X		Compliance with the Stormwater Ordinance and Land Grading and Erosion Control Ordinance (Chapters 15.12 and 14.44 of the County Code respectively) will ensure that the project will not create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality.
11. **GEOLOGY AND SOILS** - Would the project:					
a. Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			X		Sacramento County is not within an Alquist-Priolo Earthquake Fault Zone. Although there are no known active earthquake faults in the project area, the site could be subject to some ground shaking from regional faults. The Uniform Building Code contains applicable construction regulations for earthquake safety that will ensure less than significant impacts.
b. Result in substantial soil erosion, siltation or loss of topsoil?			X		Compliance with the County's Land Grading and Erosion Control Ordinance will reduce the amount of construction site erosion and minimize water quality degradation by providing stabilization and protection of disturbed areas, and by controlling the runoff of sediment and other pollutants during the course of construction.
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, soil expansion, liquefaction or collapse?				X	The project is not located on an unstable geologic or soil unit.
d. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available?				X	A public sewer system is available to serve the project.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
e. Result in a substantial loss of an important mineral resource?				X	The project is not located within an Aggregate Resource Area as identified by the Sacramento County General Plan Land Use Diagram, nor are any important mineral resources known to be located on the project site.
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X		No known paleontological resources (e.g. fossil remains) or sites occur at the project location.
12. **BIOLOGICAL RESOURCES** - Would the project:					
a. Have a substantial adverse effect on any special status species, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community?		X			The project would not have a substantial adverse effect on any special status species, nor would the project substantially reduce wildlife habitat or species populations. Mitigation is included to reduce impacts to less than significant levels. Refer to the Biological Resources discussion in the Environmental Effects section above.
b. Have a substantial adverse effect on riparian habitat or other sensitive natural communities?			X		No sensitive natural communities occur on the project site, nor is the project expected to affect natural communities off-site.
c. Have a substantial adverse effect on streams, wetlands, or other surface waters that are protected by federal, state, or local regulations and policies?				X	No protected surface waters are located on or adjacent to the project site.
d. Have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species?			X		The project would not have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species
e. Adversely affect or result in the removal of native or landmark trees?		X			Native trees occur on the project site and/or may be affected by on and/or off-site construction. Mitigation is included to ensure impacts are less than significant. Refer to the Biological Resources discussion in the Environmental Effects section above.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
f. Conflict with any local policies or ordinances protecting biological resources?			X		The project is consistent with local policies/ordinances protecting biological resources.
g. Conflict with the provisions of an adopted Habitat Conservation Plan or other approved local, regional, state or federal plan for the conservation of habitat?			X		There are no known conflicts with any approved plan for the conservation of habitat.
13. **CULTURAL RESOURCES -** Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource?			X		No historical resources would be affected by the proposed project.
b. Have a substantial adverse effect on an archaeological resource?			X		The Northern California Information Center was contacted regarding the proposed project. A record search indicated that the project site is not considered sensitive for archaeological resources. Nonetheless, unanticipated discovery mitigation will ensure impacts to buried cultural resources are less than significant. Refer to the Cultural Resources discussion in the Environmental Effects section above.
c. Disturb any human remains, including those interred outside of formal cemeteries?			X		No known human remains exist on the project site. Nonetheless, mitigation has been recommended to ensure appropriate treatment should remains be uncovered during project implementation.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
14. **TRIBAL CULTURAL RESOURCES -** Would the project:					
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?			X		Peak and Associates submitted a Sacred Lands File Search (SLFS) request to the Native American Heritage Commission (NAHC) on August 3, 2022. On October 11, 2022, the NAHC responded that there was a negative SLFS for the project site. In accordance with Assembly Bill (AB) 52, codified as Section 21080.3.1 of CEQA, formal notification letters were sent to those tribes who had previously requested to be notified of Sacramento County projects on August 30, 2023. No responses were received from the contacted tribes.
15. **HAZARDS AND HAZARDOUS MATERIALS** - Would the project:					
a. Create a substantial hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X		The project does not involve the transport, use, and/or disposal of hazardous material.
b. Expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials?			X		The project will not expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials. Refer to Hazardous Materials section.
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?			X		The project does not involve the use or handling of hazardous material.
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in a substantial hazard to the public or the environment?			X		The project is not located on a known hazardous materials site.
e. Impair implementation of or physically interfere with an adopted emergency response or emergency evacuation plan?			X		The project would not interfere with any known emergency response or evacuation plan.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
f. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to or intermixed with urbanized areas?			X		The project is within the urbanized area of the unincorporated County. There is no significant risk of loss, injury, or death to people or structures associated with wildland fires.
16. ENERGY – Would the project:					
a. Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction?			X		While the project will eventually introduce new homes that would increase energy consumption, compliance with Title 24, Green Building Code, will ensure that all project energy efficiency requirements are net resulting in less than significant impacts.
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X		The project will comply with Title 24, Green Building Code, for all project efficiency requirements.
17. GREENHOUSE GAS EMISSIONS – Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					The California Emissions Estimator Model (CalEEMod) was used to estimate the greenhouse gas emissions associated with the project. Based on the results, the established County threshold of 1,100 annual metric tons of CO2e for the residential sector of the proposed project will not be exceeded.
b. Conflict with an applicable plan, policy or regulation for the purpose of reducing the emission of greenhouse gases?			X		The project is consistent with County policies adopted for the purpose or reducing the emission of greenhouse gases.

SUPPLEMENTAL INFORMATION

LAND USE CONSISTENCY	Current Land Use Designation	Consistent	Not Consistent	Comments

General Plan	Low Density Residential (LDR)			
Community Plan	RD-5			Orangevale Community Plan
Land Use Zone	RD-5 Residential			

INITIAL STUDY PREPARERS

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APPENDICES

Appendix A: Combined CalEEMod Reports

Appendix B: Noise Study, Bollard Acoustical Consultants, Inc., March 2022

Appendix C: Drainage Report. Baker-Williams Engineering Group, December 2023

Appendix D: Biological Inventory Report. Madrone Ecological Consulting, August 2022

Appendix E: Arborist Report. Acorn Arboricultural Services, Inc., January 2022

The appendices and all project files are available at the following link:

https://planningdocuments.saccounty.net/projectdetails.aspx?projectID=8318&communityID=3