

Acting County Executive Ann Edwards

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 Negative Declaration re: The Project described as follows:

- 1. Control Number: PLNP2020-00094
- 2. Title and Short Description of Project: 2804 California Tentative Parcel Map Request to divide a 1.94 acre Lot, zoned RD-2 into three parcels of 0.94, 0.5 and 0.5 acres respectively Design Review to comply with the Countywide Design Guidelines.
- 3. Assessor's Parcel Number: 273-0323-013-0000
- **4. Location of Project:** The project site is located at 2804 California Avenue approximately 485 feet south of Palm Drive and approximately 220 feet north of Vernon Way in the community of Carmichael.
- 5. Project Applicant: Michael Borgman
- 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 Office of Planning and Environmental Review in support of this Negative Declaration. Further information may be obtained by contacting the Office of Planning and Environmental Review at 827 Seventh Street, Room 225, Sacramento, California, 95814, or phone (916) 874-6141.

[Original Signature on File]
Todd Smith
Interim Environmental Coordinator
County of Sacramento, State of California

COUNTY OF SACRAMENTO OFFICE OF PLANNING AND ENVIRONMENTAL REVIEW INITIAL STUDY

PROJECT INFORMATION

CONTROL NUMBER: PLNP2020-00094

NAME: 2804 California Tentative Parcel Map

LOCATION: The project site is located at 2804 California Avenue approximately 485 feet south of Palm Drive and approximately 220 feet north of Vernon Way in the community of Carmichael.

ASSESSOR'S PARCEL NUMBER: 273-0323-013-0000

OWNER: Hadi Ebrahimi

P.O. Box 1248 Loomis, CA 95650

APPLICANT: Michael Borgman

3536 Voelke Court Carmichael, CA 95608

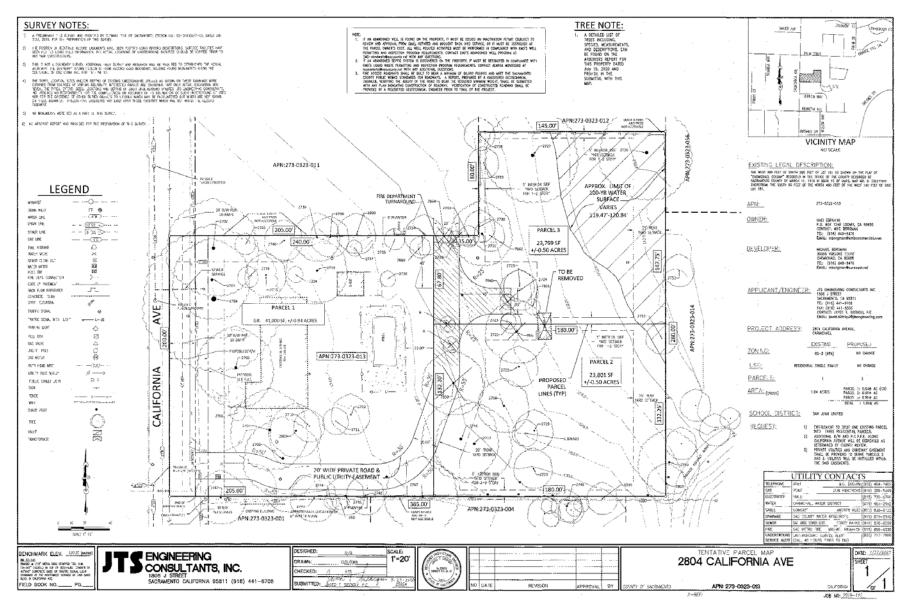
PROJECT DESCRIPTION

- 1. Request to divide a 1.94 acre Lot, zoned RD-2 into three parcels of 0.94, 0.5 and 0.5 acres respectively (Plate IS-1).
- 2. Design Review to comply with the Countywide Design Guidelines.

ENVIRONMENTAL SETTING

The project site is located on the eastern side of California Avenue between Palm Drive on the north and Vernon Way on the south (Plate IS-2). The project site is approximately 2,000 feet east of Fair Oaks Boulevard in the community of Carmichael. There is one home on the site which will remain and an existing shed will be removed. The land use designation of the Project site is low density residential and is zoned RD-2 (Plates IS-3 and IS-4, respectively).

Plate IS-1: Tentative Map



Project Site PLNP2020-00094 Project Site

Plate IS-2: Project Location

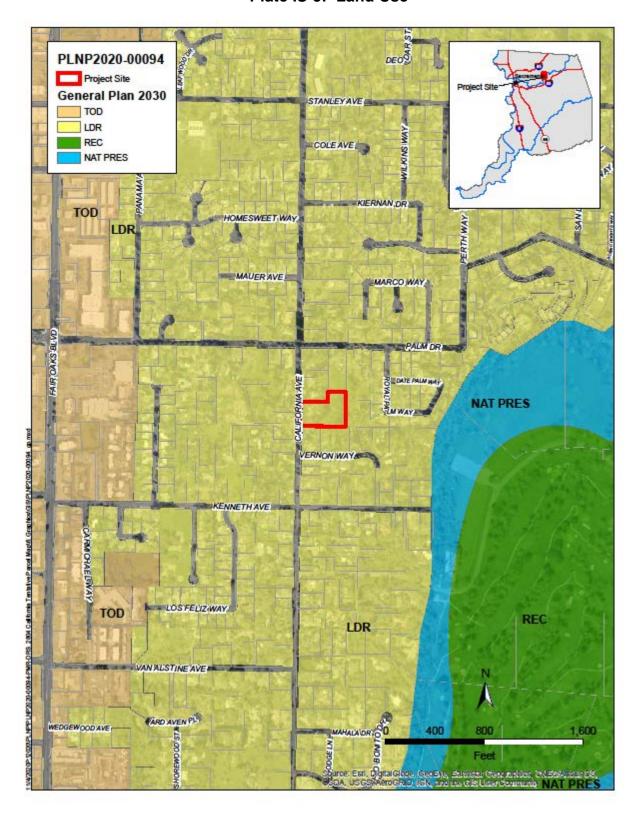
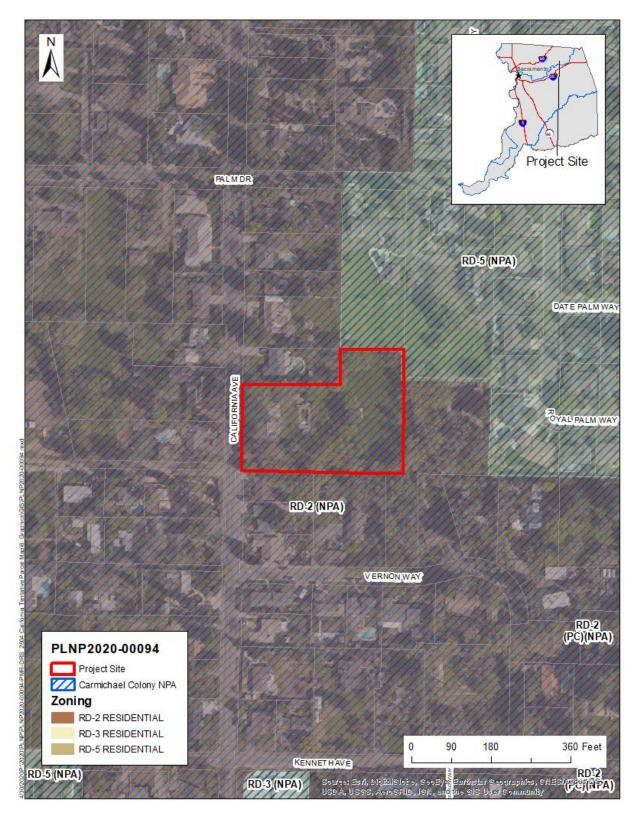


Plate IS-3: Land Use

Plate IS-4: Zoning



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.

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-1). Moreover, SMAQMD has established significance thresholds to determine if a proposed project's emission contribution significantly contributes to regional air quality impacts (Table IS-2).

Table IS-1: 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 the 1997, 2008 and the 2015 Standard.

^{4.} Cannot be classified

^{5.} Designation was made as part of EPA's designations for the 2010 SO₂ 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: December 3, 2018. http://airquality.org/air-quality-health/air-quality-pollutants-and-standards

Table IS-2: SMAQMD Significance Thresholds

	ROG ¹ (lbs/day)	NO _x (lbs/day)	CO (µg/m³)	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.

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 PM10 or PM2.5 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 PM₁₀ 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 site is less than 35 acres (1.94 acres total) and does not involve buildings more than 4 stories tall; demolition activities; significant trenching activities; an unusually compact construction schedule; cut-and-fill operations; or, import or export of soil materials requiring a considerable amount of haul truck activity. Therefore, the project meets the SMAQMD Guide screening criteria for PM₁₀ and PM_{2.5}. The SMAQMD Guide includes a list of Basic Construction Emissions Control Practices that should be implemented on all projects, regardless of size. Dust abatement practices are required pursuant to SMAQMD Rule 403 and California Code of Regulations, Title 13, sections 2449(d)(3) and 2485; the SMAQMD Guide simply lays out the basic practices needed to comply. Although these are already required by existing rules and regulations, SMAQMD has recommended to formally include them as mitigation.

OZONE PRECURSOR EMISSIONS (NO_X)

The SMAQMD Guide currently provides screening criteria for construction-related ozone precursor emissions (NO_x) similar to those which will be implemented for particulate matter. Projects that are 35 acres or less in size will generally not exceed the SMAQMD's construction NO_x 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);
- Require import or export of soil materials that will require a considerable amount of haul truck activity; or,
- Require soil disturbance (i.e., grading) that exceeds 15 acres per day.
 Note that 15 acres is a screening level and shall not be used as a mitigation measure.

CONSTRUCTION EMISSIONS CONCLUSION

The project site is less than 35 acres (1.94 acres total) and does not involve buildings more than 4 stories tall; significant trenching activities; an unusually compact construction schedule; or, import or export of soil materials requiring a considerable amount of haul truck activity. Therefore, the project meets the SMAQMD Guide screening criteria for Ozone precursors impacts are considered to 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.

Ultimately, a project typically must have 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 which 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 which include up to 1,000 new single family dwelling units for residential projects. Depending on the type of commercial use, the screening level for both ozone precursor emissions and particulate matter emissions is hundreds of thousands of square feet of commercial use. The proposed project consists of the future development of two new single family dwelling units, and therefore falls below these screening thresholds. Impacts related to operational emissions are expected to be *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 SMAQMD's 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, 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, PM₁₀, 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

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-3 and Table IS-4.

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

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 for health risks, this data is presented for informational purposes and does not represent an attempt to arrive at any level-of-significance conclusions.

Table IS-3: PM_{2.5} Health Risk Estimates

PM _{2.5} Health Endpoint	Age Range	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	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
Pospiratory		(IVICALI)	(Mean)		
Respiratory	l	1 1	0.00	0.00530/	10110
Emergency Room Visits, Asthma	0 - 99	1.1	0.98	0.0053%	18419
Hospital Admissions, Asthma	0 - 64	0.069	0.064	0.0035%	1846
Hospital Admissions, All Respiratory	65 - 99	0.36	0.33	0.0017%	19644
Cardiovascular					
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.20	0.19	0.00077%	24037
Acute Myocardial Infarction, Nonfatal	18 - 24	0.000089	0.000082	0.0022%	4
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0080	0.0076	0.0025%	308
Acute Myocardial Infarction, Nonfatal	45 - 54	0.020	0.018	0.0025%	741
Acute Myocardial Infarction, Nonfatal	55 - 64	0.032	0.031	0.0025%	1239
Acute Myocardial Infarction, Nonfatal	65 - 99	0.13	0.12	0.0023%	5052
Mortality					
Mortality, All Cause	30 - 99	2.4	2.2	0.0050%	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.
- 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	15-4	Ozone	Health	Rick	Estimates
Iable	13-4.	OZUNE	HEARL	L/19V	

Ozone 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
Respiratory		(Mean)	(Mean)		
Hospital Admissions, All Respiratory	65 - 99	0.087	0.070	0.00036%	19644
Emergency Room Visits, Asthma	0 - 17	0.37	0.31	0.0054%	5859
Emergency Room Visits, Asthma	18 - 99	0.63	0.53	0.0042%	12560
Mortality					
Mortality, Non- Accidental	0 - 99	0.055	0.047	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.*

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.
- Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area.
- Place structures that would impede or redirect flood flows within a 100-year floodplain.
- 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 not located within a federally designated flood zone. However, the northeast portion of the project site is identified as being within a locally designated 100-year flood zone (Plate IS-5). Per the drainage study prepared for the project (Appendix A), with building avoidance in the area identified as flood zone impacts to drainage would be *less than significant*.

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 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.

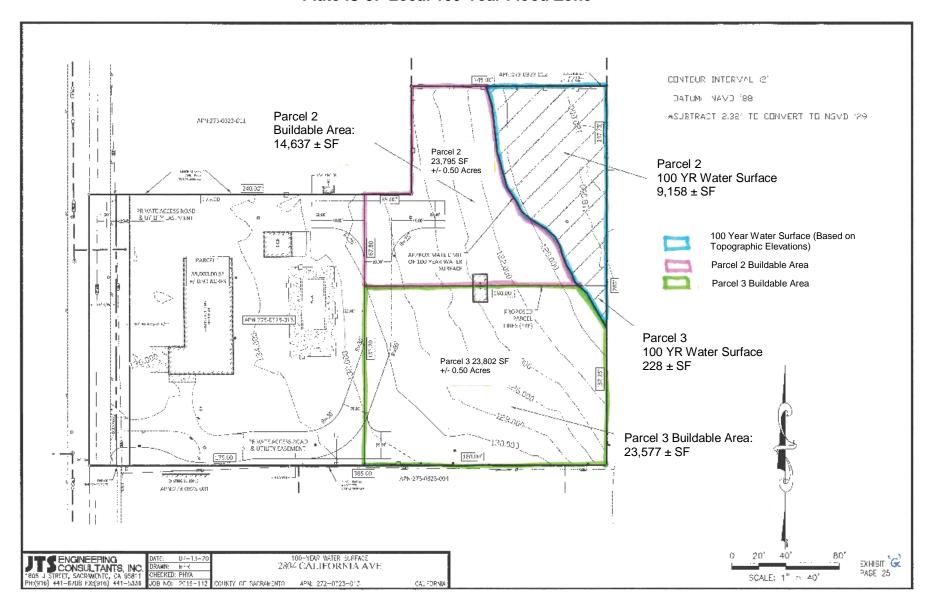


Plate IS-5: Local 100-Year Flood Zone

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:

http://www.waterresources.saccounty.net/stormwater/Pages/default.aspx

http://www.beriverfriendly.net/Newdevelopment/

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 riparian habitat or other sensitive natural communities.
- Have a substantial adverse effect on streams, wetlands, or other surface waters that are protected by federal, state, or local regulations and policies.
- 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.

According to CEQA Guidelines Appendix G, an impact to biological resources may be significant if it has a substantial effect on a special status species, sensitive habitat, or protected wetland; if it would interfere substantially with the movement of wildlife; or if it would conflict with applicable ordinances, policies, or conservation plans.

SPECIAL STATUS SPECIES

Staff review of the project site, and search of the California Natural Diversity Database (CNDDB) species list was used to determine the potential habitats and species which could be impacted by the project. Some sensitive habitats, plants, and animals occur within the Carmichael quadrangle and adjacent Citrus Heights Folsom, and Buffalo Creek quadrangles. The CNDDB indicates documented occurrences of Cooper's hawk, tricolor blackbird, Swainson's hawk, burrowing owl, bank swallow, white tailed kite,silver-haired bat, pallid bat American badger, Valley elderberry long horn beetle, vernal pool tadpole shrimp, Northern Hardpan Vernal Pool, steelhead, and Sacramento Orcutt grass within the specific quadrangles. However, the database does not indicate the presence of any of the above listed species within the project limits. The closest occurrence of the species listed above (i.e. Swainson's hawk) approximately 1/3 of a mile east of the project limits. The project site does not contain habitat to support tricolor

blackbird, burrowing owl, bank swallow, silver-haired bat, pallid bat American badger, Valley elderberry long horn beetle, vernal pool tadpole shrimp, Northern Hardpan Vernal Pool, steelhead, and Sacramento Orcutt grass. The species that have the potential for occurrence on the project site are discussed in further detail below.

SWAINSON'S HAWK

The Swainson's hawk (*Buteo swainsoni*) is listed as a Threatened species by the State of California and is a candidate for federal listing as threatened or endangered. 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.

Swainson's hawks feed primarily upon small mammals, birds, and insects. Their typical foraging habitat includes native grasslands, alfalfa and other hay crops that provide suitable habitat for small mammals. Certain other row crops and open habitats also provide some foraging habitat. The availability of productive foraging habitat near a Swainson's hawk's nest site is a critical requirement for nesting and fledgling success. In central California, about 85% of Swainson's hawk nests are within riparian forest or remnant riparian trees. CEQA analysis of impacts to Swainson's hawks consists of separate analyses of impacts to nesting habitat and foraging habitat.

The CEQA analysis provides a means by which to ascertain impacts to the Swainson's hawk. When the analysis identifies impacts, mitigation measures are established that will reduce impacts to the species to a less than significant level. Project proponents are cautioned that the mitigation measures are designed to reduce impacts and do not constitute an incidental take permit under the California Endangered Species Act (CESA). Anyone who directly or incidentally takes a Swainson's hawk, even when in compliance with mitigation measures established pursuant to CEQA, may violate the California Endangered Species Act.

NESTING HABITAT IMPACT METHODOLOGY

For determining impacts to and establishing mitigation for nesting Swainson's hawks in Sacramento County, CDFW recommends implementing the measures set forth in the Recommended Timing And Methodology For Swainson's Hawk Nesting Surveys In California's Central Valley by Swainson's Hawk Technical Advisory Committee (May 31, 2000). These state that no intensive new disturbances, such as heavy equipment operation associated with construction, should be initiated within ½ -mile of an active Swainson's hawk nest between March 1 and September 15.

FORAGING HABITAT IMPACT METHODOLOGY

Swainson's hawks are known to forage up to 18 miles from their nest site; however, that is the extreme range of one individual bird's daily movement. It is more common for a Swainson's hawk to forage within 10 miles of its nest site. Therefore, it is generally

accepted and CDFW recommends evaluating projects for foraging habitat impacts when they are within 10 miles of a known nest site. Virtually all of Sacramento County is within 10 miles of a known nest.

Statewide, CDFW recommends implementing the measures set forth in the "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California" (November 1, 1994) for determining impacts to Swainson's hawk foraging habitat unless local jurisdictions develop an individualized methodology designed specifically for their location. Sacramento County has developed such a methodology and received confirmation from CDFW in May of 2006 that the methodology is a better fit for unincorporated Sacramento County and should replace the statewide, generalized methodology for determining impacts to foraging habitat.

Swainson's hawk foraging habitat value is greater in large expansive open space and agricultural areas than in areas which have been fragmented by agricultural-residential or urban development. The methodology for unincorporated Sacramento County is based on the concept that impacts to Swainson's hawk foraging habitat occur as properties develop to increasingly more intensive uses on smaller minimum parcel sizes. As part of methodology development, County and CDFW staff analyzed aerial photography of the County and compared this to the underlying zoning. It was determined that there was a strong correlation in most areas between the presence of suitable habitat and zoning for large agricultural parcels, and conversely that areas zoned for agricultural-residential or more dense uses tended to have fragmented or absent habitat. Therefore, the methodology relies mainly on the minimum parcel size allowed by zoning to determine habitat value. Though there may be individual properties which do not follow the observed regional trend, it was concluded that adherence to this methodology would result in adequate cumulative mitigation for the species.

For the purpose of the methodology, properties with zoning of AG-40 and larger are assumed to maintain 100% of their foraging habitat value and properties with AR-5 zoning and smaller are assumed to have lost all foraging habitat value. The project site is zoned RD-2 Residential 2 for the entire 1.94 acres. In accordance with the Sacramento County Zoning Code Section 2.6.2 Table 2.4 the RD-2 zone district is summarized as "[A] minimum lot size of 20,000 square feet, with minimum lot width of 75 feet is permitted if a public sewer facility is in use or if a public sewage facility and public water facility are both in use." Table IS-5 below illustrates this valuation and the continuum between AG-40 and AR-2 that represents the partial loss of habitat value that occurs with fragmentation of large agricultural land holdings. The large, 75% loss of habitat value between AG-20 and AR-2 is due to the change in land use from general agriculture to -residential.

Table IS-5: Swainson's Hawk Foraging Habitat Value by Zoning Category

Zoning Category	Habitat Value Remaining
AG-40 and above (e.g. AR-80, AG-160 etc.)	100%
AG-20/UR	75%
AR-10	25%
AR-5 and smaller (e.g. AR-2, 1, or RD-5, 7, 10, 15, 20, etc.	0%

PROJECT IMPACTS - NESTING HABITAT

The nearest recorded nest is within two miles from the project site and large trees in the vicinity of the Project could serve as suitable nesting habitat for Swainson's hawk. Mitigation has been included to implement pre-construction surveys, according to the Recommended Timing And Methodology For Swainson's Hawk Nesting Surveys In California's Central Valley by Swainson's Hawk (May 31, 2000), for nesting raptors within ½ mile of ground disturbing activities. 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 developer 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. Impacts to nesting Swainson's hawk are considered *less than significant*.

PROJECT IMPACTS - FORAGING HABITAT

Based on the site's existing RD-2 zoning, the land possesses 0% value as suitable foraging habitat. Therefore, no mitigation is required for the loss of foraging habitat. Project impacts to Swainson's hawk foraging habitat are *less than significant*.

NESTING BIRDS OF PREY

This section addresses raptors, which are not listed as endangered, threatened, or of special concern, but are nonetheless afforded general protections by the Fish and Wildlife Code. Raptors and their active nests are protected by the California Fish and Wildlife 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(18) of the Federal Endangered Species Act 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. There are a number of large trees located on and adjacent to the project that could afford nesting opportunities.

To avoid impacts to nesting raptors, mitigation is recommended. If construction will occur during the nesting season of March 1 to September 15 pre-construction nesting surveys to identify active nests will be required. If active nests are found avoidance measures will be required. 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 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. With mitigation 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 the Federal Endangered Species Act 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, mitigation has 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.

NATIVE TREES

The Sacramento County General Plan 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 (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 the established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.

Native trees other than oaks include California sycamore (*Plantanus racemosa*), Northern California black walnut (*Juglans hindsii*), Oregon ash (*Fraxinus latifolia*), gray pine (*Pinus sabiniana*), California white alder (*Alnus rhombifolia*), California buckeye (*Aesculus californica*), narrow leaf 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*).

NON-NATIVE TREES

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 nonnative tree canopy removed for new development, project proponents (including public agencies) shall contribute to the Greenprint Program funding in an amount proportional to the tree canopy of the specific project.

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. 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. The contributions shall be equivalent to the square footage of the tree canopies removed.

TREE INVENTORY

The applicant provided a Preliminary Arborist Report & Tree Inventory (Arborist Report) prepared by California Tree and Landscape Consulting, Inc. (CalTLC) (Appendix B). The Arborist Report identified the species, size, and location of onsite and overhanging offsite trees. CalTLC inventoried and evaluated trees 4 inches or greater diameter at breast height (dbh) and all multi-trunk trees with an aggregate dbh of 10 inches or greater. A total of 71 trees were inventoried and evaluated. Of the 71 trees, 25 of the trees qualify as "protected trees" by the standards of the Sacramento County Tree Ordinance and Zoning Code (Tables IS-6 and IS-7). Of the 25 protected trees identified by the survey 16 are located within the project area and 9 are adjacent to the project. All trees identified are shown on Plate IS-6 the plate also shows the location of the trees to be removed and the potential building footprints.

Table IS-6: Tree Inventory of Protected Native Trees

Tree #	Common Name	DBH (Inches)	Dripline (Feet)	Rating	Action	Potential Encroachment from Development	Mitigation
2716	Valley Oak	25.7	26	3	Retain		N/A
2717	Valley Oak	28.6	41	2	Retain		N/A
2718	Valley Oak	22.8	26	2	Retain		N/A
2719	Valley Oak	15.8	18	2	Retain	Yes depending on final building location	See Measure F
2720	Valley Oak	18.1	21	3	Retain	Yes depending on final building location	See Measure F
2721	Valley Oak	12.9	19	4	Retain		NA
2722	Valley Oak	8.1	18	2	Remove (construction)		8.1
2723	Valley Oak	4.7	9	2	Remove (construction)		N/A (size)
2724	Valley Oak	14.1	18	3	Remove (construction)		14.1
2725	Valley Oak	13	19	3	Remove (construction)		13
2727	Valley Oak	46.2	50	4	Retain	10 percent depending on final building location	See Measure F

Tree #	Common Name	DBH (Inches)	Dripline (Feet)	Rating	Action	Potential Encroachment from Development	Mitigation
2728	Valley Oak		20	3	Retain		N/A
2730	Valley Oak	11.6		2	Retain		N/A
2731	Valley Oak	18.1	32	4	Retain	Yes depending on final building location	N/A
2742	Valley Oak	20.7	23	3	Retain		N/A
2743	Valley Oak	23	30	2	Retain		N/A
2744	Valley Oak	13	16	3	Retain		N/A
2746	Valley Oak	20	16	2	Retain		N/A
2747	Valley Oak	21.9	32	2	Retain		N/A
2748	Valley Oak	7	32	2	Retain		N/A
8749/ 2749	Interior Live Oak	17.4	23	2	Retain		N/A
2750	Interior Live Oak	28.3	25	2	Retain		N/A
2752	Valley Oak	13.6	22	3	Retain		N/A
2763	Valley Oak	18.2	27	3	Retain		N/A
7860	Interior Live Oak	5.6	9	2	Remove (driveway)		N/A (size)
8749	Interior Live Oak	17.4	23	2	Retain	Yes depending on final building location	Measure F
955	Valley Oak	10		2	Retain		N/A
Total							35.2

Table IS-7: Tree Inventory of Non-Protected Trees

Tree #	Common Name	DBH (Inches)	Dripline (Feet)	Rating	Action	Encroachment	Mitigation sq. ft.
2702	Deodar Cedar	32.7	30	3 Fair	Retain		N/A
2703	Coast Redwood	27	16	3 Fair	Retain		N/A
2704	Italian Stone Pine	46.1	48	2	Retain		N/A
2705	Coast Redwood	36		2	Retain		N/A
2706	Crape Myrtle	5.3	12	2	Retain		N/A
2707	Deodar Cedar	32.6	28	3	Retain		N/A
2708	Mulberry	27.4	33	2	Retain		N/A
2809/2709	Mulberry	13.2	30	2	Retain		N/A
2710	Loquat	10.2		3	Retain		N/A
2711	Loquat	9.3	14	3	Retain		N/A
2712	Deodar Cedar	22.1	23	2	Retain		N/A
2713	Mulberry	26.8	28	2	Retain		N/A
7214/2714	Japanese Cheesewood	20	21	2	Retain		N/A
2715	Mulberry	32.1	32	2	Retain		N/A
2716/957	Photinia	6.4	17	2	Retain		N/A
2726	California Walnut	31.4	14	2	Retain		N/A
2729	Butternut	18.4	26	3	Retain		N/A
2732	Sweetgum	8.6	14	4	Retain		N/A
2733	Photinia	4.3	18	3	Retain		N/A
2734	Pecan	15.5	38	4	Retain		N/A

Tree #	Common Name	DBH (Inches)	Dripline (Feet)	Rating	Action	Encroachment	Mitigation sq. ft.
2735	Privet	13.4	23	2	Retain		N/A
2736	Privet	5.6	13	2	Retain		N/A
2737	Fig	5.2	14	2	Retain		N/A
2737A	Pecan	17.6	28	3	Retain		N/A
2738	Pecan	16.9	29	3	Retain		N/A
2739	Privet	13.5	17	2	Remove (driveway)		254.9
2740	Pecan	17.8	25	3	Retain		N/A
2741	Loquat	6.8	9	3	Retain		N/A
2745	Privet	6.1	15	2	Retain		N/A
2751	Monterery Pine	21.3	18	2	Retain		N/A
2809	Mulberry	13.2	30	2	Retain		N/A
3898	Photinia	10	14	1	Retain		N/A
3899	Pecan	17.6	28	3	Retain		N/A
7214/2714	Japanese Cheesewood	20	21	2	Retain		N/A

Tree #	Common Name	DBH (Inches)	Dripline (Feet)	Rating	Action	Encroachment	Mitigation sq. ft.
7859	Pecan	15	10	1	Remove (driveway)		N/A (condition)
7861	Privet	7	12	1	Remove (construction)		N/A (condition)
7862	Plum	13	12	1	Retain		N/A
7864	Plum	7.1	11	3	Remove (driveway)		325.7
7865	Apricot	7.5	12	2	Retain		N/A
956	Monterey Pine	24		0	Remove (dead)		N/A
3898	Photinia	10	14	1	Retain		N/A
3899	Pecan	17.6	28	3	Retain		N/A
А	Apple	3.6	7	3	Remove (driveway)		74.9
В	Plum	3.8	11	2	Remove (driveway)		150.7
Total							806.2

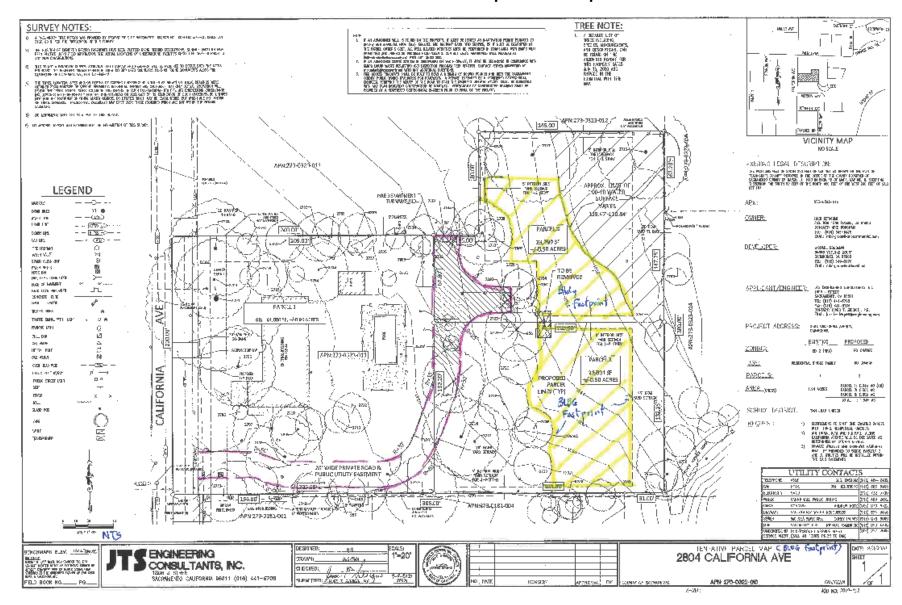


Plate IS-6: Tree Removal and Conceptual Development Area

NATIVE TREE IMPACTS

ONSITE PROTECTED NATIVE TREES TO BE REMOVED

The applicant is proposing to remove one of the oak tree (Tree 7860) located on the project site. Tree removal is proposed as a result of grading activities and construction of the project driveway. However, Tree 7860 is less than 6 inches dbh and is therefore not considered a tree protected by County Policy. In addition, there are two oaks trees that will likely be removed when homes are built on the two parcels. These trees (Trees 2724 and 2725) are located between the driveway and the area shown as the development envelop shown on (Plate IS-6) and will require mitigation for the loss of 27 dbh inches.

County Policy requires replacement of native trees removed by planting in-kind native trees equivalent to the loss of 27 inches, or through payment on an inch by inch basis if planting is shown to be infeasible. Project impacts associated with the removal of protected native trees are *less than significant*.

ONSITE AND OFFSITE NATIVE TREES SUBJECT TO DEVELOPMENT IMPACTS

There are 7 onsite native trees (Trees 2718, 2719, 2720, 2721, 2727, 2731, and 8749) that could be impacted during construction, as they are near the proposed development envelop and could be severely impacted without protection during construction of the facility. To protect these trees mitigation has been proposed that would reduce the potential impacts to these trees to *less than significant*.

NON-NATIVE TREE IMPACTS

NON-NATIVE TREES TO BE REMOVED

Forty-four trees (see Table IS-7) located on or near the project site do not meet the definition of a protected tree (either due to species or size). However, of the 44 trees there are 7 non-native trees that would be removed because of construction of the driveway and building construction. While Trees 956, 7859 and 7861 do comprise tree canopy given the condition of trees (ranking from declining to dead) their removal would not require mitigation. The remaining trees include two Plums, an Apple, and a Privet which would be severely impacted by the construction of the proposed driveway resulting in their removal. The total tree canopy loss was determined to be 806.2 square feet which will require mitigation.

County Policy requires that impacts to tree canopy be addressed by replacement or contribution to the Greenprint Program project impacts to non-protected trees are expected to be *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 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 26, 2020 for the project area and a one-quarter-mile buffer.

The records search within the proposed project area contains zero recorded prehistoric period resources and zero recorded historic-period cultural resources. Outside the proposed project area, but within the one-quarter-mile radius, the broader search area contains zero recorded prehistoric-period resources and one recorded historic-period cultural resource.

Given the extent of known cultural resources and patterns of local history, there is low potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area. The NCIC determination was that with respect to cultural resources, it appears that the proposed project area is not sensitive. Despite the "not-sensitive" finding in the non-confidential records search letter from the NCIC, the project site is in close proximity to Ancil Hoffman Park, which is known to be sensitive for cultural resources.

PROJECT IMPACTS

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. Project impacts to cultural resources are *less than significant*.

TRIBAL 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 tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with a cultural value to a California Native American tribe, that is:

Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under PRC Section 21084.3, public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources (21080.3.1(a)).

TRIBAL CULTURAL RESOURCE SETTING

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 12, 2020. Both the United Auburn Indian Community of the Auburn Rancheria (UAIC) and the Wilton Rancheria requested consultation.

DISCUSSION OF PROJECT IMPACTS – TRIBAL CULTURAL RESOURCES

Through consultation, UAIC and Wilton Rancheria indicated that the project site could contain subsurface tribal resources, given the site's proximity to other documented sensitive areas. The proposed project is the tentative parcel map that does not include development footprints at this time.

Rather than conducting archaeological sampling, such as shovel testing, across the lots, which can miss locations in which tribal cultural resources are located, tribal representatives have requested that testing occur when site improvement plans are submitted. Testing can then be focused within areas of proposed ground disturbance. This mitigation measure will be placed on the new parcels created through a tentative parcel map or lot-split project when archaeological testing has been requested by a tribe, but development plans do not exist. The purpose of the mitigation measure is to flag parcels that are sensitive for tribal cultural resources and allow tribes an opportunity to be present for testing prior to during ground disturbing construction activities. Because of the subsurface nature of tribal cultural resources, mitigation has also been included to allow for tribal monitoring during the initial grading and excavation phase of development of new parcels on the project site. In the event that resources are inadvertently uncovered, mitigation has been included address next steps, avoidance, or recovery, to be conducted in consultation with tribes.

Through consultation under CEQA, tribes confirmed that while the project area does not contain any known resources, there could be subsurface tribal cultural resources of significance. The tribes and lead agency mutually agreed that tribal cultural resources mitigation measures were appropriate and feasible for the project. The proposed tentative map does not include development footprints at this time. Therefore, mitigation has been included to conduct archaeological testing when development plans have been drafted, and that a tribal monitor be present during grading and excavation activities on newly developed lots in the event that tribal cultural resources are inadvertently uncovered. Project impacts to tribal cultural resources are *less than significant with mitigation*.

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 2050.¹

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 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

Initial Study

¹ 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.

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 County is currently preparing this second phase CAP and it is expected to be completed in 2020. The Countywide CAP was re-initiated in early 2020, with a target adoption of 12-18 months from July 1, 2020.

GHG 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. SMAQMD's technical support document, "Greenhouse Gas Thresholds for Sacramento County", identifies operational measures that should be applied to a project to demonstrate consistency. The Sacramento County Board of Supervisors adopted the SMAQMD GHG thresholds in December 2020.

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-8. Projects that do not exceed 1,100 metric tons per year are then screened out of 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-8.

Table IS-8: Thresholds of Significance for Greenhouse Gases

Land Development and Construction Projects								
	Construction Phase	Operational Phase						
Greenhouse Gas as CO ₂ e	1,100 metric tons per year	1,100 metric tons per year						
Stationary Source Only								
	Construction Phase	Operational Phase						
Greenhouse Gas as CO ₂ e	1,100 metric tons per year	10,000 metric tons per year						

METHODOLOGY

The resultant GHG emissions of the project were estimated using CalEEMod, version 2016.3.2 (Appendix C).

PROJECT IMPACTS

CONSTRUCTION PHASE

The SMAQMD Guide currently provides screening criteria of construction GHG emissions that follows the same protocols as the construction emissions for ozone precursor emissions (NO_x) and Particulate Matter (PM). The SMAQMD Guide screening criteria for construction-related GHG that are 35 acres or less in size will generally not exceed the SMAQMD's construction GHG 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);
- Require import or export of soil materials that will require a considerable amount of haul truck activity; or,
- Require soil disturbance (i.e., grading) that exceeds 15 acres per day.
 Note that 15 acres is a screening level and shall not be used as a mitigation measure.

The project site is less than 35 acres (1.94 acres total) and does not involve buildings more than 4 stories tall; significant trenching activities; an unusually compact construction schedule;; or, import or export of soil materials requiring a considerable amount of haul truck activity. Therefore, the project meets the SMAQMD Guide screening criteria for GHG construction impacts and are considered to be *less than significant*.

OPERATIONAL PHASE

To determine operational GHG impacts, the first step in the current Greenhouse Gas methodology of Sacramento County is to determine if a project screens out. This is accomplished by comparing the project with the SMAQMD Greenhouse Gas Operations Screening Levels table. For the proposed project, there is one residential land use type low density residential with 2 new units.

SMAQMD and Sacramento County have adopted thresholds for GHG operational emissions that all projects must implement Tier 1 Best Management Practices (BMP) to demonstrate consistency with the Climate Change Scoping Plan. After implementation of Tier 1 BMP, 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, except all EV capable spaces shall be instead EV ready.

While the project will implement BMP 2 of having the residences being EV ready, the two dwelling units that would be constructed will use natural gas for cooking and electrical heating and cooling systems. Therefore, the natural gas emissions that would be generated by the project will need to be offset.

The project intends to use natural gas for HVAC, cooking and water heating, and therefore, will not fully comply with BMP 1. The project will implement BMP 2 in its entirety. Since the project has proposed utilizing natural gas, the California Emissions Estimator Model (CalEEMod) was used to model the annual Greenhouse Gas emissions of CO₂e. The model run used the land use designation single family residential project with two dwelling units and emissions as metric tons per year of CO₂e are shown in the Annual Report (Appendix C).

As shown in Table IS-9, the CalEEMod model found that the operational phase of the residential project would generate 23.93 MT of CO₂e per year in total. The emissions associated with the use of natural gas is 3.68 MT of CO₂e per year. The project would implement onsite mitigation measures to offset the use of natural gas to the extent

feasible, including providing electric vehicle charging infrastructure and, installation of solar cells as beyond Title 24 requirements. Mitigation would be beyond the BMP requirements.

For purposes of evaluating a project's consistency with the 2045 statewide carbon neutrality goal, a project would need to eliminate natural gas completely (BMP 1) or require all pre-wiring necessary so that the buildings are ready for a future retrofit to all-electric. Because the project intends to utilize natural gas, mitigation has been included to install the necessary wiring such that the facility could be converted to all electric in the future, and the project would be consistent with the CARB's Scoping Plan for GHG emissions.

The operational emissions associated with the project are less than 1,100 MT of CO₂e per year. Mitigation has been included such that the project will implement BMP 2. The project will not fully implement BMP 1, but has included onsite mitigation to the extent feasible, and mitigation is included to require pre-wiring for future electric capability to be consistent with the 2045 State carbon neutrality goal. The impacts from GHG emissions are considered *less than significant with mitigation*.

Table IS-9: Greenhouse Gas Emissions by Source

Emissions Source	CO _{2e} Metric Tons					
Area	0.03					
Energy	3.68					
Mobile	19.12					
Waste	0.91					
Water	0.19					
Total	23.93					
Source: CalEEMod version 2016.3.2. See Appendix C_for emission model outputs						

ENVIRONMENTAL MITIGATION MEASURES

Mitigation Measures (I, J, K, L and M) 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[Original Signature on File]	_ Date:
MITIGATION MEASURE A: BASIC CONSTRUCT	ION 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 NESTING HABITAT

If construction, grading, or project-related improvements are to commence between March 1 and September 15, a focused survey for Swainson's hawk nests on the site and within ½ mile of the site shall be conducted by a qualified biologist no later than 30 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Fish and Wildlife shall be contacted 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 March 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree 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 August 31, a survey for active migratory bird nests shall be conducted no more than 14 day 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 August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.

3. 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, or until September 1.

MITIGATION MEASURE E: NATIVE TREES

The removal of <u>27</u> inches dbh of oak tree shall be compensated for by planting in-kind native oak trees equivalent to the dbh inches lost, 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 oak trees include: valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), and blue oak (*Quercus douglasii*).

Replacement tree planting shall be completed prior to approval of grading or improvement plans, whichever comes first. A total of <u>35.2</u> inches will require compensation.

Equivalent compensation based on the following ratio is required:

- one preserved native tree < 6 inches dbh on-site = 1 inch dbh
- 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 and < 6-inch dbh trees to be preserved
- 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.
- 6. Designation of 20-foot root zone radius and landscaping to occur within the radius of trees < 6 inches dbh to be preserved on-site.

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.

Native trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding (in the case of oak trees), utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Environmental Coordinator approval.

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 F: OAK TREE CONSTRUCTION PROTECTION

For the purpose of this mitigation measure, a native tree is defined as a valley oak and interior live oak having 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 at least 10 inches.

With the exception of the trees removed and compensated for through Mitigation Measure D, above, native trees (2718, 2719, 2720, 2721, 2727, 2731, and 8749) 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:

 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.
- 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.
- 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. 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.
- 8. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.
- 9. 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".
- 10. 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.
- 11. 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.
- 12. 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 G: CANOPY REPLACEMENT

Removal of 806.2 square feet 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 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: CULTURAL RESOURCES UNANTICIPATED DISCOVERY

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 unexpected cultural resources discovered during project construction, work shall be halted until a qualified archaeologist may evaluate the resource encountered.

- 1. 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 Office of 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. 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.
- b. 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 I: TPMS AND LOT SPLITS IN TCR-SENSITIVE AREAS

Prior to approval of improvement plans, archaeological sampling shall be conducted by a qualified archaeologist in areas proposed for development. Wilton Rancheria or United Auburn Indian Community of the Auburn Rancheria (depending on availability) shall be provided the opportunity to be present on site for sub-surface testing. If culturally sensitive material is uncovered during subsurface testing, then the protocol for inadvertent discoveries, outlined in Mitigation Measure H, shall be followed.

MITIGATION MEASURE J: NATIVE AMERICAN CONSTRUCTION MONITORING

Prior to any ground disturbance, Wilton Rancheria or United Auburn Indian Community of the Auburn Rancheria (depending on availability) shall be provided the opportunity to provide a Native American construction monitor, to be hired by the project proponent, to monitor earthwork associated with the excavation and removal of soil. If a potentially significant tribal resource is uncovered during construction, the Native American monitor shall be allowed to temporarily halt ground disturbing activities within 100 feet of the resource to determine appropriate next steps. The Project applicant will be required to implement any mitigation deemed necessary for the protection of the tribal resources.

MITIGATION MEASURE K: EV CHARGING FACILITIES

The project shall install infrastructure so that each single family home is electric vehicle (EV) Ready.

 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 L: ELECTRIC CAPABILITY

The project shall be constructed with the appropriate prewiring necessary so that the building is ready for a future retrofit to all-electric cooking. The project shall use electrical appliances for electric space heating, water heating, and drying appliances.

MITIGATION MEASURE M: SOLAR CELL CAPABILITY

The applicant shall install solar cell capacity 20 percent greater than Title 24 code requirements as determined by Development and Code Services Department.

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 \$9,800.00. This fee includes administrative costs of \$930.00.
- 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
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?			Х		The project is consistent with environmental policies of the Sacramento County General Plan, Carmichael Community Plan and Sacramento County Zoning Code.
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:					
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)?			Х		The project will neither directly nor indirectly induce substantial unplanned population growth; the proposal is consistent with existing land use.
 Displace substantial amounts of existing people or housing, necessitating the construction of replacement housing elsewhere? 			Х		The project will not result in the removal of existing housing, and thus will not displace substantial amounts of existing housing.
3. AGRICULTURAL RESOURCES - Would the pro	oject:				
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?				Х	No Williamson Act contracts apply to the project site.
c. Introduce incompatible uses in the vicinity of existing agricultural uses?				Х	The project does not occur in an area of agricultural production.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
4. AESTHETICS - Would the project:					
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:					
Result in a safety hazard for people residing or working in the vicinity of an airport/airstrip?				Х	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?				Х	The project occurs outside of any identified public or private airport/airstrip noise zones or contours.
c. Result in a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft?				Х	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?				Х	The project does not involve or affect air traffic movement.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
6. PUBLIC SERVICES - Would the project:					
a. Have an adequate water supply for full buildout of the project?	ıt		Х		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.	?		Х		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?	I		Х		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?			Х		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.
Result in substantial adverse physical impacts associated with the provision of storm water drainage facilities?			Х		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.
f. Result in substantial adverse physical impacts associated with the provision of electric or natural gas service?			Х		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.

		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
g.	Result in substantial adverse physical impacts associated with the provision of emergency services?			Х		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, <i>Goleta Union School District v. The Regents of the University of California</i> (36 Cal-App. 4 th 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?			Х		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		Vehicle miles traveled (VMT) for proposed project are below the thresholds established by Sacramento County Department of Transportation; therefore, project impacts individually or cumulatively are less than significant.
b.	Result in a substantial adverse impact to access and/or circulation?			Х		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?			Х		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.

		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
d.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			Х		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.
b.	Expose sensitive receptors to pollutant concentrations in excess of standards?			Х		See Response 8.a.
C.	Create objectionable odors affecting a substantial number of people?			Х		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 project is not in the vicinity of any uses that generate substantial noise, nor will the completed project generate substantial noise. The project will not result in exposure of persons to, or generation of, noise levels in excess of applicable standards.
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 the 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.			Х		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.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
10. HYDROLOGY AND WATER QUALITY - Would	the project:				
Substantially deplete groundwater supplies or substantially interfere with groundwater recharge?			Х		The project will not rely on groundwater supplies and will not substantially interfere with groundwater recharge.
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		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.
c. Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area?			Х		The project site is in a local flood hazard area, but not in a federally mapped floodplain. Compliance with the County Floodplain Management Ordinance, County Drainage Ordinance, and Improvement Standards will assure less than significant impacts. Refer to the Hydrology discussion in the Environmental Effects section above.
d. Place structures that would impede or redirect flood flows within a 100-year floodplain?			Х		Although the project is within a 100-year floodplain, compliance with the Sacramento County Floodplain Management Ordinance, Sacramento County Water Agency Code, and Sacramento County Improvement Standards will ensure that impacts are less than significant.
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?			Х		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?			Х		Adequate on- and/or off-site drainage improvements will be required pursuant to the Sacramento County Floodplain Management Ordinance and Improvement Standards.

		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?			Х		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?			Х		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 onor off-site landslide, lateral spreading, subsidence, soil expansion, liquefaction or collapse?			Х		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?			Х		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?				Х	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?			Х		No known paleontological resources (e.g. fossil remains) or sites occur at the project location.
12	2. BIOLOGICAL RESOURCES - Would the project	t:				
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?		Х			The project site contains suitable nesting habitat for Swainson's hawk. 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?			Х		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?			Х		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?			Х		Resident and/or migratory wildlife may be displaced by project construction; however, impacts are not anticipated to result in significant, long-term effects upon the movement of resident or migratory fish or wildlife species, and no major wildlife corridors would be affected.
e.	Adversely affect or result in the removal of native or landmark trees?			Х		Native and/or landmark 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?			Х		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?			Х		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?			Х		No historical resources would be affected by the proposed project.
b. Have a substantial adverse effect on an archaeological resource?			Х		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.
c. Disturb any human remains, including those interred outside of formal cemeteries?			Х		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.
14. TRIBAL CULTURAL RESOURCES - Would the	project:				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?		Х			Notification pursuant to Public Resources Code 21080.3.1(b) was provided to the tribes and request for consultation was received. Refer to the Tribal Cultural Resources discussion in the Environmental Effects section above.
15. HAZARDS AND HAZARDOUS MATERIALS - \	Vould the pr	oject:			
a. Create a substantial hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			Х		The project does not involve the transport, use, and/or disposal of hazardous material.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials?			Х		The project does not involve the transport, use, and/or disposal of hazardous material.
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?			Х		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.
Impair implementation of or physically interfere with an adopted emergency response or emergency evacuation plan?			Х		The project would not interfere with any known emergency response or evacuation plan.
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?			Х		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:					
Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction?			X		While the project will introduce two new homes and 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?			Х		The project will comply with Title 24, Green Building Code, for all project efficiency requirements.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments	
17. GREENHOUSE GAS EMISSIONS – Would the project:						
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		Х			The project will implement a portion of BMP 1 and BMP 2 of SMAQMD Tier 1 BMPs. Refer to the Greenhouse Gas Emissions section under Environmental Effects.	
b. Conflict with an applicable plan, policy or regulation for the purpose of reducing the emission of greenhouse gases?			Х		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	Х		
Carmichael Community Plan	RD-2	Х		
Land Use Zone	RD-2	X		

INITIAL STUDY PREPARERS

Interim Environmental Coordinator: Todd Smith

Section Manager: Chris Pahule
Project Leader: Kurtis Steinert
Initial Review: Julie Newton

Office Manager: Belinda Wekesa-Batts Administrative Support: Justin Maulit