Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

Mitigated Negative Declaration

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

1. **Control Number:** PLNP2022-00027

2. **Title and Short Description of Project:** Winding Ranch Retail and Residential Project

The project consists of the following entitlement requests:

1. A **Community Plan Amendment** of approximately 8.8 acres of Shopping Center (SC) and approximately 2.7 acres of Light Commercial (LC) to a total of 11.5 acres of Residential, 10 dwelling units per acre (RD-10).
2. A **Rezone** of approximately 8.8 acres of SC and approximately 2.7 acres of LC to a total of 11.5 acres of RD-10.
3. A **Tentative Subdivision Map** to divide approximately 24.8 gross acres into 79 single-family residential parcels, six commercial parcels, a detention basin (Lot B), three landscape lots (Lots C, D, F), an emergency vehicle access lot (Lot E) and two private streets in the SC and RD-10 zoning districts.
4. A **Use Permit** to allow the following:
    - An automobile service station in the SC zoning district;
    - A neighborhood convenience store less than 500 feet from a residential zoning district and with extended hours (24 hours a day, seven days a week) in the SC zoning district;
    - A drive-through with amplified sound in the SC zoning district located less than 300 feet from a residential zoning district; and
    - A pump island canopy to exceed the 2 ½ foot roof structure height above the design clearance height to three feet.
5. A **Special Development Permit** to allow for the following deviations:
    - Car Wash Standards (Zoning Code Section 3.7.9.I.2.b): Tunnels shall be designed so that dryers are located at least 10 feet from exits. As proposed, the dryers are located 3'-10" from the exit.
    - Landscape Screening (Zoning Code Section 5.2.4.B.4): A five foot wide landscape planter shall be installed around the perimeter of trash enclosures. The trash enclosures on the proposed commercial properties currently do not meet this requirement.
    - Landscape Aisles (Zoning Code Section 5.2.4.F, Table 5.2): Landscaped areas at the end of aisles are required and shall be a minimum of eight feet in width, excluding curbing. One location between P2 & P3 at the trash enclosure not meeting standard.
    - Public Street Frontage (Zoning Code Section 5.4.2.B, Table 5.7.A): Up to two lots maybe served by a private drive without meeting the public street frontage requirement. Lots 48 – 52 are proposed to be served by the private drive.

- Single Family Detached Minimum Front Yard (Zoning Code Section 5.2.4.C, Table 5.7.C): 20 feet without a Public Utilities and Public Facilities (PUPF). A 12.5-foot minimum front yard setback is proposed.
- Single Family Detached Minimum Interior Side Yard (Zoning Code Section 5.2.4.C, Table 5.7.C): 5 feet (1 – 2 story). A three-foot minimum interior side yard setback is proposed.
- Single Family Detached Minimum Rear Yard (Zoning Code Section 5.2.4.C, Table 5.7.C): Lot depths less than or equal to 125 feet: 20 percent of the average lot depth. The average lot depth is 75 feet thus requiring a 15-foot rear yard setback. A 10-foot minimum rear yard setback is proposed.
- Driveways (Zoning Code Section 5.9.3.F): Driveways must be a minimum of 19 feet in length. However, when a carport or garage opens onto a side street yard, the driveway length shall be a minimum of 20 feet. Driveways are proposed to be 18 feet in length.
- On-site Signs, Primary Automotive Service Stations (Zoning Code Section 5.10.5.A): The total area of all signs on an automobile service station site shall not exceed 125 square feet. As proposed, the service station will have 245.15 square feet of sign area.
- Nondirectory Pole Signs, Primary Automotive Service Stations (Zoning Code Section 5.10.5.A): The total area of all freestanding signs shall not exceed 36 square feet, except that where price signs are included on the freestanding signs, the total area shall not exceed 52 square feet. Two freestanding signs are proposed at 43.33 square feet each. The total area of both freestanding signs is 86.66 square feet.
- Masonry Walls (Zoning Code Section 5.2.5.A.3): Long spans of masonry walls or fences shall provide breaks for pedestrian connections at least every 300 feet. The property line shared between the proposed commercial and residential uses will contain a masonry wall that spans approximately 1,137 feet. One break is proposed approximately 566 feet from Winding Way.

6. A **Design Review** to determine substantial compliance with the Sacramento County Countywide Design Guidelines (Design Guidelines).

3. Assessor's Parcel Number: 245-0011-012, 245-0011-018, 245-0011-020, 245-0011-021

4. Location of Project: The project site is located at the southeast corner of the Manzanita Avenue/Winding Way intersection in the unincorporated community of Carmichael.

5. Project Applicant: RCS Engineering, Inc.

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

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

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

Julie Newton
Environmental Coordinator
County of Sacramento, State of California

COUNTY OF SACRAMENTO
PLANNING AND ENVIRONMENTAL REVIEW
INITIAL STUDY

PROJECT INFORMATION

CONTROL NUMBER: PLNP2022-00027

NAME: Winding Ranch Retail and Residential Project

LOCATION: The project site is located at the southeast corner of the Manzanita Avenue/Winding Way intersection in the unincorporated community of Carmichael

ASSESSOR'S PARCEL NUMBER: 245-0011-012, 245-0011-018, 245-0011-020, 245-0011-021

OWNER:

Pappas Investments
2020 L Street, 5th Floor
Sacramento, CA 95811
Contact: Thad Johnson

APPLICANT:

RCS Engineering, Inc.
1420 Rocky Ridge Drive, Suite 150
Roseville, CA 95661
Contact: Tiffany Wilson

PROJECT DESCRIPTION

The project consists of the following entitlement requests:

1. A **Community Plan Amendment** of approximately 8.8 acres of Shopping Center (SC) and approximately 2.8 acres of Light Commercial (LC) to a total of 11.6 acres of Residential, 10 dwelling units per acre (RD-10).

2. A **Rezone** of approximately 8.8 acres of SC and approximately 2.8 acres of LC to a total of 11.6 acres of RD-10.

3. A **Tentative Subdivision Map** to divide approximately 24.8 gross acres into 79 single-family residential parcels, six commercial parcels, a detention basin (Lot B), three landscape lots (Lots C, D, F), and an emergency vehicle access lot (Lot E) in the SC and RD-10 zoning districts.

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   - Single Family Detached Minimum Rear Yard (Zoning Code Section 5.2.4.C, Table 5.7.C): Lot depths less than or equal to 125 feet: 20 percent of the average lot depth. The average lot depth is 75 feet thus requiring a 15-foot rear yard setback. A 10-foot minimum rear yard setback is proposed.
   - Driveways (Zoning Code Section 5.9.3.F): Driveways must be a minimum of 19 feet in length. However, when a carport or garage opens onto a side street yard, the driveway length shall be a minimum of 20 feet. Driveways are proposed to be 18 feet in length.

- On-site Signs, Primary Automotive Service Stations (Zoning Code Section 5.10.5.A): The total area of all signs on an automobile service station site shall not exceed 125 square feet. As proposed, the service station will have 245.15 square feet of sign area.

- Nondirectory Pole Signs, Primary Automotive Service Stations (Zoning Code Section 5.10.5.A): The total area of all freestanding signs shall not exceed 36 square feet, except that where price signs are included on the freestanding signs, the total area shall not exceed 52 square feet. Two freestanding signs are proposed at 43.33 square feet each. The total area of both freestanding signs is 86.66 square feet.

- Masonry Walls (Zoning Code Section 5.2.5.A.3): Long spans of masonry walls or fences shall provide breaks for pedestrian connections at least every 300 feet. The property line shared between the proposed commercial and residential uses will contain a masonry wall that spans approximately 1,137 feet. One break is proposed approximately 566 feet from Winding Way.

6. A **Design Review** to determine substantial compliance with the Sacramento County Countywide Design Guidelines (Design Guidelines).

Pappas Investments has applied to Sacramento County (County) for the above entitlements to allow for the development of the Winding Ranch Retail and Residential Project (project) in the unincorporated community of Carmichael for commercial and low-density residential uses. Project-related construction activities would occur throughout the proposed development area, which comprises approximately 18.6 acres of the 24.8-acre project site (see Plate IS-3). The remaining 6.2 acres of the project site would not be developed as part of this project, but is still considered part of the project site because drainage improvements would be made to this area to support the proposed residential and commercial development. The proposed project would include the development of 79 single-family residential lots, six commercial lots containing structures totaling 29,150 square feet (see Plate IS-3), one detention basin, three landscape lots, one emergency vehicle access lot, and one lot to be merged with an adjacent parcel in the future.

The six commercial lots would border Manzanita Avenue on the western edge of the project site on parcels 81 through 86. These lots would include one Circle K gas station that includes a general store, an 8-pump fuel canopy, and a carwash. Per the project applicant, the proposed gas station would have a maximum annual throughput of gasoline of 3 million gallons per year. In addition to the gas station, there are five retail buildings, with unknown tenants. Three of the retail buildings are proposed to be drive- through, and the other two would be multi-tenant shop buildings. The site plan is designed for proposed tenant types to coexist with interconnecting parking lots, which facilitates convenient vehicle circulation. Some site changes may be necessary to accommodate future specific building shapes and sizes.

The single-family residences would generally occupy the eastern half of the project site. A 6-foot-tall masonry wall would be located behind (east) of the commercial lots, screening this

area from the single-family residential lots. In addition to the masonry wall, the eastern boundary of the commercial lots will be landscaped with trees, further screening the residential development from the commercial. A pedestrian gateway through the masonry wall would be provided approximately 537 feet south of Winding Way, for access to the restaurants from the adjacent residential development. The gateway would include landscaping, a small patio area, paved pathways, and bench seating (see Plate IS-5).

Separated sidewalks with planter strips are proposed along Winding Way and Manzanita Avenue. Additional landscaped area will be used for shade trees to meet the parking lot shade requirements, as well as for bioretention to meet the stormwater quality requirements.

The single-family residential area and the commercial area shall each conform with California Code of Regulations Title 24 and California Energy Commission 2022 requirements." The project proposes installation of a new underground stormwater drainage pipeline that would tie into the South Drainage Ditch within the southern 6.2-acre parcel that is zoned for future high-density residential development. The upstream off-site runoff from Jan Drive and the upstream runoff from the undeveloped parcel in the southern portion of the project site (zoned for future high-density residential) would be routed through a new 36-inch underground "bypass" pipeline. The bypass pipeline would be installed beginning at the southern end of the existing 30-inch culvert associated with the South Drainage Ditch, and would extend northward underneath the street right-of-ways in the proposed residential area (see Hydrology and Water Quality, Plate IS-14 and Plate IS-15). The bypass pipe would connect to the existing County-owned, 60-inch culvert under Winding Way.

Access and Circulation

The commercial lots would be accessed from Manzanita Avenue and the residential units would be accessed from Winding Way. A network of streets and subdivisions are planned and would provide direct access to the residential areas within the project site (Plate IS-3).

Plate IS-4shows the land use designations for the existing and proposed Community Plans and zoning.

Construction

Project construction, including both the retail and the residential portions of the proposed project, is anticipated to last approximately 24 months or longer. Construction activities would include demolition (removal of existing asphalt pavement as well as the "Crestview Lanes" sign)], site preparation, grading, paving, building construction, and architectural coating (e.g., painting). As part of site preparation, 111 trees would be removed from the project site. The project applicant anticipates grading cut/fill to be balanced on-site (no import or export of soil). It is anticipated that the right lane on Manzanita Avenue and Winding Way would be temporarily closed to allow construction of frontage improvements (e.g., curb, gutter, driveways, sidewalks, and landscaping).

ENVIRONMENTAL SETTING

The 24.8-acre project site is in a developed suburban area of Sacramento County and located approximately 1.75 miles southeast of Interstate 80 in the unincorporated community of Carmichael. Plate IS-1 shows the regional location of the project site, and Plate IS-2 shows an aerial view of the project site and surrounding area. The project site is bounded by Winding Way to the north and Manzanita Avenue to the west, both of which are four-lane arterial streets; Rampart Drive, Mary Lynn Lane, and the Crestview townhomes and apartments to the east; and Jan Drive in the south. The general topography of the project site is level to gently rolling. With the exception of the paved lot, the project site is currently undeveloped and primarily composed of nonnative annual grasses with some patches of mixed oak woodland.

EXISTING LAND USE DESIGNATIONS

The project site is within the Carmichael and Old Foothill Farms Community Area Plan boundaries and is within the Fair Oaks Boulevard Corridor Plan Area. Carmichael and Old Foothill Farms Community Area Plan, consistent with the Sacramento Zoning Code, designates the portion of the project site proposed for development as a mixture of shopping center (SC), and light commercial (LC). The proposed Community Plan Amendment (Plate IS-3) would redesignate 11.6 acres of the project site to Residential, 10 dwelling units per acre (RD-10) by converting approximately 8.9 acres from SC and approximately 2.8 acres from LC. With the proposed land use designation changes, the project site would include 7 acres of SC, 11.6 acres of RD-10, and 0.1 acre of LC (see Plate IS-3).

The project site is situated within the area encompassed by the Fair Oaks Boulevard Corridor Plan (Corridor Plan) (Sacramento County et al. 2011). The Corridor Plan was prepared to guide the revitalization and enhancement of a three-mile-long stretch of Fair Oaks Boulevard and Manzanita Avenue. The Corridor Plan encompasses commercial and contiguous residential parcels located between Oak Avenue and Manzanita Avenue to Winding Way in the north, and west on Fair Oaks Boulevard to Marshall Avenue. Fair Oaks Boulevard runs between the original 2,000- and 1,000-acre rural “colonies” created by Daniel W. Carmichael in 1909. The Corridor Plan includes four districts; the project site is within the Manzanita District, within Area A designated as “Community Shopping Center and Large Vacant Parcels.” The Corridor Plan identifies opportunities for future use within Area A as potential commercial development and a new transit- oriented, mixed-use neighborhood.

Plate IS-1: Regional Site Location Map

Plate IS-2: Project Site Aerial

Plate IS-3: Composite Site Plan

Plate IS-4: Community Plan Amendment and Rezone Exhibit

Note: The existing and proposed zoning districts are identical to the existing Community Plan land uses and proposed changes to the Community Plan land uses portrayed in this figure.

With regard to consistency with the Corridor Plan, Sacramento County Zoning Code Section 6.7.3.B states the following:

1. Although not mandatory, projects outside of the Main Street District are encouraged to, and may at applicant's option, follow any or part of the development and design standards contained in the Fair Oaks Boulevard Corridor Plan.

2. Development projects proposed within the East Fair Oaks Boulevard, Manzanita, and South Gateway districts of the Fair Oaks Boulevard Corridor Plan may, at the applicant's option, utilize the alternative development and design standards, as described in the Fair Oaks Boulevard Corridor Plan instead of the development and design standards contained in the Zoning Code.

The project site is located outside of the Main Street District. The applicant has chosen not to participate in the Fair Oaks Boulevard Corridor Plan. Therefore, the project design must comply with relevant County Zoning Code Development standards.

Previous Land Uses

The northwest corner of the project site (Assessor's Parcel Number [APN] 245-0011- 0018) was once an automobile service station but was removed prior to 2010 and is now undeveloped. Crestview Lanes, a bowling alley, once stood in the center of the project site (APN 245-0011-020) but was demolished in 2015. The area once occupied by the bowling alley is now mostly vegetated with weedy species and some of the former parking lot remains paved.

Surrounding Land Uses

Surrounding land uses include commercial businesses, apartment buildings, single- family homes, and a neighborhood park. The surrounding area also includes public and private schools. Immediately west of the project site is Options for Youth, a public charter school for 7th to 12th graders. Farther west of the project site are three private schools, including Saint John the Evangelist School, St. Michael's Academy, and Sacramento Adventist Academy, serving varying age groups ranging from preschool through high school age students. Two San Juan Unified School District public schools are located near the project site, including Cameron Ranch Elementary School and Thomas Kelly Elementary School southwest and northeast of the project site, respectively. All of these schools are less than a half mile away from the project site.

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 Initial Study Checklist is warranted.

AESTHETICS

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

a. Have a substantial adverse effect on a scenic vista?

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

c. In nonurbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

ENVIRONMENTAL SETTING

VISUAL CHARACTER

The project site is located at the corner of Manzanita Avenue and Winding Way in the urbanized community of Carmichael, in unincorporated Sacramento County. Manzanita Avenue and Winding Way are 4-lane arterial roadways with center turn lanes; these roadways carry relatively high traffic volumes. The site was formerly developed with a gasoline station, and a commercial building that housed a bowling alley; these buildings were demolished in 2009 and 2015, respectively. However, the paved parking lot from the former bowling alley is still present on the project site. The remainder of the site is currently undeveloped and is primarily composed of nonnative annual grasses, with a few patches of mixed oak woodland. The site is traversed by several drainage ditches, and most of the trees are situated along the central north–south drainage ditch that bisects the site. The perimeter of the site is enclosed with metal chain link fencing. The site is comprised of flat to gently rolling topography; elevations range from 124 to 106 feet above mean sea level.

The project site is surrounded by existing urban development on all sides: commercial uses are present to the north and northwest; a small commercial building with a paved parking area is present adjacent to the project site on the east side of Manzanita Avenue; an office building and multi-family residential are present to the west and southwest; and multi-family

residential is present to the east. The southern portion of the project site is an approximately 6.2-acre undeveloped parcel comprised of grasses, forbs, and a few trees that is designated for future multi-family residential development (not part of the proposed project), but project-related drainage improvements are proposed on this parcel. Immediately south of this parcel, single-family residential uses and the northwest corner of Jan Park are present.

Public views of the project site are available from Winding Way and the Crestview Village shopping center to the north, from Manzanita Avenue and retail/commercial development to the west, from the small commercial building immediately adjacent to the project site on the east side of Manzanita Avenue, and from the northern end of Jan Park to the south. Public views of the project site from the east are available from local streets, including the northern end of Rampart Drive, Mary Lynn Lane, and Jan Drive to the southeast and southwest.

The description of the visual character at the project site is presented through photographs showing the existing conditions and the accompanying descriptions of each of the relevant key observation points (KOPs). Plate IS-5 shows the location of each of the KOPs.

Plate IS-5: Key Observation Points

Source: AECOM 2023

Source: AECOM 2024

Photo Viewpoint KOP-1. Northwest Corner of Jan Park Looking Northwest. Visible in the foreground are pavement, signage, and painted white barriers associated with Jan Drive West, along with a wood corner post at the northwest end of Jan Park; along with green grasses and fencing at the southern end of the parcel planned for future high- density residential. Several small trees and one very large tree and green grasses are visible on the parcel planned for future high-density development. The black arrow in the middle ground indicates the southern end of the project site where single-family residential development is proposed. A wood power pole with overhead electrical lines that served the former bowling alley is also visible in the middle ground. Tall trees associated with off-site commercial/retail development on the west side of Manzanita Avenue are visible in the background.

Source: AECOM 2024

Photo Viewpoint KOP-2. Jan Drive West Looking North. Small green trees, green grasses, and the southern end of an existing drainage ditch on the future high-density residential parcel north of Jan Drive West are visible in the foreground. The black arrows in the middle ground indicate the location of the southern end of the project site where single-family residential development is proposed. Tall green trees in the middle ground on the right side of the photo are associated with the Crestview Apartments. The back side of the white commercial building on the east side of Manzanita Avenue is visible in the middle ground on the left side of the photo.

Source: AECOM 2024

Photo Viewpoint KOP-3. Manzanita Avenue Looking East. Visible in the foreground are an on-site drainage ditch, along with green grasses and deciduous shrubs. In the background, tall green trees associated with off-site landscaping and buildings at the Crestview Apartments are visible.

Source: AECOM 2024

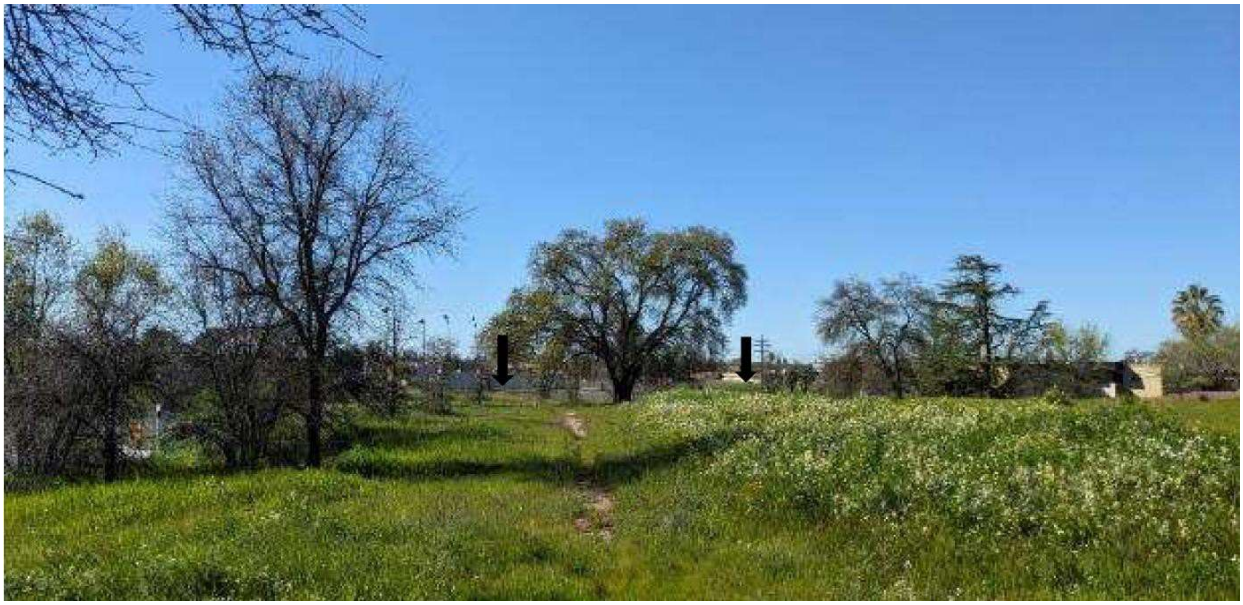
Photo Viewpoint KOP-4. Manzanita Avenue at Winding Way Looking Northeast. The former gasoline station site at the project site surrounded by chain link fencing and covered with green grasses is visible in the foreground. Also visible in the foreground are green trees adjacent to a drainage ditch running north–south through the middle of the project site. In the middle ground, green grasses on the project site are visible on the far side of the drainage ditch; along with pavement, vehicles, street lights, wood power poles, and overhead power lines on Winding Way; and the southern end of the Crestview Village shopping center and adjacent gasoline station. Tall green trees associated with existing high-density residential development on the east side of Rampart Drive and north of Winding Way are visible in the background.

Source: AECOM 2024

Photo Viewpoint KOP-5. Winding Way Looking Southwest. Grasses at the project site are visible in the foreground and middle ground, along with trees adjacent to the north– south drainage ditch that bisects the project site. The Crestview Apartments with associated landscaping are also visible in the middle ground on the left side of the photo, along with wood power poles with overhead power lines along Manzanita Avenue. Off-site trees to the south and west are visible in the background.

Source: AECOM 2024

Photo Viewpoint KOP-6. Rampart Drive at Mary Lynn Lane Looking Southwest. Green grasses at the project site are visible in the foreground. Middle ground views include landscape trees at the Crestview Apartment complex, and green grasses and scattered trees on the project site. In the background, the back side of the white commercial building on the east side of Manzanita Avenue is visible, along with Manzanita Avenue and associated vehicles, commercial/retail development and associated landscaping on the west side, and overhead power lines.



Source: AECOM 2024

Photo Viewpoint KOP-7. Jan Drive East Near Ranger Way Looking Northwest. An unofficial use path at the end of Jan Drive East, green grasses, and trees are visible in the foreground. The back side of Crestview Apartments and associated landscaping are visible in the middle ground. The black arrows in the middle ground indicate the southern end of the project site where single-family residential housing is proposed. In the background, the back side of the white commercial building on the east side of Manzanita Avenue is visible, along with retail/commercial development on the west side of Manzanita Avenue.

LIGHT AND GLARE

The project site is in the developed community of Carmichael, surrounded by the urbanized areas of Fair Oaks, Citrus Heights, North Highlands, McClellan Park, Arden- Arcade, and Rancho Cordova. The level of existing nighttime lighting in the project area is high due to the existing surrounding development, which includes streetlights, parking lot lighting, security lighting, and signage.

SCENIC HIGHWAYS

The project site is not within the viewshed of any designated or eligible scenic highway. The closest County-designated scenic roadway is Garden Highway, approximately 10.5 miles to the southwest (Sacramento County 2022a). The closest State-designated scenic highway is State Route 160, approximately 15.75 miles to the southwest (California Department of Transportation [Caltrans] 2019).

DISCUSSION

A) HAVE A SUBSTANTIAL ADVERSE EFFECT ON A SCENIC VISTA?

A scenic vista is a public viewpoint that provides expansive views of highly valued scenery or landscapes. The project consists of flat undeveloped land covered with forbs, scattered

trees, and a paved parking lot, and is surrounded by flat land covered with urban development including 4-lane roadways, and commercial, retail, and residential development. The project site does not contain any unique geologic features, major waterfalls, unique rock outcroppings, gorges, mountains, or other features that could be regarded as outstanding scenic features. Thus, there would be **no impact**.

B) SUBSTANTIALLY DAMAGE SCENIC RESOURCES, INCLUDING, BUT NOT LIMITED TO, TREES, ROCK OUTCROPPINGS, AND HISTORIC BUILDINGS WITHIN A STATE SCENIC HIGHWAY?

The project site is not within the viewshed of any designated or eligible scenic highway. The closest County-designated scenic roadway is Garden Highway, approximately 10.5 miles to the southwest (Sacramento County 2022a). The closest State-designated scenic highway is State Route 160, approximately 15.5 miles to the southwest (Caltrans 2019). Thus, there would be **no impact**.

C) IN NONURBANIZED AREAS, SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF THE SITE AND ITS SURROUNDINGS? IF THE PROJECT IS IN AN URBANIZED AREA, WOULD THE PROJECT CONFLICT WITH APPLICABLE ZONING AND OTHER REGULATIONS GOVERNING SCENIC QUALITY?

DEGRADATION OF VISUAL CHARACTER

PROPOSED DESIGN ELEMENTS

The project applicant has engaged the services of an architectural design firm to provide conceptual renderings showing exterior elevations of the proposed commercial development at the project site. Conceptual renderings illustrating the visual character as viewed from Manzanita Avenue of the front of the proposed convenience store and car wash at the gas station site, and options for the front of the proposed five restaurant pads, are shown in Plate IS-6 through Plate IS-10, respectively. The relative size of these buildings in relationship to one another are shown in Plate IS-11.

Plate IS-6: Convenience Store

Source: Greenberg Farrow et al. 2023

Plate IS-7: Car Wash

Source: Greenberg Farrow et al. 2023

Plate IS-8: Restaurant Option 1

Source: Studio W Architects 2023

Plate IS-8: Restaurant Option 2

Source: Studio W Architects 2023

Plate IS-9: Restaurant Option 3

Source: Studio W Architects 2023

Plate IS-10: Restaurant Option 4

Source: Studio W Architects 2023

In addition, a conceptual landscape plan for the proposed commercial development is shown in Plate IS-11. The project proposes an approximately 6-foot-tall masonry wall with associated landscaping along the eastern boundary between the proposed commercial and residential development. A pedestrian gateway through the wall would be provided approximately 566 feet south of Winding Way, for access to the restaurants from the adjacent residential development. The gateway would include landscaping, a small patio area, paved pathways, and bench seating (see Plate IS-11).

Plate IS-11: Conceptual Commercial Landscape Plan

Source: Fuhrman Leamy Land Group 2023

VISUAL CHARACTER FROM KEY VIEWPOINTS

The project proposes commercial and single-family residential development on the project site. The project also proposes underground drainage improvements at the northern end of an existing drainage ditch within 6.2-acre parcel in the southern portion of the project site. As shown in KOP-3 through KOP-6, the project site consists of flat to gently rolling land with no development other than an approximately 1.8-acre paved parking area which served a former bowling alley. The project site is covered with grasses and forbs. Several drainage ditches bisect the project site from north to south and east to west (see KOP-3). Shrubs and scattered trees are present along the sides of the drainage ditches (see KOP-3 and KOP-4). Immediately south of the project site, an existing drainage ditch is present that connects to Jan Drive; the proposed project includes installation of a new 36-inch underground pipeline that would convey off-site flows northward through the residential portion of the site and would tie-in to the existing 60-inch culvert underneath Winding Way. The pipeline would be installed at the northern end of the ditch where the 6.2-acre parcel zoned for future high-density residential meets the southern end of the proposed single-family residential development (see Plate IS-17 in Hydrology and Water Quality). Due to the intervening topography and vegetation, this stormwater drainage improvement area is not visible from Jan Park (KOP-1) or the west side of Jan Drive (KOP-2). The visual appearance of this southern drainage ditch from Jan Drive northward as shown in KOP-2 would not change.

However, all of the drainage ditches within the parcels proposed for commercial and residential development under the proposed project (see, for example, KOP-3) would be abandoned and filled during project-related grading. New underground stormwater drainage pipelines would be installed throughout the areas proposed for development.

As shown in KOP-1, the southern end of the proposed single-family residential development at the project site (indicated by the black arrow) would be approximately 400 feet northwest of the north end of Jan Park. Views of the east side of the proposed development from Jan Park would be blocked in the summer and fall by the large deciduous tree shown in KOP-1, but clear views of the proposed development would be available to recreationists in winter and spring, approximately 400 feet to the north. The intervening open space shown in KOP-1 would remain in views from recreationists in Jan Park looking north. Generally unobstructed views of the southern end of the proposed residential development would be available to local motorists traveling on Jan Drive west of the park. Views of the southern end of the proposed commercial development from recreationists at Jan Park and motorists on Jan Drive west would be blocked by the intervening residential development (see Plate IS-3, "Composite Site Plan," in Project Description).

Motorists traveling on Manzanita Avenue would have unobstructed views of the proposed commercial development (see KOP-3 and KOP-4). Views of the proposed residential development on the east side of the project site would be blocked by the new commercial development and associated landscaping, and the proposed screen wall with landscaping between the proposed commercial and single-family residential development.

Those traveling on Winding Way (KOP-5) would generally not have views of the proposed single-family residential development because of the proposed screen/sound wall between the residences and Winding Way, and associated landscape trees.

Limited views for a few seconds of the proposed residences would be available as motorists pass by the main residential entry road from Winding Way. However, motorists on Winding Way would have clear views of the proposed commercial development and associated landscaping and parking as they proceed farther west to the corner of Manzanita Avenue.

Views of the proposed residential development for local motorists traveling on Rampart Drive and Mary Lynn Lane (KOP-6) would be blocked by a screen wall and landscape trees, except for limited views for a few seconds for motorists at the Street 6 entry from Rampart Drive. Views of the proposed commercial development to the west would be blocked by the new single-family residences and landscaping.

Views of the southern end of the proposed single-family residential development from the east side of Jan Drive and the northeast corner of Jan Park are illustrated by the black arrows in KOP-7. In winter, the proposed residential development would be visible for local motorists traveling on Jan Drive northward onto Ranger Way; there would be no views of the proposed development for southbound motorists. In the summer, views from KOP-7 and slightly further south at the intersection of Jan Drive and Ranger Way would be almost completely blocked by several very large intervening deciduous trees.

Although CEQA does not require an analysis of visual impacts from private viewpoints (*Mira Mar Mobile Community v. City of Oceanside*, 119 Cal.App.4th 477 [Cal. Ct. App. 2004])the following information related to views from surrounding residential development is provided for informational purposes.

The property boundary along the backyards of single-family residences along the south side of Jan Drive (south of the project site) are separated from the road by an approximately 6-foot-tall solid fence. Furthermore, tall landscape trees, shrubs, and hedges within these backyards further block views of the proposed residential development that would be constructed approximately 325 feet to the north. Views of the proposed commercial development from these residences would be blocked by the proposed single-family residential development.

Views of the proposed residential development from private residences along Ranger Way east of the project site are generally blocked by existing intervening high-density development (i.e., Crestview Apartments) (see Plate IS-). Residents in the Crestview Apartments and Crestview Townhomes along Rampart Drive and Mary Lynn Lane east of the project site would have clear views of the proposed residential development (see KOP-6), which would be designed per the Countywide Design Standards (discussed in detail below). Views of the proposed development at the project site from the back yards of the four single-family residences along Ranger Way south of the Crestview Apartments would be blocked for the two homes immediately adjacent to the apartments due to the viewing angle. Views of the proposed development from the other two residences near the intersection of Ranger Way and Jan Drive East would be partially blocked by large landscape trees in summer and fall, but would be fully visible during winter and spring (see KOP-7).

Residences in the small subdivision on Kimberly Hill Court, on the west side of Manzanita Avenue, face directly north–south. Since the proposed new development at the project site would be situated to the northeast, and considering the landscaping and fencing at the Kimberly Hill Court residences and the existing commercial building on the east side of Manzanita Avenue, these residences would not have direct views of the project site. Views of the proposed development would be available to these local resident motorists when traveling east on Kimberly Hill Court at the intersection with Manzanita Avenue.

CONCLUSION

Portions of the project site were previously developed with a gas station/convenience store, and a commercial building (bowling alley) with a large, paved parking lot; although the former buildings have been demolished (in 2009 and 2015, respectively), the parking lot is still present at the site. The current visual character of the project site would change from open space with scattered trees and shrubs, and a large, paved parking lot, to commercial and residential development. However, the visual character and quality of the proposed development would be consistent with current industry standard architectural and landscape design principles (see Plate IS-6 through Plate IS-11) and the project will be required to demonstrate substantial compliance with the Sacramento Countywide Design Standards (Sacramento County 2022b). Furthermore, from a visual perspective the proposed development would be

consistent with similar types of existing development (i.e., residential and commercial) currently surrounding the site to the north, east, and south. Therefore, implementation of the proposed project would not result in a substantial degradation of the visual character or quality of the site or the surrounding area, and this impact is considered **less than significant**.

CONFLICTS WITH REGULATIONS GOVERNING SCENIC QUALITY

As described above, the project site is situated in the developed community of Carmichael, surrounded by the suburban areas of Fair Oaks, Citrus Heights, North Highlands, Old Foothill Farms, Arden-Arcade, and Rancho Cordova. The project site is within an area that has been developed with urban and suburban land uses. Scenic quality in the project area is regulated through compliance with the Sacramento County Zoning Code (Sacramento County 2023), the County's Design Review process and Countywide Design Standards (Sacramento County 2022b), the County General Plan (Sacramento County 2022c) and Carmichael Community Action Plan (Sacramento County 2006), and the Fair Oaks Boulevard Corridor Plan (Sacramento County et al. 2011). Each of these regulatory mechanisms as related to scenic quality are discussed separately below.

SACRAMENTO COUNTY ZONING CODE

As described in the Project Description, the project site is currently zoned for Shopping Center (SC) and Light Commercial (LC) development. As part of the proposed project, 8.8 acres of Shopping Center and approximately 2.8 acres of Light Commercial would be rezoned to a total of 11.6 acres of Residential with a maximum of 10 dwelling units per acre (RD-10). Within the remaining 7-acre portion of the project site zoned for Shopping Center development, there would be six commercial parcels. The commercial parcels would consist of a gasoline station with a convenience store and car wash, and five restaurant building pads.

The Sacramento County Zoning Code (Sacramento County 2023) sets forth standards for all types of development including residential and commercial/retail related to a variety of features such as allowable uses, lot sizes, setbacks, building heights, landscaping, lighting, and signage. As noted in the Project Description, the project proposes a Special Development Permit to allow deviations from certain Zoning Code standards (please see above under the heading, "Project Description"). The deviations related to aesthetics are listed below.

a. A gasoline pump island canopy to exceed the 16-foot maximum design clearance height to 17.5 feet;

b. A gasoline pump island canopy to exceed the 2.5-foot roof structure height above the design clearance height to 3 feet;

c. **Landscape Screening (Zoning Code Section 5.2.4.B.4):** A 5-foot-wide landscape planter shall be installed around the perimeter of trash enclosures. The trash enclosures on the proposed commercial properties would not meet this requirement.

d. **On-site Signs, Primary Automotive Service Stations (Zoning Code Section 5.10.5.A):** The total area of all signs on an automobile service station site shall not exceed 125 square feet. As proposed, the service station would have 245.15 square feet of sign area.

e. **Nondirectory Pole Signs, Primary Automotive Service Stations (Zoning Code Section 5.10.5.A):** The total area of all freestanding signs shall not exceed 36 square feet, except that where price signs are included on the freestanding signs, the total area shall not exceed 52 square feet. Two freestanding signs are proposed at 43.33 square feet each. The total area of both freestanding signs is 86.66 square feet.

f. **Masonry Walls (Zoning Code Section 5.2.5.A.3):** Long spans of masonry walls or fences shall provide breaks for pedestrian connections at least every 300 feet. The property line shared between the proposed commercial and residential uses would contain a masonry wall that spans approximately 1,137 feet. For security purposes, only one break is proposed—approximately 566 feet south of Winding Way.

The visual impact of the proposed deviations listed above would be minor in terms of size, scale, colors, and the overall design aesthetic as it appears to viewers. The project applicant is seeking a Special Development Permit that would allow for the deviations listed above. Prior to issuance of the requested permit, all aspects of the proposed project, included the above-listed deviations, would be subject to the County's Design Review process (discussed in detail below) to ensure that quality design and attractive exterior aesthetics are maintained throughout the site.

SACRAMENTO COUNTY DESIGN REVIEW PROGRAM AND COUNTYWIDE DESIGN GUIDELINES

Sacramento County Zoning Code (Sacramento County 2023) Section 6.3, Design and Site Plan Review, sets forth the provisions of the County's Design Review Program, in which discretionary and non-discretionary projects are reviewed to determine each project's compliance with the Countywide Design Guidelines (Sacramento County 2022b). Most development projects, regardless of the type of project or the zoning district, that require discretionary entitlement(s) or approval(s) are subject to the Design Review Program, including the proposed project.

The process for use of the Countywide Design Guidelines consists of:

- Review the Community Context / Neighborhood Compatibility Type (Section 2.1) Respond to Neighborhood Site Design Standards (Section 2.2)
- Apply the Building Design Standards (Section 2.3)
- Apply the Landscape / Site Elements Design standards (Section 2.4) Apply Active Design Principles (throughout the Design Guidelines)

Some of the relevant guidelines and objectives for commercial and residential development contained in the Countywide Design Guidelines are described below.

COMMERCIAL DEVELOPMENT

Guidelines: Projects in commercial districts should further the economic and image objectives for the district and advance healthy and sustainable communities in the County. Each project should contribute to the streetscape, pedestrian and auto access objectives, and architectural and signage design objectives for the site and surrounding area.

COMMUNITY DESIGN OBJECTIVES

- Renovated and new projects should be designed to reinforce sustainable planning and design objectives for the surrounding district and neighborhood. This could include creation of gateways, tree-shaded parkways, open spaces, an interconnected system of pedestrian ways, or other design features. Innovative project design is encouraged, so long as these designs respect the building form and scale of the surrounding area, with consideration of building heights, setbacks, orientation, architectural style, and landscape transitions.
- Renovated and new projects should be planned and designed so that the siting and shape of buildings contribute to the district's identity and urban design concepts. This could include orientation and siting of buildings, composition of roof forms, and architectural treatments.
- The frontage of primary commercial roadways and connecting side streets should be enhanced by the design of commercial buildings and centers. They should improve streetscape, building edge and land use continuity. Service areas should be located so as not to disturb pedestrian circulation, land use continuity, or the function of adjacent land uses.
- Providing openings to fences and sound walls can provide pedestrian and bicycle connections to adjacent neighborhoods and should include "live-end" features. Also used in cul-de-sacs, "live-ends" provide for pedestrian access at the ends to adjoining streets, open spaces, parking lots while permitting the access point to be used as a common outdoor space. "Live-ends" should be landscaped and can include benches, providing nice areas for sitting and socializing.
- Paseos should be utilized to provide common outdoor spaces and allow for pedestrian access through the development, and connection to adjacent developments.
- Building and parking setbacks should be designed as an extension of the urban design concept for the district, neighborhood, or center. This includes the depth, edge treatment, pedestrian facility and landscaping of setback areas.
- Renovated and new projects should support urban design concepts with open spaces that create gateways, act as collectors for pedestrian systems, or provide a social focal point for a project and the surrounding district.
- Renovated and new projects should have signage and graphic identity concepts that support both project and district planning and economic objectives.

ROADWAY DESIGN AND STREETSCAPING OBJECTIVES

Landscape, lighting, and signage for every project should contribute to the implementation of streetscape principles and concepts for commercial corridors or districts. Streetscape and landscaping should promote pedestrian activity and provide for pedestrian safety, access, comfort, and connections while contributing to overall placemaking and objectives for commercial districts or centers. Landscaping and trees can be used to complement buildings and to make a positive contribution to the aesthetics and function of the specific site and area. These aesthetics contribute to the mental and emotional well-being of customers, and support economic activity.

- Renovated and new projects should have an inter-connected system of roadways, pedestrian walks and sidewalks. This system should connect to the district and neighborhood and should be safe and attractive to pedestrians and invite walking activity.
- Projects should possess an overall landscape and streetscape concept plan. The plan should reinforce the placemaking, connections, and shopping environment objectives for the project and surrounding district.
- Projects should provide an overall street lighting and furniture concept plan. The plan should identify the types and location of lighting fixtures and furniture. The lighting and furniture should be a coordinated “family” with color and style that complements site and architectural concepts and invites shoppers to use it. The lighting plan should use fixtures that are energy efficient, contribute to a safe environment and reduce impacts on dark skies.
- Use accent paving such as textured paving and paving blocks in driveways. Use of permeable concrete, cool pavements and pavers is desirable. Minimize and share driveways wherever possible.
- Along streets with greater than 50,000 vehicles average daily traffic (ADT), plant trees conducive to absorbing particulates including deodar cedar, valley oak, and redwoods. Utilize canopy trees for pedestrian areas to increase shading, cool the pavement and support walking.

DRIVE-THROUGH BUSINESSES AND AUTOMOBILE SERVICE STATIONS OBJECTIVES

The trend toward multi-service convenience retail centers that are less auto-oriented and more retail-oriented in character creates an opportunity to better integrate drive through businesses and automobile service stations into the diverse context of the County, while promoting walkability and supporting the design of active communities. To this end, drive through businesses and automobile service uses should be designed with the following considerations.

- Balance business needs and standardized designs with the local sense of place of the community or neighborhood. Encourage design that is responsive to the local and regional context and contributes to the established or desired character and identity of the commercial or neighborhood area.

- Support a more pedestrian-friendly environment along public streets, particularly in urban and commercial settings, and in the organization of private streets internal to a project, to support the safe access of both automobiles and pedestrians.
- Provide quality architecture and landscape design that complements or ensures compatibility with adjacent land uses and on-site activities.
- Minimize impacts to adjacent land uses from on-site activities with appropriate siting of facilities, screening of service functions, and application of landscape buffers between uses.
- Coordinate the requirements of various on-site functions within a commercial or business center, particularly shared ingress and egress points and safe internal vehicular and pedestrian access and circulation.
- The design of stand-alone automobile service stations should conform to the dominant existing or planned character of the surrounding neighborhood. This can be accomplished through the use of similar forms, materials, and colors. In areas where no existing or little context exists, project applicants should work with the County to determine the character and design theme for the project.
- The design of a facility that occupies a pad or portion of a building within a larger commercial or business center should be compatible with or enhance the design elements of that center.
- Service station pump island canopies, including supporting columns and ancillary buildings should be architecturally compatible with the primary service building(s) in color, materials and building design.
- Drive-through elements should be architecturally integrated into the building rather than appearing to be applied or appear as an appendage to the building.
- All sides of a building should express consistent architectural detail and character. All site walls, screen walls, and pump island canopies, and other covered outdoor areas should be architecturally integrated with the building, with similar materials, colors, and details.
- Incorporate landscaping that is compatible with the public realm landscape image and dominant existing or planned streetscape character of the commercial or neighborhood district.
- Landscaping should be provided near the primary building(s) to soften the structure and integrate it with the surrounding environment. Landscaping should be provided in accordance with the landscape requirements in the County Zoning Code.
- Trees should be provided along pedestrian pathways to provide shade, reduce heat island effects, particularly in parking lots, and reduce glare.
- Where site constraints require the location of the drive-through lanes, drive through areas, driveways, or parking areas between the street and the building, the view of the lanes should be minimized with the use of screening, landscaping, and other design elements, such as low decorative walls. Plant street trees, shrubs or other vegetation

along the edge of the street. Use trees, shrubs and low walls to screen automobiles and automobile lights from view, while allowing visibility into the site.

Based on the conceptual design plans and renderings, the proposed project would be consistent with the Commercial Guidelines contained in the Countywide Design Guidelines.

RESIDENTIAL GUIDELINES

Single Family Design Review is based on three different areas of focus: Neighborhood Site Design, Building Design, and Landscaping/Site Elements. The County General Plan encourages infill of existing communities consistent with existing Community Plan and zoning designations, while striking a balance with the need to design new residential development that is compatible within the context of the project's surroundings. The County General Plan and the Countywide Design Guidelines encourage continued investment in existing communities and recognize that new investment must often respond to market needs that may not be the same style and design as the existing neighborhood. The Countywide Design Guidelines seek design strategies to ensure new projects blend in with and complement their surroundings, and simultaneously enable property owners to develop at zoned densities. Innovation and creativity are encouraged to achieve highly livable neighborhoods.

Good site design is an inherent part of good neighborhood design. Specific Site Design objectives in the Countywide Design Guidelines address street and block patterns, lot configurations, a home's orientation and massing, and the overall layout with regard to its lot. A single-family residential project should be compatible with the overall scale and mass of adjacent neighborhoods. Some of the relevant site design and architectural style objectives are presented below.

- For single-family subdivisions, provide variation in the streetscape with different heights, setbacks, and roof shapes of buildings.
- To maintain a compatible scale and massing of streetscape, provide that the rhythm, size, and proportions of openings (windows, doors) be compatible with each other.
- The mass of a larger structure should be broken down into smaller components that are similar in scale to other buildings in the neighborhood.
- Reduce the appearance of mass of the upper stories on two- and three-story homes.
- Facades should be articulated to break up the surface, add interest, and reduce the appearance of mass.
- Roof style and articulation should be compatible and in context with that of the subdivision or the existing neighborhood.
- For single-family subdivisions, the building styles along the same street should be complementary and coordinated yet diverse. Variation of architectural styles along the same street is appropriate if the overall massing, form and setbacks of the homes is compatible.

- New stylistic interpretations of traditional architecture are encouraged, but fundamental design principles such as proportions, scale, shapes, and rhythm shall be utilized.
- Architectural features and detailing should be proportional to the scale of the home, as well as to other homes of a similar architectural style in the surroundings.
- Individual elements of a structure should be consistent with that structure's overall design or style.
- No building facade shall consist of an unarticulated blank wall or unbroken series of garage doors.
- The structure should have appropriate finishes on all sides to provide continuity. Materials should appear substantial and integral to the structure; and shall be durable so as not to readily succumb to weathering and aging. Material changes not accompanied by changes in plane appear "tacked-on" and are strongly discouraged.
- For most architectural styles, exterior colors should be in context or compatible with those in its neighborhood.
- Corner lots should present attractive facades to both adjoining streets through elements such as wraparound porches, bays, entries, window treatments, and use of alternative materials such as brick and stone.
- Provide windows with views onto outdoor spaces for additional security and visual interest. Active uses, such as kitchens and living rooms, are encouraged to the front of the building for more "eyes on the street."
- Attractive, well-articulated building facades should be created. Articulation can be achieved with windows, setbacks, entries, porches, and/or balconies. All elevations should be given design treatment with particular emphasis on those seen from the street or public way.
- Variety in use of materials is desirable.
- Roof forms should be an integral part of the architectural design of the building. There should be a consistent relationship of slopes and pitches used on each building.

DESIGN REVIEW PROCESS

Design Review Submittals must include the following materials:

1. Conceptual Building Elevations of proposed buildings, and any accessory structures, including elevations of all sides.

2. Illustrative Landscaping Plans, including irrigation plans. Landscaping Plans may be submitted concurrent with Water Conservation Plans.

3. Illustrative Fencing Details for the front and side street yard areas of residences. Landscaping and Fence Details for public and commercial areas.
4. Streetscape Drawings, showing a continuous portion of typical street frontage

elevations and a three-dimensional streetscape view showing relationship to adjoining properties.

For discretionary projects, the Design Review Advisory Committee conducts design reviews and makes findings and recommendations to the approving authority regarding compliance with the Countywide Design Guidelines. The Committee does not have final authority over projects and serves in an advisory and technical guidance capacity to the approving authority (Zoning Code Section 6.3.2.E.2).

The appropriate County approving authority is required to make one of the following findings (Zoning Code Section 6.3.2.F):

1. The project substantially complies with the Countywide Design Guidelines;

2. The project would substantially comply with the Countywide Design Guidelines if modified with recommended modifications; or

3. The project does not comply with the Countywide Design Guidelines and should, as consequence, not be approved.

Consistent with this requirement, the Design Review Advisory Committee would evaluate the proposed project, make recommendations regarding project modifications and conditions, and make findings.

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan Land Use Element (Sacramento County 2022c) contains policies related to land use that are intended to help ensure visual quality in urban design and prevent adverse environmental impacts, including the examples listed below.

Policy LU-16: Apply the “Community Design Guidelines” and design review authority to all long-range planning efforts, including but not limited to Specific Plans, Comprehensive Plans, Community Plans, and Commercial Corridor Plans.

Policy LU-17: Support implementation of the design review program on a project-by- project basis to ensure that all development applications positively contribute to the immediate neighborhood and the surrounding community.

Policy LU-18: Encourage development that complements the aesthetic style and character of existing development nearby to help build a cohesive identity for the area.

Policy LU-19: Incompatible land uses should be buffered from one another by methods that retain community character, and do not consume large land areas or create pedestrian barriers.

Policy LU-20: Planning processes for existing communities, commercial corridors and new growth areas shall provide for distinct and identifying physical elements, which may include: gateways, signage, public art, common site or street layout, shared design qualities of buildings or infrastructure, or prominent landmarks or destinations.

Policy LU-89: Support planning for and development of mixed-use centers and urban villages along commercial corridors to improve quality of life by creating diverse neighborhood gathering places, supporting enhanced transit service and non- automotive travel, stimulating local economic development, eliminating blight, and balancing land uses.

Policy LU-90: Focus investment of County resources in commercial corridors to facilitate improvements to streetscapes, sidewalks, landscaping, undergrounding of utilities, and other infrastructure and public amenities to encourage and stimulate private investment.

Policy LU-94: Use design review to ensure that new commercial and residential development projects are designed to be compatible with existing neighborhoods and improve quality of life.

Policy LU-102: Ensure that the structural design, aesthetics, and site layout of new developments is compatible and interconnected with existing development.

The proposed project would be consistent with these County General Plan policies.

FAIR OAKS BOULEVARD CORRIDOR PLAN

The project site is situated within the area encompassed by the Fair Oaks Boulevard Corridor Plan (Corridor Plan) (Sacramento County et al. 2011). The Corridor Plan was prepared to guide the revitalization and enhancement of a 3-mile-long stretch of Fair Oaks Boulevard and Manzanita Avenue. The Corridor Plan encompasses commercial and contiguous residential parcels located between Oak Avenue and Manzanita Avenue to Winding Way in the north, and west on Fair Oaks Boulevard to Marshall Avenue. Fair Oaks Boulevard runs between the original 2,000- and 1,000-acre rural “colonies” created by Daniel W. Carmichael in 1909. The Corridor Plan includes four districts; the project site is within the Manzanita District, within Area A designated as “Community Shopping Center and Large Vacant Parcels.” The Corridor Plan identifies opportunities for future use within Area A as potential commercial development and new transit oriented mixed-use neighborhood.

With regards to consistency with the Corridor Plan, Sacramento County Zoning Code Section 6.7.3.B states the following:

1. Although not mandatory, projects outside of the Main Street District are encouraged to, and may at applicant’s option, follow any or part of the development and design standards contained in the Fair Oaks Boulevard Corridor Plan.

2. Development projects proposed within the East Fair Oaks Boulevard, Manzanita, and South Gateway districts of the Fair Oaks Boulevard Corridor Plan may, at the applicant’s option, utilize the alternative development and design standards, as described in the Fair Oaks Boulevard Corridor Plan instead of the development and design standards contained in the Zoning Code.

The project site is located outside of the Main Street District. The applicant has chosen not to participate in the Fair Oaks Boulevard Corridor Plan. Therefore, the project design must comply with relevant County Zoning Code Development standards, which are discussed above.

CONCLUSION

The proposed County zoning and Carmichael & Old Foothill Farms Community Plan changes to allow RD-10 residential development in the eastern portion of the project site would promote land use and visual consistency with the adjacent existing residential development to the north, east, and south of the project site, and with approval of the Special Development Permit for minor deviations from County standards, would not result in a degradation of visual character or quality. The proposed commercial development has been designed to meet the standards and regulations governing scenic quality discussed in detail above, including the Countywide Design Guidelines as related to commercial development. The Design Review Advisory Committee reviewed the proposed project on July 13, 2023, and found the proposed project to be in substantial compliance with the Sacramento Countywide Design Guidelines. All facets of the proposed project would undergo the County's design review process to ensure quality design and visually appealing aesthetics for viewers both on the project site and from the surrounding area. Therefore, with approval of the proposed changes to on-site zoning and the Carmichael & Old Foothill Farms Community Plan, and the Special Development Permit, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality, and this impact would be **less than significant**.

D) CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE WHICH WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS IN THE AREA?

The project area is developed, and is not a "dark sky" area; existing development in the project area already contributes substantially to nighttime lighting and skyglow effects. Proposed urban land uses at the project site would introduce new street lighting, parking lot lighting, pedestrian way lighting, interior lighted building signage, interior and front lighted landmark signage, exterior lighted (light emitting diode [LED]) security lighting, and architectural lighting, during the project's operational stage. These lights would be visible during nighttime hours and would represent a new source of light and glare from the surrounding developed areas and roadways, and would contribute to nighttime skyglow effects. Therefore, this impact is considered **potentially significant**.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure AE-1 would reduce the project's potentially significant impacts from nighttime glare and nighttime skyglow effects to a **less-than-significant** level because an exterior lighting plan with measures specifically designed to reduce nighttime light spillover, glare, and skyglow effects would be prepared and implemented.

AIR QUALITY

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

a. Conflict **with or obstruct implementation of the applicable air quality** plan?

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

c. Expose sensitive receptors to substantial pollutant concentrations?

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The project site is located within the southern portion of the Sacramento Valley Air Basin (SVAB). Air quality in the Sacramento County portion of the SVAB is regulated by the U.S. Environmental Protection Agency (USEPA) at the federal level, by the California Air Resources Board (CARB) at the state level, and by the Sacramento Metropolitan Air Quality Management District (SMAQMD) at the regional level. This section supplements the Initial Study Checklist by summarizing the Air Quality and Greenhouse Gas Emissions Technical Report completed by HELIX Environmental Planning, Inc. (HELIX) in December 2023 to evaluate potential air quality impacts during construction and operation of the proposed project. The HELIX report is contained in Appendix A.

ENVIRONMENTAL SETTING

CLIMATE AND METEOROLOGY

The climate of the SVAB is characterized by hot, dry summers and mild, rainy winters. During the year, the temperature may range from 20 to 115 degrees Fahrenheit with summer highs usually in the 90s and winter lows occasionally below freezing. Average annual rainfall is about 20 inches with snowfall being very rare. The prevailing winds are moderate in strength and vary from moist breezes from the south to dry land flows from the north. The mountains surrounding the Sacramento Valley create a barrier to airflow, which can trap air pollutants in the valley when certain meteorological conditions are right, and a temperature inversion (areas of warm air overlying areas of cooler air) exists. Air stagnation in the autumn and early winter occurs when large high-pressure cells lie over the valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows pollutants to become concentrated in the air. The surface concentrations of pollutants are highest when these conditions are combined with increased levels of smoke or when temperature inversions trap cool air, fog, and pollutants near the ground. The ozone season (May through October) in the SVAB is characterized by stagnant morning air or light winds with the breeze arriving in the afternoon out of the southwest from the San Francisco Bay. Usually, the evening breeze transports the airborne pollutants to the north out of the SVAB. During about half of the days from July to September, however, a phenomenon called the “Schultz Eddy” prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern and pollutants to circle back southward. This phenomenon’s effect exacerbates the pollution levels in the area and increases the likelihood of violating the federal and state air quality standards (SMAQMD 2020a).

The predominant wind direction in the vicinity of the project site is from the southeast and the average wind speed is approximately 6.1 miles per hour (mph), as measured at the Sacramento McClellan Airport, approximately 4 miles northwest of the project site (Iowa Environmental Mesonet 2021). The annual average maximum temperature in the project area, as measured at the Sacramento 5 ESE climatic station, approximately 8 miles southwest of the project site, is approximately 73.1 degrees Fahrenheit (°F), and the annual average minimum temperature is approximately 49.8°F. Total precipitation in the project area averages approximately 18.2 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center 2017).

CRITERIA POLLUTANTS

Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the general public. In general, criteria air pollutants include the following compounds:

- Ozone (O_3)
- Carbon monoxide (CO)
- Nitrogen dioxide (NO_2)
- PM, which is further subdivided:
- Coarse PM, 10 micrometers or less in diameter (PM_{10})
- Fine PM, 2.5 micrometers or less in diameter ($PM_{2.5}$)
- Sulfur dioxide (SO_2)
- Lead (Pb)

Criteria pollutants can be emitted directly from sources (primary pollutants; e.g., CO, SO_2, PM_{10}, $PM_{2.5}$, and lead), or they may be formed through chemical and photochemical reactions of precursor pollutants in the atmosphere (secondary pollutants; e.g., ozone, NO_2, PM_{10}, and $PM_{2.5}$). PM_{10} and $PM_{2.5}$ can be both primary and secondary pollutants. The principal precursor pollutants of concern are reactive organic gases ([ROGs] also known as volatile organic compounds [VOCs])[1] and nitrogen oxides (NO_X).

The descriptions of sources and general health effects for each of the criteria air pollutants are shown in Table IS-1. Specific adverse health effects on individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables such as cumulative concentrations, local meteorology and atmospheric conditions, and the number and characteristics of exposed individuals (e.g., age, gender). Criteria pollutant precursors (ROG and NO_X) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to ozone and NO_2 are, therefore, the product of emissions generated by numerous sources throughout a region. Emissions of criteria pollutants from vehicles traveling to or from the project site (mobile emissions) are distributed nonuniformly in location and time throughout the region, wherever the vehicles may travel. As such, specific health effects from these

[1] CARB defines and uses the term ROGs while the USEPA defines and uses the term VOCs. The compounds included in the lists of ROGs and VOCs and the methods of calculation are slightly different. However, for the purposes of estimating criteria pollutant precursor emissions, the two terms are often used interchangeably.

criteria pollutant emissions cannot be meaningfully correlated to the incremental contribution from the project.

Table IS-1: Summary of Common Sources and Human Health Effects of Criteria Air Pollutants

Pollutant	Major Man-Made Sources	Human Health Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to climate change and nutrient overloading, which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O_3)	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrogen oxides (NO_X) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes.
Particulate Matter (PM_{10} and $PM_{2.5}$)	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and other sources.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze). Long-term exposure to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality.
Sulfur Dioxide (SO_2)	A colorless, nonflammable gas formed when fuel containing sulfur is burned, when gasoline is extracted from oil, or when metal is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid, which can damage marble, iron, and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Lead	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CARB 2023a; USEPA 2023a

Health-based air quality standards have been established for criteria air pollutants by USEPA at the federal level and by CARB at the state level. These standards are referred to as the national ambient air quality standards (NAAQS) and the California ambient air quality standards (CAAQS), respectively. The NAAQS and CAAQS were established to protect the public with a margin of safety from adverse health impacts caused by exposure to air pollution. Both EPA and CARB designate areas of California as "attainment," "nonattainment," "maintenance," or "unclassified" for the various pollutant standards according to the federal Clean Air Act (CAA) and the California CAA (CCAA), respectively.

Within the SVAB, SMAQMD is responsible for ensuring that air quality standards are not violated. With respect to regional air quality, Sacramento County is designated as nonattainment for the 8-hour ozone and 24-hour $PM_{2.5}$ NAAQS. Sacramento County is designated as attainment or unclassified for all other criteria pollutant NAAQS. Sacramento County is currently in attainment for the CO, NO_2, SO_2, $PM_{2.5}$, and lead CAAQS; and in nonattainment for ozone and PM_{10} (SMAQMD 2020a).

TOXIC AIR CONTAMINANTS

The Health and Safety Code (§39655, subd. (a).) defines a toxic air contaminant (TAC) as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the CAA (42 United States Code Section 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is referred to as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter (CARB 2023b). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a notable effect on California's population—it is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM (CARB 2023b).

Activities at gasoline dispensing facilities can release TACs into the air. Gasoline vapor consists of a mixture of organic gases, including seven gases classified as TACs with quantifiable health risk factors: benzene, ethyl benzene, n-hexane, naphthalene, propylene (or propene), xylenes and toluene (CARB 2022a).

Benzene – Benzene is a potent carcinogen and one of the highest-risk air pollutants regulated by CARB. Acute inhalation exposure of humans to benzene may cause drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic inhalation exposure to benzene has caused various disorders in the blood. Benzene is classified as a known human carcinogen for all routes of

exposure (USEPA 2012a). Benzene contributes approximately 78 percent of the cancer risk and nearly 100 percent of the non-cancer chronic health impacts resulting from gasoline vapor emissions at retail gas stations in California (CARB 2022a).

Ethyl benzene – Acute exposure to ethylbenzene in humans results in respiratory effects, such as throat irritation and chest constriction, irritation of the eyes, and neurological effects such as dizziness (USEPA 2000a).

N-hexane – Chronic exposure to hexane in air is associated with polyneuropathy in humans, with numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue observed. Neurotoxic effects have also been exhibited in rats (USEPA 2000b).

Naphthalene – Acute exposure of humans to naphthalene by inhalation, ingestion, and dermal contact is associated with hemolytic anemia, damage to the liver, and neurological damage. Chronic exposure of workers and rodents to naphthalene has been reported to cause cataracts and damage to the retina. Classified as a possible human carcinogen (USEPA 2000c).

Xylenes – Acute inhalation exposure to mixed xylenes in humans results in irritation of the eyes, nose, and throat, gastrointestinal effects, and neurological effects. Chronic inhalation exposure of humans to mixed xylenes results primarily in central nervous system (CNS) effects, such as headache, dizziness, fatigue, tremors, and incoordination; respiratory, cardiovascular, and kidney effects have also been reported (USEPA 2000d).

Toluene – The CNS is the primary target organ for toluene toxicity in both humans and animals for acute and chronic exposures. CNS dysfunction and narcosis have been frequently observed in humans acutely exposed to elevated airborne levels of toluene; symptoms include fatigue, sleepiness, headaches, and nausea. Chronic inhalation exposure of humans to toluene also causes irritation of the upper respiratory tract and eyes, sore throat, dizziness, and headache (USEPA 2012b).

Asbestos – Another concern related to air quality is naturally occurring asbestos (NOA).[2] The project site is not in an area identified with the potential for NOA.[3]

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[2] Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. When rock containing asbestos is broken or crushed, such as through construction-related ground disturbance or rock quarrying activities where NOA is present, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease which causes scarring of the lungs). Because asbestos is a known carcinogen, NOA is considered a TAC. NOA is typically associated with fault zones, and areas containing serpentinite or contacts between serpentinite and other types of rocks.

[3] Areas with potential for naturally occurring asbestos, available: https://www.arcgis.com/apps/webappviewer/index.html?id=da4b648958844134adc25ff002dbea1c

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005; OEHHA 2015).

> Residential areas are considered sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children and infants are considered more susceptible to health effects of air pollution due to their immature immune systems, developing organs, and higher breathing rates. As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities.

The closest sensitive receptors to the project site are multi-family dwellings adjacent to the project site to the east. The closest existing sensitive receptors to the proposed gas station are multi-family residences approximately 385 feet to the northwest (across Manzanita Avenue and Winding Way). The closest school to the project site is the Options for Youth Charter School, approximately 345 feet to the west (across Manzanita Avenue).

DISCUSSION

A) CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN?

Air quality plans describe air pollution control strategies to be implemented to bring an area that does not attain the NAAQS or CAAQS into compliance with those standards, or to maintain existing compliance with those standards, pursuant to the requirements of the CAA and CCAA.

SMAQMD has adopted air quality plans pursuant to regulatory requirements under EPA and CARB for the attainment and maintenance of federal and state ambient air quality standards. The goal of the air quality plans is to reduce criteria air pollutant emissions for which the SVAB is designated as nonattainment in order to achieve NAAQS and CAAQS by the earliest practicable date. For ozone nonattainment, the regional air quality management plan was developed to describe and demonstrate how the region is meeting requirements under the federal CAA in demonstrating reasonable further progress and attainment of the NAAQS for ozone (SMAQMD 2017). For particulate matter, SMAQMD developed the $PM_{2.5}$ Maintenance Plan and Redesignation Request (SMAQMD 2013) to address how the region attained and would continue to attain the 24-hour $PM_{2.5}$ standard and the PM_{10} Implementation/Maintenance Plan and Redesignation Request for Sacramento County (SMAQMD 2010).

In accordance with SMAQMD's CEQA Guide, (SMAQMD 2020a, p. 4-6):

> By exceeding the District's mass emission thresholds for operational emissions of ROG, NO_X, PM_{10}, or $PM_{2.5}$, the project would be considered to conflict with or obstruct implementation of the District's air quality planning efforts.

As documented in the SMAQMD CEQA Guide, the recommended construction and operational mass emissions thresholds for ozone precursors correlate to the NO_X and ROG reductions from heavy-duty vehicles and land use project emission reduction requirements committed to in the Ozone Attainment Plan; therefore, projects whose emissions would be less than the recommended thresholds of significance for criteria air pollutants would not conflict with or obstruct implementation of applicable air quality plans related to the attainment of ozone. Similarly, the construction and operational mass emissions thresholds for PM correlate to the SMAQMD's permitting offset trigger levels, which prevents deterioration of ambient air quality and ensures projects do not worsen the region's attainment status (SMAQMD 2015). Therefore, projects whose emissions do not exceed the recommended PM thresholds of significance would also not conflict with or obstruct implementation of the applicable air quality plans related to PM.

Table IS-2 presents the most current significance thresholds established by SMAQMD, including regional daily thresholds for short-term construction and long-term operational emissions. A project with daily emission rates below these thresholds is generally considered to have a **less than significant** effect on air quality (SMAQMD 2020b).

Table IS-2: SMAQMD Criteria Pollutant Thresholds of Significance

Pollutant	**Construction (pounds per day)**	**Operation (pounds per day)**
VOC	None	65
NO_X	85	65
PM_{10}	80[1]	80[1]
$PM_{2.5}$	82[1]	82[1]
Pollutant	Construction (tons per year)	Operation (tons per year)
PM_{10}	14.6[1]	14.6[1]
$PM_{2.5}$	15[1]	15[1]

Source: SMAQMD 2020b

1 PM thresholds are zero (0) unless all feasible Beast Available Control Practices/Best Management Practices are applied.

VOC = volatile organic compound; NO_X = nitrogen oxides;

PM_{10} = respirable particulate matter with a diameter of 10 microns or less; $PM_{2.5}$ = fine particulate matter with a diameter of 2.5 microns or less

To allow the use of non-zero PM_{10} and $PM_{2.5}$ thresholds of significance, the SMAQMD recommends lead agencies require implementation of the following Basic Construction Emission Control Practices (BCECPs) and operational Best Management Practices (BMPs) for all land use development projects (SMAQMD 2020a; SMAQMD 2020c):

BASIC CONSTRUCTION EMISSION CONTROL PRACTICES

- 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 mph;
- All roadways, driveways, sidewalks, and 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;
- Minimize idling time by either shutting equipment off when not in use or reducing time of idling to 5 minutes. Provide clear signage that posts this requirement for workers at the entrances to the site; and
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

OPERATIONAL BEST MANAGEMENT PRACTICES

1. Compliance with SMAQMD rules that control operational PM and NO_X emissions.
2. Compliance with mandatory measures in the California Building Energy Efficiency Standards (Title 24, Part 6) that pertain to efficient use of energy at a residential or non-residential land use.
3. Compliance with mandatory measures in the California Green Building Code (Title 24, Part 11).
4. Compliance with anti-idling regulations for diesel-powered commercial motor vehicles (greater than 10,000 gross vehicular weight rating).

As shown in item b) below, the project's construction-generated emissions of NO_X, PM_{10}, and $PM_{2.5}$ and operation-generated emissions ROG and NO_X would not exceed SMAQMD thresholds. However, because construction and operations of the project would generate PM emissions, implementation of best management practices would be required in order to apply SMAQMD's non-zero thresholds of significance for PM. The SMAQMD recommends lead agencies should add these emission control practices as Conditions of Approval (COA) or include in a mitigation measure (SMAQMD 2020a).

Without incorporation of applicable SMAQMD's BCECPs and operational BMPs for PM Emissions, the project's construction and operational activities would be considered to

potentially conflict with or obstruct implementation of the applicable air quality plans and the impact would be **potentially significant**. Mitigation Measures AQ-A and AQ-B would require implementation of the SMAQMD's recommended BCECPs and operational BMPs, respectively.

Significance After Mitigation

With the implementation of mitigation measures AQ-A and AQ-B, the project would implement applicable Best Available Control Technology (BACT) and BMPs for the purposes of minimizing PM, and would thereby not conflict with or obstruct implementation of the applicable air quality plan, and the impact would be **less than significant with mitigation incorporated**.

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

The nonattainment status of regional pollutants is a result of past and present development within the region, and by its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development within Sacramento County. The Sacramento region is in nonattainment for ozone (ozone precursors NO_X and ROG) and particulate matter ($PM_{2.5}$ and PM_{10}). A single project's emissions may be individually limited, by could be cumulatively considerable when considered in combination with past, present, and future emissions sources within the air basin. The SMAQMD has established project- level construction and operational emissions thresholds of significance for ROG, NO_X, PM_{10}, and $PM_{2.5}$. If a project's emissions are below the SMAQMD thresholds of significance, the project is not considered to result in a cumulatively considerable contribution to a significant impact on regional air quality (SMAQMD 2020a). The project's emissions of these criteria pollutants and precursors during construction and operation are evaluated below.

Construction

The project would generate criteria pollutants and precursors in the short-term during construction and the long-term during operation. The project's construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.2021. Project-specific construction parameters (e.g., pavement demolition amounts, total acres disturbed, quantity of import/export material, and amount of development per land use) were used as inputs in the air quality analysis. Where project-specific information was not available, CalEEMod default parameters were used. Model outputs are provided in Appendix A. The results of the project construction modeling are shown in Table IS-3. The data are presented as the maximum anticipated daily emissions for comparison with the SMAQMD thresholds. The modeling assumes implementation of the fugitive dust control measures which are quantifiable in CalEEMod, specifically watering demolition areas and exposed surfaces twice daily, and cleaning track-out of soil onto paved roads daily.

Table IS-3: Construction-Related Emissions of Criteria Air Pollutants and Precursors

Construction Year	Maximum Daily Emissions ROG (pounds per day)	Maximum Daily Emissions NO_X (pounds per day)	Maximum Daily Emissions PM_{10} (pounds per day)	Maximum Daily Emissions $PM_{2.5}$ (pounds per day)	Maximum Annual Emissions PM_{10} (tons per year)	Maximum Annual Emissions $PM_{2.5}$ (tons per year)
2024	4.1	43.1	10.3	5.8	0.2	0.1
2025	15.3	12.3	1.06	0.6	0.1	0.1
SMAQMD Significance Threshold[1]	-	85	80	82	14.6	15
Emissions Exceed SMAQMD Threshold?	-	No	No	No	No	No

Notes: NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; $PM_{2.5}$ = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ROG = reactive organic gases; SMAQMD = Sacramento Metropolitan Air Quality Management District
[1] Represents SMAQMD Threshold of Significance with the application of Best Management Practices (BMPs) and Best Available Control Technology (BACT).
Modeled by HELIX in 2023. See Appendix A for additional details.

As shown in Table IS-3, emissions of criteria pollutants and precursors would not exceed the SMAQMD significance thresholds. Nevertheless, as noted above under item a), SMAQMD recommends a set of BCECPs, considered by the SMAQMD to be feasible for controlling fugitive dust from a construction site. The practices also serve as BMPs, allowing the use of the non-zero PM significance thresholds. The SMAQMD recommends lead agencies should add these emission control practices as COA or include in a mitigation measure (SMAQMD 2020a). Without implementation of the BCECPs, construction emissions of PM_{10} and $PM_{2.5}$ would be **potentially significant**. Mitigation Measure AQ-A would require implementation of the SMAQMD's recommended BCECPs.

OPERATIONS

Once project-related construction is complete, additional pollutants would be emitted through the use, or operation, of the site. Such emissions sources would include motor vehicle trips to and from the site; fuel combustion from landscape maintenance equipment; natural gas combustion emissions from on-site natural gas use at restaurants; evaporative emissions of ROG associated with the use of consumer products (paint, cleaning products, etc.); evaporative emissions of ROG resulting from the intermittent re-application of architectural coatings; and ROG loss from the gasoline dispensing facility. CalEEMod was used to estimate the long-term operational emissions associated with area and energy sources (i.e., natural gas combustion, landscape maintenance, periodic architectural coatings, and consumer products), and vehicle trips to and from the project site. The mobile source emissions analysis is based upon project-related daily trip information developed for this analysis. Emissions of ROGs from the proposed project retail gasoline dispensing activities

were calculated using CARB's Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities (CARB 2013). CalEEMod model outputs and a printout of the gasoline dispensing ROG calculation sheet is included in Appendix A. Table IS-4 presents the summary of the unmitigated maximum daily operational emissions compared to the SMAQMD thresholds.

Table IS-4: Unmitigated Operational Emissions of Criteria Air Pollutants and Precursors

Source	Maximum Daily Emissions ROG (pounds per day)	Maximum Daily Emissions NO_X (pounds per day)	Maximum Daily Emissions PM_{10} (pounds per day)	Maximum Daily Emissions $PM_{2.5}$ (pounds per day)	Maximum Annual Emissions PM_{10} (tons per year)	Maximum Annual Emissions $PM_{2.5}$ (tons per year)
Area	5.3	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	1.4	0.1	0.1	<0.1	<0.1
Mobile	22.1	25.2	40.4	10.5	7.2	1.9
Gas Station Gasoline Vapor	3.7	-	-	-	-	-
Total Operational Emissions	31.2	26.6	40.5	10.6	7.2	1.9
SMAQMD Significance Threshold[1]	65	65	80	82	14.6	15
Emissions Exceed SMAQMD Threshold?	No	No	No	No	No	No

Notes: NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; $PM_{2.5}$ = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ROG = reactive organic gases; SMAQMD = Sacramento Metropolitan Air Quality Management District
[1] Represents SMAQMD Threshold of Significance with the application of Best Management Practices (BMPs) and Best Available Control Technology (BACT).
Modeled by HELIX in 2023. See Appendix A for additional details.

As shown in Table IS-4, long-term emissions of criteria pollutants and precursors would not exceed the SMAQMD thresholds. Nevertheless, to allow the use of non-zero PM significance thresholds, the SMAQMD recommends implementation of operational BMPs, considered by the SMAQMD to be feasible for reducing operational PM_{10} and $PM_{2.5}$ emissions from land use development projects. The applicant would comply with those BMPs which are required by SMAQMD and State regulations, including SMAQMD rules 202 (New Source Review) and 403 (Fugitive Dust) that control operational PM and NO_X emissions, and the applicable mandatory measures in the California Building Energy Efficiency Standards (Title 24, Part 6) and the California Green Building Code (Title 24, Part 11). However, for operational BMP 4, the SMAQMD recommends industrial and retail projects post signage informing the public and truck drivers of the State diesel- powered commercial vehicle idling regulations. Without implementation of all of the operational BMPs, construction emissions of PM_{10} and $PM_{2.5}$

would be **potentially significant**. Mitigation Measure AQ-B would require signage per SMAQMD's recommendations.

While short-term construction and long-term operation of the project would not result in criteria pollutant or precursor pollutant emissions that would exceed the SMAQMD significance thresholds, implementation of the project would result in an increase of emissions of PM_{10} and $PM_{2.5}$ compared to existing conditions. The SMAQMD considers any increase in construction or operational PM emissions to be significant unless the BCECPs and operational BMPs are implemented. Therefore, Mitigation Measure AQ-A would be required to enforce implementation of the SMAQMD BCECPs, and Mitigation Measure AQ-B would be required to implement the SMAQMD operational BMP recommendation to post signage at project commercial entrances informing the public and truck drivers of the State diesel-powered commercial vehicle idling regulations.

SIGNIFICANCE AFTER MITIGATION

With the implementation of Mitigation Measures AQ-A and AQ-B, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Sacramento Region is non-attainment, and the impact would be **less than significant** with mitigation.

C) EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS?

As discussed in "Environmental Setting" above, some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, those with existing health conditions, and athletes or others who engage in frequent exercise are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered sensitive receptors include schools, daycare centers, parks and playgrounds, and medical facilities.

The project site is generally surrounded by residential uses on the eastern and southern perimeters of the project site. To the west of the project site across Manzanita Avenue, there is the Options for Youth Charter School. North of the project site across Winding Way there is a retail shopping center and some residences.

The exposure of sensitive receptors (e.g., existing off-site residents) to substantial pollution concentrations from short-term (construction) and long-term operational (mobile, stationary, and other) sources is discussed separately below.

CONSTRUCTION ACTIVITIES

Implementation of the project would result in the use of heavy-duty construction equipment, haul trucks, on-site generators, and construction worker vehicles. These vehicles and equipment could generate the TAC DPM. Generation of DPM from construction projects typically occurs in a localized area (e.g., at the project site) for a short period of time. Because construction activities and subsequent emissions vary depending on the phase of construction (e.g., grading, building construction), the construction-related emissions to which nearby receptors are exposed to would also vary throughout the construction period and would be dispersed throughout the proposed 18.6-acre development area of the 24.8-acre project site. During some equipment-intensive phases such as grading, construction-related

emissions would be higher than other less equipment-intensive phases such as architectural coatings. Concentrations of mobile-source DPM emissions are typically reduced by 60 percent at a distance of 300 feet from the source (Zhu and Hinds 2002), and by 70 percent at approximately 500 feet (CARB 2005).

The dose (of TAC) to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a fixed quantity of emissions would result in higher health risks. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods (typically 30 years for individual residents based on guidance from OEHHA) and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities, such as for the proposed project where construction activities are expected to occur over an approximately 24-month period (7 percent of the typical 30-year health risk assessment exposure period). Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (OEHHA 2015).

Considering this information, the highly dispersive nature of DPM, and the fact that construction activities would occur at various locations throughout the project site for short periods, it is not anticipated that construction of the project would expose sensitive receptors to substantial DPM concentrations. As a result, this impact would be **less than significant**.

OPERATIONAL ACTIVITIES

HEALTH EFFECTS OF REGIONAL CRITERIA POLLUTANTS

Long-term operation of the project would result in emissions of criteria pollutants and precursors. Any source of criteria pollutant or precursor emissions has the potential to result in air pollution-related community health risks, described in Table IS-1, in “Environmental Setting.”

Projects that emit criteria air pollutants that exceed the SMAQMD thresholds of significance are considered to be “cumulatively considerable” and may contribute to the regional cumulative degradation of air quality that could result in impacts to human health. As discussed in “Environmental Setting” above, the NAAQS and CAAQS identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. The SMAQMD’s criteria pollutant and precursor thresholds are set such that a project that does not result in emissions exceeding the threshold would not result in a new violation, or exacerbate an existing violation of, the NAAQS and CAAQS.

Although modeling techniques exist to simulate the complex regional photochemical reactions which form ozone and secondary PM_{10} and $PM_{2.5}$, and techniques exist to quantify the resultant health effects from regional distributions of criteria pollutants, the modeling has a high degree of uncertainty. Existing models have limited sensitivity to small changes in

regional criteria pollutant concentrations, and as such, translating project-generated regional criteria pollutants to specific health effects would not produce meaningful results. In other words, minor increases in regional air pollution from project- generated ROG and NO_X would have nominal or negligible impacts on human health. Currently, CARB and EPA have not approved a quantitative method to meaningfully and consistently translate the mass emissions of criteria air pollutants from a project to quantified health effects. As explained in the amicus brief filed by the South Coast Air Quality Management District (SCAQMD) in the Sierra Club v. County of Fresno (2014) 26 Cal.App.4th 704, it "takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels" (SCAQMD 2015).

The results from regional modeling of small sources of emissions, such as the project emissions, are not statistically meaningful. In 2020, SMAQMD published Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District (SMAQMD 2020d), which provides a screening level analysis estimating the health effects of criteria air pollutants and their precursors, as well as provides guidance for conducting a health effects analysis of a project that satisfies the requirements of the Sierra Club v. County of Fresno, 2018, 6 Cal. 5th 502 case ruling regarding the proposed Friant Ranch Project. The Guidance was prepared by conducting regional photochemical modeling and relies on the EPA's Benefits Mapping and Analysis Program to assess health impacts from ozone and $PM_{2.5}$. An analysis was conducted to estimate the level of health effects for a proposed project that has emissions at the maximum SMAQMD-recommended thresholds of significance using 41 hypothetical project locations, as well as a screening model conducted to estimate potential health effects for strategic areas where development is anticipated to cause exceedance of thresholds of significance. The results were used to develop two screening tools intended to support individual projects in analyzing health risks from criteria pollutants: the Minor Project Health Screening Tool for projects with criteria pollutant emissions below SMAQMD's adopted thresholds of significance, and the Strategic Area Project Health Screening Tool for projects with emissions between two and six times the SMAQMD threshold levels.

The modeling results support a conclusion that any one proposed project in the region, which is inclusive of the proposed project site, with emissions at or below the maximum SMAQMD thresholds of significance levels for criteria air pollutants does not on its own lead to sizeable health effects. The findings of the SMAQMD screening modeling indicate that the mean health incidence for a project emitting at the threshold of significance levels at all 41 representative locations was less than 3 per year for mortality and less than 1.5 per year for other health outcomes evaluated. The maximum reported mortality rate is 22 incidences per year and all other health outcomes evaluated are under 9 per year from a project emitting 656 pounds/day of each NO_X, ROG, and $PM_{2.5}$ at the downtown Sacramento strategic area.

As discussed in item b), above, the project would not result in criteria pollutant and precursor pollutant emissions that would exceed the SMAQMD significance thresholds, and, in fact would be substantially less than the SMAQMD-established thresholds. As described previously, the SMAQMD modeling indicates that for projects with emissions at or below the maximum SMAQMD thresholds of significance levels for criteria air pollutants, the project on its own does not lead to sizeable health effects. As discussed above, the nature of criteria

pollutants is such that the emissions from an individual project cannot be directly identified as responsible for health impacts within any specific geographic location. As a result, attributing health risks at any specific geographic location to a single proposed project is not feasible, and this preceding information and consideration is presented for informational purposes only.

LOCALIZED CRITERIA AIR POLLUTANTS

A mobile-source pollutant of localized concern is CO. Continuous engine exhaust may elevate localized CO concentrations, or "CO hot spots." According to the SMAQMD, land use development projects do not typically have the potential to result in localized concentrations of criteria air pollutants that expose sensitive receptors to substantial pollutant concentrations. This is because criteria air pollutants are predominantly generated in the form of mobile-source exhaust from vehicle trips associated with the land use development project. These vehicle trips occur throughout a paved network of roads, and, therefore, associated exhaust emissions of criteria air pollutants are not generated in a single location where high concentrations could be formed. However, there may be unique situations where a project with high levels of emissions may require concentration modeling to determine if the emissions will expose sensitive receptors to substantial pollutant concentrations (SMAQMD 2020a). SMAQMD does not have a threshold for mass emissions of CO, but the project's emissions of ROG, NO_X, PM_{10} and $PM_{2.5}$ are well below the SMAQMD's thresholds, indicating that the project does not have high levels of emissions. The proposed project would not result in prolonged idling throughout the day, nor contribute substantial amounts of vehicular traffic to congested, high-volume roadways. Finally, the surrounding intersections at which vehicle trips may increase are not locations of typically limited vertical and/or horizontal of ambient air (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadways), and therefore would not likely be subject to elevated concentrations of CO. Due to the low level of emissions that would be generated by the project and lack of conditions that would limit dispersion of CO emissions from vehicle exhaust, the project would not expose sensitive receptors to substantial localized criteria pollutant concentrations, including localized concentration of CO from exhaust emissions, or "CO hotspots" and the impact would be **less than significant**.

TAC EMISSIONS

The project would include a retail gas station with gasoline and diesel refueling. As described in "Environmental Setting," above, gasoline refueling stations can be a source of TAC emissions. The health risks associated with emissions from gasoline refueling stations are related to the anticipated volume of gasoline dispensed and to the distance to the nearest sensitive receptors. CARB provides a risk assessment screening tool to estimate potential health risks based on gasoline throughput, distance to receptors, and gasoline vapor control technology (CARB 2022b; CARB 2022c). Per the project applicant, the proposed gas station would have a maximum annual throughput of gasoline of 3 million gallons per year. For all gasoline dispensing from stationary storage tanks larger than 250 gallons, CARB and SMAQMD regulations require a permit and the installation of Enhanced Vapor Recovery Systems (EVR) for the storage tank (EVR Phase I) and the dispensing nozzle (EVR Phase II) to control emissions of gasoline vapor. Based on the highest anticipated throughput, distance to the closest off- site sensitive receptors (385 feet; 117 meters), distance to the closest off-

site worker and acute receptor locations (200 feet; 61 meters) and the required gasoline vapor control technology, the CARB screening tool calculated that maximum increased residential cancer risk would be 1.29 in 1 million, the maximum increased worker cancer risk would be 0.23 in 1 million, the maximum non-cancer chronic hazard index would be 0.01, and the maximum acute Hazard Index would be 0.12, which are below the SMAQMD thresholds of 10 in 1 million increased cancer risk and 1.0 Hazard Index (the CARB Gasoline Service Station Assessment Tool results are included in Appendix A). Furthermore, although the proposed gas station would also include diesel dispensing, TACs associated with diesel vapor are not expected to be released in quantities sufficient enough to require detailed analysis or reporting. Diesel has a much lower volatility in comparison to gasoline. In addition, when comparing the concentrations of TACs between the two materials, gasoline in the United States (U.S.) contains 0.6 to 1.3 percent benzene by volume, however diesel fuel contains less than 0.02 percent benzene (International Agency on Research for Cancer [IARC] 1989). Accordingly, diesel refueling stations are not expected to be a significant source of TAC emissions. Therefore, operation of the project gas station would not expose sensitive receptors to substantial concentrations of TACs and this impact would be **less than significant**.

NEW SENSITIVE RECEPTORS

As a residential development, the project would site new sensitive receptors. The CARB siting recommendations within the Air Quality and Land Use Handbook (CARB 2005) suggest a detailed health risk assessment should be conducted for proposed sensitive receptors for land uses potentially applicable to the proposed project within the following distances:

- 1,000 feet of a warehouse distribution center;
- 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater);
- 50 feet of a typical gas dispensing facilities,
- 300 feet of a dry cleaning facility that uses perchloroethylene (PCE); or
- 500 feet of a freeway, an urban road with 100,000 or more vehicles per day, or rural roads carrying 50,000 vehicles per day.

The closest existing gas station to the project site (a small gas station with 8 dispensing stations) is located approximately 200 feet northwest of the project residential lots, beyond of the CARB minimum sensitive receptor siting distance from typical gas stations. The proposed project gas station would be approximately 140 feet from the closest project residential lot, beyond the CARB minimum sensitive receptor siting distance from typical gas stations. There are no dry-cleaning facilities that use PCE within 300 feet of the project site, nor warehouse distribution centers within 1,000 feet of the project site. In addition, the closest high-volume urban roadway would be Interstate 80 (I-80), approximately 1.9 miles northwest of the project site. Therefore, future project residents would not be exposed to substantial concentrations of TACs and the impact would be **less than significant**.

D) RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS) ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE?

CONSTRUCTION ACTIVITIES

Odors associated with diesel exhaust and ROG from application of asphalt and architectural coatings would be emitted during project construction. The odor of these emissions is objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not be at a level that would affect a substantial number of people. Further, construction activities would be temporary, and the applicant would be required to comply with applicable portions of SMAQMD Rules 402 (Nuisance) and 442 (Architectural Coatings), which would help ensure that odors generated by short- term construction would not affect a substantial number of people. As a result, impacts associated with temporary odors during construction would be **less than significant**.

OPERATIONAL ACTIVITIES

Typical land uses which could generate significant odor impacts include wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants (SMAQMD 2020a). The project would not include any of these land uses. The project proposes a retail gas station which can be a source of gasoline vapor odors. However, the gas station would be required by SMAQMD and CARB regulations to install and maintain gasoline vapor control systems which would also help minimize odors from gasoline vapors. In addition, gas stations are not listed by SMAQMD as typical land uses which would result in odor impacts. During operation, the proposed project could also generate odors from cooking associated with the proposed fast food restaurants. However, odors from cooking are not substantial enough to be considered nuisance odors that would affect a substantial number of people. Furthermore, as previously noted, nuisance odors are regulated under SMAQMD Rule 402. Therefore, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people and would be **less than significant**.

BIOLOGICAL RESOURCES

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

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

c. Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

ENVIRONMENTAL SETTING

The 24.8-acre project site, which includes a proposed 18.6-acre development area and a 6.2-acre parcel designated for future high-density residential development, is located approximately 1.75 miles southeast of I-80 in the unincorporated community of Carmichael. The project site is located in a developed suburban area. It is bound by Winding Way to the north and Manzanita Avenue to the west, both high-traffic streets, to the east by Rampart Drive, Mary Lynn Lane, and high-density apartment complexes, and on the south by Jan Drive and the now defunct Crestview Lanes Bowling Alley.

The general topography of the project site is level to gently rolling, with elevations that range from approximately 110 to 140 feet above mean sea level (AMSL). It is evident that the project site has been disturbed in the past. Signs of previous disturbance include excavated ditches intended to promote surface drainage, a gravel lot, and leveled areas suggestive of past grading.

BIOLOGICAL STUDIES

A biological resources assessment, arborist survey, and aquatic resources report were prepared for this project and are used to support the discussion in this section of the document. In July 2022, HELIX prepared a Biological Resources Assessment, which describes the baseline conditions of the project site, summarizes the general biological resources occurring or potentially occurring on the site, assesses the suitability of the site to support special-status species and sensitive habitat types, and provides recommendations for regulatory permitting or further analysis that may be required prior to development activities occurring on the site (Appendix C). Vegetation communities within the project site were characterized and evaluated for their potential to support the special-status species identified during the database research. Every plant that was encountered in the project site was identified to the taxonomic level necessary to determine whether it was a special-status species.

In January 2020, Sierra Nevada Arborists completed an Arborist Report and Tree Inventory Summary which summarizes the results of an arborist survey completed by an International

Society of Arboriculture (ISA) certified arborist (WE-0510A) on December 17 and 18, 2019. This report identifies every tree on the project site, assesses potential impacts, and provides general protection guidelines for trees planned for preservation (Appendix D). In May 2015, ECORP Consulting, Inc prepared a Delineation of Waters of the United States for the Crestview Property, (now referred to as Winding Ranch or the project) which included all parcels of the project site except for the 0.8-acre parcel on the northwest corner of the project site. In July 2023, HELIX prepared an Aquatic Resources Delineation and Preliminary Jurisdictional Determination Addendum to address aquatic resources on the additional 0.8-acre parcel on the northwest corner of the project site (Appendix E). In July 2023, an AECOM biologist reviewed the information in these reports and conducted a reconnaissance-level survey to confirm the observations and conclusions made in these technical studies.

LAND COVER

Plate IS-12 shows the various land cover types and aquatic resources within the project site. Table IS-5 summarizes the impact acreages of each land cover type and aquatic resource within the project site.

Table IS-5: Land Cover and Aquatic Resources in the Project Site

Classification	Acreage
Biological Communities	
Ruderal Herbaceous	20.033
Mixed Oak Woodland	1.164
Developed/Disturbed	3.407
Other Features within the Biological Communities	
Wetland Ditch*	0.165
Ditch/Canal	0.035

Source: HELIX Environmental Planning, Inc.

Ruderal herbaceous is the primary habitat type within the project site and is widespread across the entirety of the project site. Ruderal herbaceous habitat is characterized by plant species that are among the first to colonize disturbed areas and is typically associated with invasive and noxious weeds. The dominant plants within the project site and within this community type include ripgut brome (*Bromus diandrus*), wild oat (*Avena fatua*), chicory (*Cichorium intybus*), and vetch (*Vicia* sp.).

Developed/disturbed habitat within the project site occurs primarily in the southern portion of the project site and consists of a paved parking lot along Manzanita Avenue. Other developed/disturbed areas consist of dirt foot paths parallel to the seasonal wetland ditch in the north and along oaks in the south. Developed/disturbed habitat differs from ruderal habitat by generally having little to no vegetation and containing built structures or maintained surfaces. Vegetation that does occur within this community type is often ornamental. Plant species that occur in the project site within this community type are similar to the dominant species previously described in the ruderal herbaceous habitat. Cottonwoods (*Populus fremontii*), willows (*Salix* sp.) and palms (*Washingtonia robusta*) are present within this community primarily located in tree wells within the paved parking lot.

Plate IS-12: Habitat Types and Aquatic Resources within the Project Site

Source: HELIX Environmental Planning, 2022, Winding Ranch Project Biological Resources Assessment.

Mixed oak woodland occurs along the seasonal wetland ditch, running north to south in the center of the project site. Mixed oak woodland also occurs along the southeastern portion of the project, along the boundary between the project site and the adjacent high-density residential development. Trees in this land cover type are primarily valley oak (*Quercus lobata*), cork oak (*Quercus suber*), and blue oak (*Quercus douglasii*) with various other native and non-native species interspersed. This vegetation community qualifies as valley oak woodland and forest due to the dominance of valley oak in the tree canopy and presence of blue oak. However, this isolated valley oak woodland is located on an infill site surrounded by development, and is not associated with any older *native* oak woodland groves. Most of the trees associated with this vegetation community appear to be less than 25 years old (Google Earth 2024). Even though this patch of oak woodland is young and isolated from older oak woodland groves, Valley oak woodland is defined as habitat that consists of at least 50 percent relative cover in the tree canopy or at least 30 percent relative cover when other tree species, such as blue oak, are present. This land cover comprises at least 30 percent relative cover of Valley oak with other oak species present. Therefore, this natural community is considered a sensitive natural community (CDFW 2022).

WILDLIFE OBSERVATIONS

Wildlife observed on the project site during the biological resources survey include American crow (*Corvus brachyrhynchos*), California scrub-jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), black-tailed jack rabbit (*Lepus californicus*), and western fence lizard (*Sceloporus occidentalis*).

SPECIAL-STATUS SPECIES

The federal Endangered Species Act of 1973 (50 Code of Federal Regulations [CFR] 17) provides legal protection for plant and animal species in danger of extinction. The federal Endangered Species Act requires federal agencies to make a finding on all projects that have the potential to jeopardize the continued existence of any listed species potentially impacted by the action. Section 9 of the federal Endangered Species Act prohibits the "take" of any member of an endangered species. "Take" is defined by the act as, "….to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has further defined the terms "harass" and "harm" to include indirect injury through habitat destruction or modification. Section 10(a) of the federal Endangered Species Act permits the incidental "take" of an endangered species if the take is "incidental to, and not the purpose of, the carry out of an otherwise lawful activity."

A 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.

Review of the CNDDB species list indicates that some sensitive habitats, plants, and animals occur within the Citrus Heights 7.5 minute United States Geologic Survey (USGS) quadrangle and eight surrounding quadrangles. However, none of those species identified by the CNDDB as species of concern, rare, threatened, or endangered are known to occur within the project site. The closest occurrence of a listed species (Swainson's hawk [*Buteo swainsoni*]) is approximately 2 miles from the project site.

Special-status species that have been documented in the database searches have been evaluated for their potential to occur within the project site (Appendix C, Biological Resources Assessment).

The project site contains suitable habitat for eight species of special status wildlife, including five birds (purple martin [*Progne subis*], white-tailed kite [*Elanus leucurus*], Swainson's hawk [*Buteo swainsoni*], tricolored blackbird [*Agelaius tricolor*], and burrowing owl [*Athene cunicularia*]), one bat species (pallid bat [*Antrozous pallidus*]), and Crotch's bumblebee (*Bombus crotchii*). In addition, the project site provides suitable habitat for nesting migratory birds protected by the Federal Migratory Bird Treaty Act.

Three special-status plant species have potential to occur within the project site, due to suitable habitat. Sanford's arrowhead (*Sagittaria sanfordii*) (California Native Plant Society [CNPS] 1.B) has high potential to occur within seasonal wetland ditches on-site, Ahart's dwarf rush (*Juncus leiospermus*) (CNPS 1B) have low potential to occur in the seasonal wetland ditches, and stinkbells (*Fritallaria agrestis*) (CNPS 4.2) have low potential to occur in ruderal herbaceous habitat within the project site. All other special- status plant species have no or low likelihood of occurring in the project site due to elevation, range, or non-suitable habitat.

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Although some wildlife species may utilize portions of the project site for foraging, breeding, or other functions, the site itself does not link two significant natural areas and it is not considered a wildlife migration corridor. The project site is surrounded by commercial and residential development and busy roadways, resulting in limited terrestrial landscape linkages for wildlife. The primary existing barriers to overland wildlife movement into the project site are the multi-lane Manzanita Avenue and commercial developments to the west, the multi-lane Winding Way and commercial developments to the north, and residential developments to the east and south.

SENSITIVE NATURAL COMMUNITIES

California natural communities are categorized by CDFW and partner organizations, such as CNPS, based on vegetation type classification, and are ranked using the same system to assign global and state rarity ranks for plant and animal species in the CNDDB. Mixed oak woodland comprises 1.16 acres within the project site. This community is dominated by valley oak and cork oak and contains many other species of non-native trees. This vegetation community qualifies as valley oak woodland and forest due to the dominance of valley oak in the tree canopy and presence of blue oak. This natural community is considered a sensitive natural community (CDFW 2022). As described above, this isolated valley oak woodland is located on an infill parcel in an urban area and is not associated with any older native oak woodland groves. In other words, this woodland is fragmented, which is considered low quality habitat compared to large expanses of woodland (Woodland Trust 2024).

AQUATIC RESOURCES

Two seasonal wetland ditches are present in the project site. The first is located north of the existing paved parked lot and drains a culvert in the north along Winding Way and in the west along Manzanita Avenue. The second seasonal wetland ditch runs from a culvert just south

of the existing paved parking lot and runs south until it reaches another culvert along Jan Drive at the southern boundary of the project site. These features are linear wetland features that do not exhibit an ordinary high water mark (OHWM) and are typically inundated for short periods during and generally only immediately after rain events, but usually maintain soil saturation for longer periods in the growing season. The two seasonal wetland ditches north and south of the paved parking lot are connected by a culvert. The vegetation is dominated by swamp smartweed (*Persicaria hydropiperiodes*) These seasonal wetland ditches drain to culverts on the western and northern boundaries of the project site. These culverts flow into Arcade Creek via a storm drain system. Therefore, potential wetlands on-site would likely be considered tributary to Arcade Creek, a perennial creek that flows from east to west to the southwest of the Property. Because Arcade Creek flows for three or more months of the year, it would likely be considered relatively permanent water (RPW). Arcade Creek is a tributary to the American River via Steelhead Creek. The U.S. Army Corps of Engineers (USACE) Sacramento District has identified the American River as a navigable water. As a RPW tributary to a Navigable Water, Arcade Creek would be subject to USACE jurisdiction, along with Waters of the U.S. that abut Arcade Creek.

The *Delineation of Water of the United States for the Crestview Property* (ECORP 2015) which was issued a preliminary jurisdictional determination by USACE in 2015, states that the seasonal wetland ditches would likely be jurisdictional pursuant to the USEPA and USACE memorandum regarding CWA jurisdiction following the Rapanos decision (USEPA and USACE 2007). (Appendix C, Biological Resources Assessment and Appendix E Aquatic Resources Report for the Winding Ranch Project). However, the Final Rule issued by the EPA in August 2023 excludes features that are characterized by low volume, infrequent, or short duration flow. While these features were likely jurisdictional in 2015, they may no longer be jurisdictional due to recent changes in jurisdiction. Jurisdictional status of these features requires verification of an updated delineation report by USACE.

Six additional ditch/canals are present. Four of these ditches drain into the wetland ditch, and one drains to a drop inlet north of the parking lot. The final ditch is manmade and constructed in an upland, with no outlet into any downstream feature (Appendix C, Biological Resources Assessment and Appendix E, Aquatic Resources Report for the Winding Ranch Project).

TREE INVENTORY

The project site was surveyed by an ISA certified arborist (WE-0510A) on December 17 and 18, 2019. A total of 111 trees consisting of 1 almond (*Prunus dulcis*), 9 blue oaks, 1 black walnut (*Juglans nigra*), 1 California fan palm (*Washingtonia filifera*), 3 Chinese pistache (*Pistacia chinensis*), 2 Chinese zelkovas (*Ulmus parvifolia*), 28 cork oaks, 1 deodar cedar (*Cedrus deodara*), 4 Fremont cottonwoods (*Populus fremontii*), 1 fruitless mulberry (*Morus alba*), 2 gum trees (*Eucalyptus* sp.), 1 Modesto ash (*Fraxinus velutina*), 3 northern California Walnut (*Juglans hindsii*), 3 pecans (*Carya illinoinensis*), 1 sweetgum (*Eucalyptus cladocalyx*), and 50 valley oaks were inventoried on the project site during these surveys (Appendix D, Arborist Report for the Winding Ranch Project). Of these 111 trees within the project site, 61 are protected under the Sacramento County Trees Preservation ordinance due to their species or size. Protected trees within the project site include 38 valley oak, 8 blue oak, and

one northern California walnut (non-oak native) and 14 other non-native trees whose diameter at breast height (dbh) exceeds 19 inches.

Table IS-6: Winding Ranch Tree Inventory

Species	Number of Trees	Total Aggregate Diameter (inches)
Almond	1	30
Blue oak	9	153
California Black Walnut	1	15
California fan palm	1	14
Chinese pistache	3	34
Chinese zelkova	2	71
Cork oak	28	354
Deodar cedar	1	25
Fremont cottonwood	4	51
Fruitless mulberry	1	16
Gum	2	74
Modesto ash	1	19
Northern California walnut	3	41
Pecan	3	38
Sweetgum	1	23
Valley oak	50	829
TOTAL	111	1,787

NATIVE TREES

Chapter 19.12 of the Sacramento County Code, Tree Preservation and Protection (Tree Protection Ordinance) states that no person shall trench, grade or fill within the dripline of any protected native oak tree, or destroy, kill or remove any protected tree in the designated urban area of the unincorporated area of Sacramento County, on any property, public or private, without a tree permit or unless authorized as a condition of a discretionary project approval by the Board of Supervisors, County Planning Commission, Zoning Board of Appeals, the Zoning Administrator or the Subdivision Review Committee. A protected tree is defined as any living native oak tree having at least one trunk of 6 inches or more in diameter measured at 4 ½ feet above the ground, or a multi-trunked native oak tree having an aggregate diameter of 10 inches or more measured 4 ½ feet above the ground. Native oak and specified non-oak native trees which measure 4 inches in diameter and larger (or 10-inch aggregate diameter for multi trunk native oak and Northern California Black walnut trees) are afforded various levels of protection through the County's environmental review

policy. The Sacramento County Conservation Element requires native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, or through payment of in-lieu fees in cases where on-site planting and preservation is not feasible. Furthermore, the approving body has the authority to adopt mitigation measures as conditions of approval for discretionary projects in order to protect other species of trees, in addition to the native oaks.

In addition, the Sacramento County Zoning Code, Chapter 5: Development Standards, Section 5.2.4.H Removal and Replacement of Landscaping states that replacement trees shall be required for trees removed with or without a Tree Removal Permit.

NON-NATIVE TREES

As described above, the Sacramento County Zoning Code, Chapter 5: Development Standards, Section 5.2.4.H Removal and Replacement of Landscaping states that replacement trees shall be required for trees removed with or without a Tree Removal Permit. Non-native trees with trunk diameters of 19 inches and larger are afforded various levels of protection through the County's environmental review policy. Furthermore, the Conservation Element of the Sacramento County General Plan specifies mitigation for non-native tree canopy impacts by creating equivalent canopy on-site.

DISCUSSION

A) HAVE A SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON ANY SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL-STATUS SPECIES IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR THE U.S. FISH AND WILDLIFE SERVICE?

SPECIAL-STATUS PLANTS

The seasonal wetland ditches provide potentially suitable habitat for special-status plant species including Ahart's dwarf rush and Sanford's arrowhead, and the ruderal herbaceous habitat provides potential habitat for stinkbells, which are known to occur in the vicinity of the project site. If these plants are present, project buildout would result in direct harm to these species through direct removal during site preparation and grading activities. This would result in a **potentially significant** impact on special-status plant species.

SPECIAL STATUS WILDLIFE

The project site contains suitable habitat for eight species of special status wildlife, purple martin, white-tailed kite, Swainson's hawk, tricolored blackbird, burrowing owl, pallid bat, and Crotch's bumblebee. In addition, the project site provides suitable habitat for nesting migratory birds protected by the Federal Migratory Bird Treaty Act.

SWAINSON'S HAWK

The project site contains trees suitable for nesting, but based on the extent of surrounding development, the project site is not expected to provide foraging habitat value for Swainson's hawks. If construction occurs during the nesting season for this species (March 1 to September 15), tree removal could result in destruction of an active nest if present.

Construction activities could result in a take outside of the project site if construction related noise and vibration resulted in an individual abandoning their nest. This would result in a **potentially significant** impact on nesting Swainson's hawks.

TRICOLORED BLACKBIRD

The ruderal herbaceous habitat within the project site provides marginally suitable foraging habitat for tricolored blackbird, however, foraging habitat for this species is not regulated under California Endangered Species Act (CESA). No suitable nesting habitat for this species is present within the project site. Therefore, the impact on this species is **less than significant**.

BURROWING OWL

The gently rolling topography, low-lying herbaceous vegetation, and small mammal burrows present within the project site provide potentially suitable habitat for burrowing owl. If present within the project site, construction activities would result in the collapse of occupied burrowing owl burrows which would cause direct harm to an individual or its habitat. This would be a **potentially significant** impact.

SPECIAL-STATUS AND COMMON NESTING BIRDS

There is a potential for nesting birds to be directly impacted through removal of vegetation containing nests, and indirectly impacted through noise and other disturbance during construction of the project. If project implementation occurs during the bird breeding season (generally February 1 through September 30), active nests may be present in vegetation slated for removal, such as trees, shrubs, and dense patches of herbaceous vegetation. Removal of this vegetation or vehicle/equipment mobilization through these vegetation communities could result the crushing of active nests resulting in mortality to adult birds, fledglings, or eggs. In addition, increased disturbance may occur from noise, human presence, and grading/construction activities which would have the potential to cause bird nest abandonment in locations adjacent to work areas. Construction activities that cause direct harm (crushing birds or active nests) or indirect harm (nest abandonment) is considered a **potentially significant** impact.

PALLID BAT

The ruderal herbaceous and mixed oak woodland communities within the project site provide suitable roosting habitat for this species. If this species is roosting within any viable roost locations (forested areas or isolated trees) during tree removal activities, this species could be directly harmed. This would be a **potentially significant** impact.

CROTCH'S BUMBLEBEE

Crotch's bumblebee has the potential to occur within the ruderal herbaceous habitat and mixed oak woodland communities within the project site. The vegetation within these communities provides nesting, breeding, and foraging habitat for Crotch's bumblebee. Vegetation clearing and ground-disturbing activities within these vegetation communities could impact this species during construction if present. However, since Crotch's bumblebee establishes new nests annually, the potential loss of individual nests is not expected to have

a significant impact on this species. The project's impact on these species would be **less than significant**.

B) HAVE A SUBSTANTIAL ADVERSE EFFECT ON ANY RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY IDENTIFIED IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR THE U.S. FISH AND WILDLIFE SERVICE?

The mixed oak woodland meets the CNPS Manual of California Vegetation criteria for valley oak woodland, which is a sensitive natural community (CNPS 2023, CDFW 2022). This analysis conservatively assumes that all 1.16 acres of the oak woodland habitat mapped within the project site would be impacted by project activities. The oak woodland habitat that falls within the project footprint may be subject to permanent impacts (i.e., removal). While the oak woodland within the project site is highly fragmented since the project site is surrounded by urban development, removal of this sensitive natural community would be considered a **potentially significant** impact.

C) HAVE A SUBSTANTIAL ADVERSE EFFECT ON STATE OR FEDERALLY PROTECTED WETLANDS (INCLUDING, BUT NOT LIMITED TO, MARSH, VERNAL POOL, COASTAL, ETC.) THROUGH DIRECT REMOVAL, FILLING, HYDROLOGICAL INTERRUPTION, OR OTHER MEANS?

A total of approximately 0.165 acre of wetland ditch that are infrequently inundated, typically only following rain events, and 0.035 acre of ditches and canals were mapped within the project site.

As currently designed, the proposed project would result in impacts (i.e., discharge of dredged or fill material) to features that were determined to be waters of the U.S. and waters of the State in the 2015 delineation that was conducted by ECORP, and was issued a Preliminary Jurisdictional Determination by the USACE in June 2015. As discussed, due to recent changes to guidance on jurisdiction, the previously mapped features on the project site may no longer be under the jurisdiction of USACE and subject to Section 404 and 401 of the Clean Water Act. If these wetlands are considered Waters of the United States, a Section 404 Clean Water Act Permit would be required by the Corps and a Section 401 Water Quality Certification would be required by the Regional Water Quality Control Board (RWQCB) prior to the issuance of a grading permit. Any waters of the U.S. or jurisdictional wetlands that would be lost or impacted would need to be replaced or rehabilitated on a "no-net-loss" basis in accordance with the USACE mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement should be at a location and by methods agreeable to the USACE and RWQCB. This would be a **potentially significant** impact on aquatic resources.

D) INTERFERE SUBSTANTIALLY WITH THE MOVEMENT OF ANY NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES OR WITH ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS, OR IMPEDE THE USE OF NATIVE WILDLIFE NURSERY SITES?

The project site is surrounded by developed urban land, resulting in limited terrestrial landscape linkages for wildlife. The primary existing barriers to overland wildlife movement into the project site are the multi-lane Manzanita Avenue and commercial developments to the west, the multi-lane Winding Way and commercial developments to the north, and residential developments to the east and south. Some wildlife species may use portions of the project site for foraging, breeding, or other functions; however, the project site itself does

not link two significant natural areas and it is not considered a wildlife migration corridor. With the lack of migratory corridors in the project site, this impact would be **less than significant**.

E) CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES, SUCH AS A TREE PRESERVATION POLICY OR ORDINANCE?

There are 111 trees within the project site, 61 of which are considered protected trees. Of these 61 protected trees, there are 38 valley oak, 8 blue oak, and 15 other native non-oak and non-native trees whose dbh exceeds 19 inches.

NATIVE TREES

The Sacramento County Tree Protection Ordinance states that no person shall trench, grade or fill within the dripline of any protected native oak tree, or destroy, kill or remove any protected tree in the designated urban area of the unincorporated area of Sacramento County, on any property, public or private, without a tree permit or unless authorized as a condition of a discretionary project approval by the Board of Supervisors, County Planning Commission, Zoning Board of Appeals, the Zoning Administrator or the Subdivision Review Committee (Sacramento County 2023).

The applicant arborist report notes that design plans have not yet been finalized, and details about trees that would need to be removed are not yet available. Up to 46 protected oak trees, totaling 898 inches dbh may be removed to accommodate construction of the project. Additionally, as discussed in the applicant's arborist report for the proposed project, for trees that are planned for preservation, project specific root system and canopy impacts on a tree-by-tree basis cannot be definitively assessed until the site development, grading, and other improvement plans have been refined and finalized and data from the accompanying inventory summary (i.e., tree numbers, dripline radius, and root protection zones) is properly depicted on the plans. The impact is **potentially significant**. For all protected trees affected by the proposed project, the applicant will be required to compensate and preserve native trees, as well as protect native trees to be preserved on-site during construction, consistent with the Sacramento County Tree Protection Ordinance, which would mitigate the impact to **less than significant** with mitigation incorporated.

NON-NATIVE TREES

The Sacramento County Tree Preservation Ordinance also grants protections to non- native trees that have dbh of 19 inches or greater. Project buildout may require the removal of these non-native trees. The proposed project would result in the removal of native and non-native trees protected by the Sacramento County Tree Preservation Ordinance. Furthermore, the Conservation Element of the Sacramento County General Plan specifies mitigation for non-native tree canopy impacts by creating equivalent canopy on-site. Construction could also result in the harm to trees suitable for preservation. This impact would be **potentially significant**. The applicant will be required to mitigate for the removal of non-native tree canopy by creating an equivalent new canopy, which would mitigate the impact to **less than significant** with mitigation incorporated.

F) CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN?

This project site is not within the plan area of any adopted habitat conservation plan or natural community conservation plan. Therefore, the project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **No impact** would occur.

SIGNIFICANCE AFTER MITIGATION

SPECIAL-STATUS PLANTS

Implementation of Mitigation Measure BIO-1 would require surveys of Sanford's arrowhead, Ahart's Dwarf Rush, and stinkbells during the month of May to evaluate the presence of this species within the project site. If any of these species are observed during the focused survey, the plants and/or the seedbank would be transplanted to suitable habitat within the project site outside of the project footprint, or offsite if suitable habitat is not available within the project site. A qualified biologist would also prepare an avoidance and mitigation plan detailing protection and avoidance measures, transplanting procedures, success criteria, and long-term monitoring protocols. In addition, a pre-construction worker awareness training would be conducted alerting workers to the presence of and protections for special-status plants in the vicinity of the work area. Implementation of Mitigation Measure BIO-1 would reduce the project's impact on special-status plants to **less than significant with mitigation incorporated**.

SWAINSON'S HAWK

Implementation of Mitigation Measure BIO-2 would require pre-construction surveys to be conducted prior to construction. This mitigation measure would also require the establishment of no-disturbance zones if nesting Swainson's hawks are found within 500 feet of the project site. By identifying active nests during nesting season and establishing buffer zones around active nests to minimize nest disturbance until the young have successfully fledged, Mitigation Measure BIO-2 would reduce potential impacts to Swainson's hawks to **less than significant with mitigation incorporated**.

BURROWING OWL

Implementation of Mitigation Measure BIO-3 requires pre-construction surveys be conducted for burrowing owl. If present within 500 feet of the project site, the project proponent shall consult with CDFW and develop a detailed mitigation plan establishing avoidance and mitigation measures based on the requirements set forth in Appendix A of the 2012 Staff Report (CDFW 2012). Implementation of this mitigation would reduce the potential impacts to burrowing owls to **less than significant with mitigation incorporated**.

NESTING BIRDS

If construction activities would occur between February 1 and September 30, Mitigation Measure Mitigation Measure BIO-2 would require preconstruction surveys for nesting birds. The purpose of the survey requirement is to ensure that construction activities do not agitate

or harm nesting Swainson's hawk, purple martin, white-tailed kite, Cooper's hawk, and other migratory birds, potentially resulting in nest abandonment or other harm to nesting success. To avoid take of nesting special-status raptors and migratory birds, Mitigation Measure BIO-2 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. With the implementation of Mitigation Measure BIO-2, potential impacts to migratory birds would be reduced to **less than significant with mitigation incorporated**.

PALLID BAT

Mitigation Measure BIO-4 would require a preconstruction survey for pallid bat and other bat species be conducted prior to tree removal to determine the species presence on the project site. If present, the mitigation measure would require the establishment of a non-disturbance buffer. With implementation of Mitigation Measure BIO-4, the impact would be reduced to **less than significant with mitigation incorporated**.

SENSITIVE NATURAL COMMUNITIES

The proposed project will result in the loss of 1.16 acres of isolated, highly fragmented valley oak woodland. Because the valley oak woodland that will be impacted by the project activities is small, highly fragmented, and surrounded on all sides by urban area, it does not provide high value of habitat for woodland species in the same way that larger expanses of valley oak woodland would. Due to the already disturbed and highly fragmented nature of this vegetation community, the impact of habitat loss on species that use this vegetation community is not substantial. Implementing Mitigation Measure BIO-5a would require the in-kind replacement of trees for every native tree that is removed due to project activities. Implementation of Mitigation Measure BIO-5a would require through payment into the County Tree Preservation Fund for every dbh inch removed, which would create similar habitat quality to that currently within the project site, reducing. Additionally, Mitigation Measure BIO-5b would require the implementation of various measures to ensure the protection of trees that would be preserved on-site. Therefore, payment into the County Tree Preservation Fund and associated planting implemented under this program, and the protection of trees that would be preserved on-site, would reduce the impacts on valley oak woodland to a less than significant level.

AQUATIC RESOURCES

Implementation of Mitigation Measure BIO-6 would require the applicant to obtain all necessary permits, as may be required by the CDFW, USACE, and/or USFWS and to implement all the conditions set forth in those permits. Implementation of this mitigation measure would reduce potential impacts to State and federally protected wetlands to less than significant with mitigation incorporated.

NATIVE TREES

Implementation of Mitigation Measure BIO-5a would ensure that removal of any protected native trees is compensated through payment into the County Tree Preservation Fund, consistent with the Sacramento County Tree Protection Ordinance. County PER reviewed the project plans and determined that onsite tree plantings are not feasible, and the appropriate mitigation is through payment of in-lieu fees. There is not enough acreage for

tree plantings within the proposed project subdivision. Implementation of Mitigation Measure BIO-5b would require various measures to ensure the protection of native trees that would be preserved on the project site. These two mitigation measures would reduce this impact to **less than significant** with mitigation incorporated.

NON-NATIVE TREES

Implementation of Mitigation Measure BIO-5c would require the developer to either create new non-native tree canopy on-site using the Sacramento County Department of Transportation 15-year shade cover values for tree species, or by contributing to the Sacramento Tree Foundation's Greenprint program in an amount proportional to the tree canopy lost. Implementation of Mitigation Measures BIO-5a through BIO-5c would ensure that the project complies with the Sacramento County Tree Preservation Ordinance, which would reduce this impact to **less than significant** with mitigation incorporated.

CULTURAL RESOURCES

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

a. Cause a substantial adverse change in the significance of a historical resource

b. Have a substantial adverse effect on an archaeological resource

c. Disturb any human remains, including those interred outside of formal cemeteries

ENVIRONMENTAL SETTING

The Area of Potential Effects (APE) for cultural resources is defined as the geographic area where project activities may directly or indirectly cause changes in the character or use of historic properties of pre-contact or historic age, if any such properties exist. The APE for the Winding Ranch project site measures approximately 24.8 acres and corresponds to the project's maximum area of ground disturbance. The land is currently vacant except for an approximately 350- by 300-foot asphalt parking lot that once served the Crestview Lanes bowling alley, which was closed in 2010 and subsequently demolished, and the "Crestview Lanes" sign that was associated with the bowling alley.

RECORDS SEARCH

A search of records and historical information on file at the North Central Information Center (NCIC) was conducted on December 2, 2019 for the project area and a one-half- mile buffer. A second records search was conducted by the NCIC on June 13, 2022 that addressed the 24.0-acre Area of Potential Effect (APE) plus an additional 0.8-acre parcel in the APE's far northwest corner. The APE corresponds to the 24.8-acre project site.

The cultural resources records searches identified four studies that have previously been conducted within a 0.5-mile radius of the APE. Of these, two studies included the current APE as part of their survey area; these include report numbers 010352 (Maniery and

Dougherty 2009) and 010854 (Windmiller 2011). The two records searches yielded did not identify any previously recorded resources within the project site.

FIELD SURVEY

On December 19, 2019, HELIX conducted a field survey of the initial 24-acre project site. On June 27, 2022 and July 2,2022, HELIX conducted follow-up surveys of the expanded 24.8 acre project site. The archaeologists walked parallel transects with 10 meters of separation. During the surveys, the ground surface was examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, fire-affected rock, pre- contact ceramics), soil discoloration that might indicate the presence of a pre-contact cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations, wells) or historic debris (e.g., metal, glass, ceramics). No pre-contact or historic-era archaeological resources were identified during the field surveys.

HISTORICAL RESOURCES EVALUATION

The project site was developed with a bowling alley from at least 1964 to 2015 (Wallace Kuhl & Associates [Wallace Kuhl] 2019), and has been vacant land since 2015 with the exception of the “Crestview Lanes” sign that was associated with the bowling alley but had not yet been demolished. The “Crestview Lanes” sign was evaluated for historical significance based on the California Register of Historical Resources (CRHR) evaluation criteria and guidelines, and assessed for historic integrity (AECOM 2024). The evaluation concluded that while the sign itself generally retains integrity to its potential period of significance (1964), based on the results of this current historic assessment, the remnant sign does not appear to meet any of the eligibility criteria for listing in the CRHR. In addition, because of the demolition of the bowling alley building in 2015, the sign lacks integrity of design, setting, and association.

The sign has also been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code (which mirror the criteria used in this assessment). The sign does not meet the criteria as a historical resource for the purposes of CEQA.

DISCUSSION

A) CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A HISTORICAL RESOURCE PURSUANT TO § 15064.5?

As discussed above, the project site contains no historical resources. With the exception of the “Crestview Lanes” sign associated with the bowling alley, no structures remain on the project site. The “Crestview Lanes” sign was determined not to meet the criteria as a historical resource for the purposes of CEQA. Therefore, the project would have **no impact** on the significance of a historical resource pursuant to § 15064.5.

B) CAUSE A SUBSTANTIAL ADVERSE EFFECT ON AN ARCHAEOLOGICAL RESOURCE

As discussed above, an NCIC search and a field survey were performed for the project site. The record search revealed two studies covering the project site APE that did not identify any previously recorded archaeological resources within the project site. No pre- contact or

historic-era archaeological resources were identified during the field surveys. However, if undiscovered archaeological resources are encountered on the project site during construction, ground disturbance activities could result in a substantial adverse change in the significance of an archaeological resource. Therefore, the project could have a **potentially significant** impact on unknown archaeological resources.

c) Disturb any human remains, including those interred outside of formal cemeteries?

No evidence of human burials was found during the field survey. However, as the presence of human remains cannot be ruled out, project construction could have a **potentially significant** impact on unknown human remains.

Significance After Mitigation

Implementation of Mitigation Measure CUL-1 would require a worker awareness training be given to all construction personnel to inform them on what a cultural resource would look like if found, what to do if found, and the legal consequences for not following the procedures surrounding inadvertently found historic cultural resources. Mitigation Measure CUL-2 requires consultation with a qualified archaeologist in the event of an inadvertent discovery of a cultural resource. With implementation of Mitigation Measures CUL-1 and CUL-2, unknown historic cultural resources will be adequately protected and preserved if found during construction. These mitigation measures would reduce impacts to historic cultural resources to **less than significant with mitigation incorporated**.

Implementation of Mitigation Measure CUL-1 would require a worker awareness training be given to all construction personnel to inform them on what a cultural resource would look like if found, what to do if found, and the legal consequences for not following the procedures surrounding inadvertently found historic cultural or archaeological resources. Mitigation Measure CUL-2 requires consultation with a qualified archaeologist in the event of an accidental discovery of an archaeological resource. With implementation of Mitigation Measures CUL-1 and CUL-2, unknown archaeological resources will be adequately protected and preserved if found during construction. These mitigation measures would reduce impacts to archaeological resources to **less than significant with mitigation incorporated**.

Implementation of Mitigation Measure CUL-1 would require a worker awareness training be given to all construction personnel to inform them on what a cultural resource (including human remains) would look like if found, what to do if found, and the legal consequences for not following the procedures surrounding inadvertently found historic cultural or archaeological resources. Mitigation Measure CUL-3 outlines the procedure if human remains are discovered during construction. With implementation of Mitigation Measures CUL-1 and CUL-3, unknown humans remains will be adequately protected and preserved if found during construction. These mitigation measures would reduce impacts to human remains to **less than significant with mitigation incorporated**.

ENERGY

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

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

ENVIRONMENTAL SETTING

This section describes the existing conditions and regulatory framework related to energy resources in Sacramento County and surrounding region. Within this section, and most relevant to Sacramento County and the proposed project, the energy resources described are those related to electricity, natural gas, and transportation fuels (primarily gasoline and diesel fuel), and opportunities for energy conservation and use of renewable energy resources.

The transportation sector (predominantly from on-road vehicles) is by far the largest consumer of energy, accounting for 38 percent of end-use energy consumption in California (U.S. Energy Information Administration 2023a). There is a direct link between the vehicle miles traveled (VMT) and energy use, as well as related greenhouse gas (GHG) emissions. In addition to mobile sources in the transportation sector, energy is consumed from residential and non-residential building operations. Energy is consumed by building operations primarily in the form of electricity and natural gas, and by transportation uses primarily in the form of gasoline and diesel fuel.

ELECTRICAL AND NATURAL GAS SERVICE AND RESOURCES

Electric services in the project site are provided by the Sacramento Municipal Utility District (SMUD), which has a 900 square mile service area, including most of Sacramento County and small, adjoining portions of Placer and Yolo Counties. In 2022, SMUD provided 10,661,678 megawatt hours (MWh) of electricity to its customers (CEC 2023a).

Electricity is generated from a variety of sources, including hydropower, natural-gas- fired generators, renewable resources eligible under the state's Renewable Portfolio Standards (RPS) program (e.g., solar, wind, geothermal, hydroelectric, and bioenergy), and purchases from other energy suppliers. Established in 2002, California's RPS requires electricity providers to provide a specified minimum portion of their electricity supply from eligible renewable resources by milestone target years. The RPS requires retail sellers of electricity to serve 60 percent of their electric load with renewable energy by 2030 with interim targets of 44 percent by 2024 and 52 percent by 2027, as well as requiring that all of the state's electricity come from carbon-free resources (not only RPS-eligible ones) by 2045. SMUD currently offers customers the option to purchase up to 100 percent of their electricity from renewable sources through its Greenergy® program. In addition, the proportion of SMUD-

delivered electricity for all customers generated from eligible renewable energy sources is anticipated to increase to 100 percent by 2030 based on SMUD's 2030 Zero Carbon Plan (SMUD 2021). The general electrical power mix for SMUD as of 2022 is presented in Table IS-7 below.

Table IS-7: SMUD Electrical Power General Mix, 2022

Energy Source	Percentage (%)
Eligible Renewable, Total	23.7
Biomass and Biowaste	1.6
Geothermal	3.8
Eligible Hydroelectric	0.8
Solar	2.8
Wind	14.7
Coal	0.0
Large Hydroelectric	25.4
Natural Gas	45.6
Nuclear	1.6
Other	0.1
Unspecified Power	3.6
Total	100.0

Notes:
1 As defined in Senate Bill 1078, and Senate Bill 1038, which modified the definition of "in-state renewable electricity generation technology," an eligible renewable resource includes geothermal facilities, hydroelectric facilities with a capacity rating of 30 MW or less, biomass and biogas, selected municipal solid waste facilities, photovoltaic, solar thermal, and wind facilities, ocean thermal, tidal current, and wave energy generation technologies.
2 "Unspecified Power" sources refer to electricity that has been purchased through open market transactions and is not traceable to a specific generation source.
Source: SMUD 2023

Natural gas service is provided to Sacramento County and the surrounding areas of northern and central California by Pacific Gas & Electric (PG&E) through portions of PG&E's approximately 44,000 miles of natural gas distribution pipelines (PG&E 2023). Natural gas consumption within the PG&E service area was approximately 4,422 million therms in 2022 (CEC 2023b), approximately 6.9 percent (304 million therms) of which was provided to users in Sacramento County (CEC 2023c).

Many of the statewide and regional policies and plans developed to reduce GHG emissions, such as the CARB 2022 Scoping Plan, also target reductions in energy use through reduced VMT and increased energy efficiency. In addition, new buildings constructed in California must comply with the standards contained in California Code of Regulations (CCR) Title 20,

Energy Building Regulations, and Title 24, Energy Conservation Standards (CALGreen), which are designed to increase energy efficiency and conservation.

TRANSPORTATION-RELATED ENERGY CONSUMPTION

Transportation is the largest energy consuming sector in California, accounting for approximately 38 percent of all energy use in the state (U.S. Energy Information Administration 2023a). More motor vehicles are registered in California than in any other state, and commute times in California are among the longest in the country. Since transportation accounts for more energy consumption than other end-use sectors, the travel demand reducing features of the project site and design are important for consideration in an assessment of energy efficiency.

Transportation fuel has and will continue to diversify in California and elsewhere. While historically gasoline and diesel fuel accounted for nearly all demand, there are now numerous alternative fuel options becoming more market-available, including ethanol, natural gas, electricity, and hydrogen. Currently, despite advancements in alternative fuels and clean vehicle technologies, gasoline and diesel remain the primary fuels used for transportation in California, and California remains the second highest consumer of motor gasoline in the country (U.S. Energy Information Administration 2023a).

DISCUSSION

A,B) RESULT IN POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES OR CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY DURING PROJECT CONSTRUCTION OR OPERATION OR CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY?

CONSTRUCTION-RELATED ENERGY CONSUMPTION

Implementation of the proposed project would increase the consumption of energy for the duration of construction in the form of electricity, natural gas, and fossil fuels (e.g., gasoline, diesel fuel). Energy in the form of fuel and electricity would be consumed during this period by construction vehicles and equipment operating on-site, trucks delivering equipment and supplies to the site, and construction workers driving to and from the site.

Table IS-8 presents the total fuel consumption anticipated for the proposed construction activities, shown both for the overall construction period and amortized over an assumed 30-year period of building operation. Over the anticipated 24-month construction period, the proposed project would require a total of approximately 64,982 gallons of diesel and 8,897 gallons of gasoline. The energy resources required to construct the physical buildings and infrastructure associated with the project would be irretrievable. The calculations in Table IS-8 are based on the emissions calculations for proposed construction activities modeled using the CalEEMod, as further detailed in Air Quality, and Greenhouse Gas Emissions, of this Initial Study (IS), and application of the United States Energy Information Administration CO_2 emissions coefficients (U.S. Energy Information Administration 2023b) to estimate fuel consumption for each phase of construction activities.

Table IS-8: Modeled Construction Fuel Consumption

	Phase	Source	GHG Emissions (MT CO_2e per Year[a])	Predominant Fuel Type	Factor (lb CO_2 per Gallon)[b]	Gallons per Year
Demolition	Offroad Equipment	37.2	Diesel	22.45	3,653	
Demolition	Worker	1.7	Gas	17.86	210	
Demolition	Vendor	0.0	Diesel	22.45	-	
Demolition	Hauling	27.2	Diesel	22.45	2,671	
Site Prep	Offroad Equipment	27.1	Diesel	22.45	2,661	
Site Prep	Worker	1.0	Gas	17.86	120	
Site Prep	Vendor	0.0	Diesel	22.45	-	
Site Prep	Hauling	14.0	Diesel	22.45	1,375	
Grading	Offroad Equipment	116.0	Diesel	22.45	11,391	
Grading	Worker	3.8	Gas	17.86	472	
Grading	Vendor	0.0	Diesel	22.45	-	
Grading	Hauling	0.0	Diesel	22.45	-	
Building Construction	Offroad Equipment	327.1	Diesel	22.45	32,122	
Building Construction	Worker	57.9	Gas	17.86	7,152	
Building Construction	Vendor	56.5	Diesel	22.45	5,549	
Building Construction	Hauling	0.0	Diesel	22.45	-	
Paving	Offroad Equipment	13.8	Diesel	22.45	1,355	
Paving	Worker	1.5	Gas	17.86	180	
Paving	Vendor	0.0	Diesel	22.45	-	
Paving	Hauling	24.4	Diesel	22.45	2,396	
Architectural Coating	Offroad Equipment	8.0	Diesel	22.45	782	
Architectural Coating	Worker	5.1	Gas	17.86	623	
Architectural Coating	Vendor	0.0	Diesel	22.45	-	
Architectural Coating	Hauling	0.0	Diesel	22.45	-	
All Phases	All Sources	-	Total Gallons Diesel	-	63,956	

	Phase	Source	GHG Emissions (MT CO_2e per Year[a])	Predominant Fuel Type	Factor (lb CO_2 per Gallon)[b]	Gallons per Year
All Phases	All Sources	-	Total Gallons Gasoline	-	8,757	

Notes:
CO_2 = carbon dioxide; CO_2e = carbon dioxide equivalent; MT = metric tons
a Modeled by HELIX in 2023. Note that CO_2e emissions were used in this analysis, which somewhat overestimates the fuel consumption.
b U.S. Energy Information Administration 2023b
See Appendix A and Appendix B for detailed emissions modeling and energy calculations.

Project-related construction activities would be temporary in nature and would be conducted in accordance with all applicable laws and regulations, including applicable federal, state, and local laws that are intended to promote efficient utilization of resources and minimize environmental impacts. Construction equipment and vehicle activity and related energy consumption would be typical of that associated with the construction of the types of land uses included in the project. The proposed project does not include unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites. Therefore, construction associated with the proposed project would not result in inefficient, wasteful, or unnecessary use of fuel or other energy sources. This impact would be **less than significant**.

OPERATIONAL ENERGY CONSUMPTION

Building energy use associated with operations under full buildout of the project would include electricity and natural gas use associated with the proposed land uses. The proposed buildings would be constructed to meet all applicable energy efficiency standards at the time of construction and would be required to comply with the current energy performance standards found Title 24 of the California Code of Regulations, including the Green Building Code (Part 11 of Title 24) Building Energy Efficiency Standards.

Electrical and natural gas demands modeled using CalEEMod based on the proposed land uses are presented in Table IS-9. The electricity demands presented in this table include both the electricity associated with the operation of the building, and electricity associated with the supply, distribution and treatment of water and wastewater treatment, which were estimated using CalEEMod default electricity intensity factors. The estimated energy usage in Table IS-9 reflects compliance with the 2022 Title 24 standards, which include a requirement for new residential buildings with three or fewer residential floors, and most new commercial/retail buildings, to have on-site generation of electricity through photovoltaic (solar) panels.

Table IS-9: Project Land Use Operational Electricity and Natural Gas Usage

Proposed Land Use	Electrical (kWh/year)	Natural Gas (kBtu/year)
Parking Lot	256,589	0
Fast Food Restaurant with Drive Thru	411,433	1,257,596

Proposed Land Use	Electrical (kWh/year)	Natural Gas (kBtu/year)
Single Family Housing	442,907	3,185,822
Automobile Care Center	751,988	0
Convenience Market with Gas Pumps	223,788	104,636
Strip Mall	42,746	76338
Fast Food Restaurant w/o Drive Thru	189,800	581,262
Total	**2,319,252**	**5,205,654**

Notes: kBtu = thousand British thermal units; kWh = kilowatt-hours
Source: Modeled by HELIX in 2023

Additional details of operational activities, calculation of solar panel electricity requirements, and other input parameters, are included in Appendix A. Reliance on non-renewable energy resources would decrease as a result of implementation of Mitigation Measure GHG-A identified to reduce GHG emissions and support consistency with State goals toward carbon neutrality, which would require proposed land uses be built without natural gas infrastructure (other than for restaurant cooking equipment) and electrical demand would increase to serve those operational activities otherwise assumed to be powered by natural gas. As discussed above in "Environmental Setting," electricity will continue to shift over time to more renewable sources within the power mix due to RPS requirements. In addition, Mitigation Measure GHG-A would require project buildings to comply with the current CALGreen Tier 2 standards to further reduce energy use. Therefore, energy consumption associated with the project's building operations would not be inefficient, wasteful, or unnecessary and this impact is **less than significant**.

Transportation-related energy consumption would be in the form of both fuel (e.g., diesel and gasoline) and electricity for electric and hybrid vehicles. Buildout of the project would generate daily trips for residents and employees. Transportation fuel consumption associated with operational trips were estimated based on the VMT estimates developed in support of this Initial Study, and the use of the EMFAC2021 vehicle fuel and electricity consumption data. Table IS-10 shows the estimated transportation-related energy consumption during project operations, anticipated to begin in 2026.

TABLE IS-10: PROJECT OPERATIONAL TRANSPORTATION-RELATED ENERGY CONSUMPTION

Fuel Source	Energy Consumption	Energy Consumption Unit of Measurement
Diesel Fuel	26,439	Gallons per year
Gasoline	755,702	Gallons per year
Electricity	464,820	KWh per year

Notes: KWh = kilowatt per hour, VMT = vehicle miles traveled
Modeled by HELIX in 2023 and adapted for energy calculations by AECOM in 2023; see Appendix A and Appendix B for detailed modeling and calculations.

The Sacramento Area Council of Governments (SACOG), pursuant to the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375) incorporates State-developed GHG emissions targets for passenger vehicle emissions into a "sustainable communities strategy" as part of its regional transportation plan. SACOG has also developed

analysis and mapping showing the location of low VMT areas within the region. The proposed project site is within a low VMT area, as identified by SACOG – an area where the density, mix of land uses, access to non-vehicular transportation options, and other factors result in a reduced need for vehicular transportation compared to the balance of the region.[4] In addition, implementation of Mitigation Measure GHG-A would require proposed parking to include electric vehicle ready infrastructure, thereby supporting electric vehicle adoption and reduced reliance on fossil fuels for transportation.

Therefore, due to proposed design features and compliance with energy efficiency standards that exceed CALGreen requirements, the project's energy consumption associated with building operations and operational transportation would not be inefficient, wasteful, or unnecessary and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact is **less than significant.**

Energy efficiency is a possible indicator of environmental impacts. The actual adverse physical environmental effects associated with energy use and the efficiency of energy use are detailed throughout this Initial Study in the environmental topic–specific sections. For example, the use of energy can lead to air pollutant and GHG emissions, the impacts of which are addressed in Air Quality and Greenhouse Gas, respectively, of this Initial Study. There is no physical environmental effect associated with energy use that is not addressed in the environmental topic–specific sections of this Initial Study.

GEOLOGY AND SOILS

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

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)

   ii) Strong seismic ground shaking?

   iii) Seismic-related ground failure, including liquefaction?

   iv) Landslides?

b. Result in substantial soil erosion or the loss of topsoil?

[4] Please see SACOG's website for more details: https://sacog.maps.arcgis.com/apps/webappviewer/index.html?id=0eac172e44514776b2f30e4324652f88&extent=-13567338.6225%2C4599309.7898%2C-13330078.0867%2C4789485.1162%2C102100

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

ENVIRONMENTAL SETTING

SEISMICITY

Geologists have determined that the greatest potential for surface fault rupture and strong seismic ground shaking is from active faults; that is, faults with evidence of activity during the Holocene epoch (i.e., the last 11,700 years). Surface rupture is the actual cracking or breaking of the ground surface along a fault during an earthquake, which is generally limited to a linear zone that is only a few yards wide. If surface fault rupture occurs, structures that are located across the fault trace can be torn apart, and pipelines can rupture. The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was created to help reduce the loss of life and property from an earthquake by prohibiting the construction of structures designed for human occupancy across the traces of active faults. The project site is not located within or near a fault designed under the Alquist-Priolo Act, or any other known active or potentially active fault (California Geological Survey [CGS] 2022, Jennings and Bryant 2010).

The project site is situated in the center of the Sacramento Valley; this area historically has not been seismically active (Jennings and Bryant 2010). Ground shaking—motion that occurs as a result of energy released during faulting—could potentially result in the damage or collapse of buildings and other structures, depending on the magnitude of the earthquake, the distance to the epicenter, and the character and duration of the ground motion. Other important factors to be considered are the characteristics of the underlying soil and rock and, where structures exist, the building materials used and the workmanship of the structures. The intensity of ground shaking depends on the distance from the earthquake epicenter to the site, the magnitude of the earthquake, and site soil conditions. Calculations of earthquake shaking hazard for California are part of a cooperative project between the USGS and CGS, and are part of the National Seismic Hazard Mapping program. Earthquake shaking hazards are calculated by projecting earthquake rates based on earthquake history and fault slip rates, the same data used for calculating earthquake probabilities. Fault parameters are developed for these calculations by the Working Group on California Earthquake Probabilities. The 2016 map showing the probabilistic Earthquake Shaking Potential for California (Branum et al. 2016) indicates that the project site is rated with a low potential

shaking hazard intensity. Regions in the low intensity categories are distant from known, active faults and are projected to experience lower levels of shaking less frequently.

The groundwater table is relatively deep (Wallace Kuhl 2019); the site is composed of stable, Pleistocene-age deposits (Gutierrez 2011); and the project site and the surrounding area are flat. Therefore, liquefaction and landslides do not represent hazards at the site.

SOILS

A review of U.S. Natural Resources Conservation Service (NRCS) soil survey data indicates that most of the project site is composed of the Urban Land-Xerarents- Fiddyment complex (0 to 8 percent slopes) soil type (NRCS 2022). Approximately 1.5 acres in the northwest corner of the site are composed of the Urban Land soil type. Xerarents are found in Mediterranean climates (like the Sacramento area), and they do not have soil horizons because they have been deeply mixed by plowing, spading, or other methods of moving by humans. Urban soils have been altered or obscured by urban works and structures; buildings and pavement cover more than 85 percent of the surface of this soil type. Xerarents and Urban Land are not rated by the NRCS in terms of soil characteristics.

PALEONTOLOGICAL RESOURCES

REGIONAL AND LOCAL GEOLOGY

The project site is located in the southeastern Sacramento Valley. The Sacramento Valley is part of the Great Valley Geomorphic Province, which is a forearc basin composed of thousands of feet of sedimentary deposits that has undergone periods of subsidence and uplift over millions of years. Alluvial deposits outcrop at the surface and extend to a depth of over 1,000 feet, overlying the deeply buried bedrock units in the mid-basin areas of the valley. At the project site, the alluvial deposits are composed of sediments from the Sierra Nevada to the east, which were carried by water and deposited on the valley floor.

Based on a review of geologic mapping prepared by Gutierrez (2011), the project site is underlain by the Turlock Lake Formation. This formation is of late Pleistocene age (approximately 600,000–900,000 years Before Present) (Marchand and Allwardt 1981).

In the Sacramento Valley, the Turlock Lake Formation is composed of arkosic (i.e., having a high percentage of feldspar), deeply weathered and dissected gravels with minor resistant metamorphic rock fragments and quartz pebbles; sand and silt are also present along the south and east sides of the Sacramento Valley (Helley and Harwood 1985). The Turlock Lake Formation stands topographically above the younger alluvial fans and terraces, and commonly displays as much as 100 feet of erosional relief. This formation represents eroded alluvial fans derived primarily from the plutonic rocks of the Sierra Nevada to the east (Helley and Harwood 1985).

PALEONTOLOGICAL SENSITIVITY ASSESSMENT CRITERIA

A paleontologically sensitive geologic formation is one that is rated high for potential paleontological productivity (i.e., the recorded abundance and types of fossil specimens, and the number of previously recorded fossil sites) and is known to have produced unique,

scientifically important fossils. Exposures of a specific geologic formation at any given project site are most likely to yield fossil remains representing particular species or quantities similar to those previously recorded from that geologic formation in other locations. Therefore, the paleontological sensitivity determination of a rock formation is based primarily on the types and numbers of fossils that have been previously recorded from that formation.

The Society of Vertebrate Paleontology (SVP 2010) established four categories of sensitivity for paleontological resources: high, low, no, and undetermined to guide assessment and mitigation of adverse impacts on paleontological resources. Areas where fossils have been previously found are considered to have a high sensitivity and a high potential to produce fossils. Areas that are not sedimentary in origin and that have not been known to produce fossils in the past typically are considered to have low sensitivity. Areas consisting of high-grade metamorphic rocks (e.g., gneisses and schists) and plutonic igneous rocks (e.g., granites and diorites) are considered to have no sensitivity. Areas that have not had any previous paleontological resource surveys or fossil finds are considered to be of undetermined sensitivity until surveys are performed. After reconnaissance surveys, a qualified paleontologist can determine whether the area of undetermined sensitivity should be categorized as having high, low, or no sensitivity. In keeping with the Society of Vertebrate Paleontology sensitivity criteria, all vertebrate fossils are generally categorized as being of potentially significant scientific value.

PALEONTOLOGICAL SENSITIVITY ASSESSMENT

A records search of the U.C. Berkeley Museum of Paleontology (UCMP) was performed by AECOM in February 2023; there are no recorded fossil localities within the project site (UCMP 2023).

As noted above, the project site is underlain by the Turlock Lake Formation. The Fairmead Landfill Fossil locality represents the largest single deposit of fossils from the Turlock Lake Formation in California (Dundas et al. 1996). The Fairmead Landfill site, located in Chowchilla, contains Pleistocene-age fossils that were originally discovered in 1993 during excavation activities for a new Madera County landfill. Since 1993, more than 15,000 fossil specimens from over 35 different species have been recovered from the Fairmead site, including mammoth, ground sloth, giant short-faced bear, saber tooth cat, wolf, deer, camel, horse, antelope, rodents, birds, reptiles, fish, and prehistoric vegetation.

A variety of plant fossils have also been recovered from several localities in the Turlock Lake Formation in Fresno County (UCMP 2023). Marchand and Allwardt (1981) reported that several vertebrate fossils were recovered from the Turlock Lake Formation near Friant, also in Fresno County. Hansen (2008) reported that excavations for the California Department of Transportation's State Route 180 West Freeway project uncovered fossil specimens from a Pleistocene-age camel in sediments of the Turlock Lake Formation in Fresno County.

Jefferson (1991) reported two vertebrate fossil localities from Roseville and Rocklin, likely from the Turlock Lake Formation.

Because of the large number of vertebrate fossils that have been recovered from the Turlock Lake Formation, it is considered to be of high paleontological sensitivity.

Discussion

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)

The nearest active faults, including those that are classified under the Alquist-Priolo Earthquake Fault Zone Act, are approximately 40 miles west in the Coast Ranges and approximately 60 miles east near Lake Tahoe (Jennings and Bryant 2010, CGS 2022). The nearest known fault is the Bear Mountain Fault Zone, approximately 21 miles east of the project site, which is not classified as "active" (Jennings and Bryant 2010). Therefore, hazards from surface fault rupture are unlikely, and there would be **no impact**.

ii) Strong seismic ground shaking?

As described in threshold a) i) above, the nearest known fault is the Bear Mountain Fault Zone, approximately 21 miles east of the project site, which is not classified as "active" (Jennings and Bryant 2010). The project site has a low potential for strong seismic ground shaking (Branum et al. 2016).

Development of the proposed project is required by law to comply with seismic safety standards of the California Building Standards Code (CBC). The CBC philosophy focuses on "collapse prevention," meaning that structures are designed for prevention of collapse for the maximum level of ground shaking that could reasonably be expected to occur at a site. Based on the seismic design category, the CBC requires an analysis of slope instability, liquefaction, and surface rupture attributable to faulting or lateral spreading, plus an evaluation of lateral pressures on basement and retaining walls, liquefaction and soil strength loss, and lateral movement or reduction in foundation soil- bearing capacity. It also requires that measures to reduce damage from seismic effects be incorporated in structural design. Measures may include ground stabilization, selection of appropriate foundation type and depths, selection of appropriate structural systems to accommodate anticipated displacements, or any combination of these measures.

A site-specific geotechnical report would be prepared according to CBC and County requirements (including County Municipal Code Chapter 16.44 related to grading), which is required to contain appropriate engineering and design recommendations related to seismic, soils, and other geologic considerations at the project site. The geotechnical report would be submitted to the County for review as part of the applicant's permit application. The project applicant is required by law to design and construct all buildings in compliance with the CBC (CCR Title 24), which includes implementing the recommendations contained in the geotechnical report to comply with CBC provisions that are specifically designed to prevent the collapse of structures during seismic ground shaking. Therefore, impacts from strong seismic ground shaking would be **less than significant**.

iii) SEISMIC-RELATED GROUND FAILURE, INCLUDING LIQUEFACTION?

The project site is composed primarily of stable, late Pleistocene-age deposits consisting of the Turlock Lake Formation (Gutierrez 2011) along with two small areas of artificial fill. The depth to groundwater at the project site is relatively deep— approximately 75 feet below the ground surface (Wallace Kuhl 2019), and there is a low potential for strong seismic ground shaking (Branum et al. 2016). Therefore, there is no potential for liquefaction, and there would be **no impact**.

iv) LANDSLIDES?

The project site is flat, and is not adjacent to any areas of steep slopes; thus, there is no potential for landslides, and there would be **no impact**.

B) RESULT IN SUBSTANTIAL SOIL EROSION OR THE LOSS OF TOPSOIL?

Based on a review of NRCS (2022) soil data, most of the project site soil consists of Urban Land-Xerarents-Fiddyment complex, and a small area in the northwest corner is classified as Urban Land. These soil types are not rated by the NRCS in terms of soil characteristics.

Project-related construction would involve earthmoving activities throughout the project site, including soil removal; grading; trenching and pipe installation; installation of building, road, and parking lot foundations; and landscaping. Construction activities during the winter months would expose soils to rain events, which could mobilize loose soil and result soil erosion. Subsequent soil transport during storm events could result in sedimentation both within and downstream of the project site. Furthermore, earthmoving activities during the summer months could result in wind erosion.

However, the project applicant is required to comply with the County's Land Grading and Erosion Control Ordinance (County Municipal Code Chapter 16.44). Because the project would involve clearing and grubbing more than 1 acre of land, a grading permit is required for compliance with the ordinance. As part of the permit application, plans must be submitted to the County showing the location, implementation schedule, and maintenance schedule of all erosion control measures and sediment control measures to be implemented or installed prior to, during, or after the proposed activity (Municipal Code Section 16.44.090). Furthermore, because the proposed project would disturb more than 1 acre of land, the project applicant is required by law to prepare a Stormwater Pollution Prevention Plan (SWPPP) and implement site-specific BMPs that are specifically designed to prevent erosion and downstream sedimentation, and to protect water quality. A Notice of Intent, along with a SWPPP and BMPs, must be submitted to the Central Valley Regional Water Quality Control Board for approval, in compliance with the statewide National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order WQ 2022-0057-DWQ). The Construction General Permit also includes post-construction stormwater performance standards that address water quality and hydromodification protection. Examples of the types of BMPs that could be implemented to reduce construction- related erosion include watering the soil during earthmoving activities, silt fences, staked straw bales/wattles, silt fences, geofabric, trench plugs, terraces, water bars, soil stabilizers, mulching, and revegetation of disturbed areas. Construction techniques that could be

implemented to reduce the potential for stormwater runoff include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup.

Because the project applicant would be required to comply with the requirements in the County's Grading Ordinance, and would prepare a SWPPP and implement BMPs designed to control construction-related stormwater runoff and reduce erosion as required by the State Water Resources Control Board (SWRCB), the impact from construction of the proposed project on soil erosion or loss of topsoil would be **less than significant**. (Long-term impacts from project operation related to soil erosion are evaluated in Hydrology and Water Quality.)

C) BE LOCATED ON A GEOLOGIC UNIT OR SOIL THAT IS UNSTABLE, OR THAT WOULD BECOME UNSTABLE AS A RESULT OF THE PROJECT, AND POTENTIALLY RESULT IN ON- OR OFF-SITE LANDSLIDE, LATERAL SPREADING, SUBSIDENCE, LIQUEFACTION, OR COLLAPSE?

As described above, the project site consists of the Urban Land-Xerarents-Fiddyment complex, and a small area in the northwest corner is classified as Urban Land. These soil types are not rated by the NRCS in terms of soil characteristics (NRCS 2022). However, the project applicant is required by the County and the CBC to prepare a site- specific geotechnical report, which would be submitted to the County for review and approval prior to issuance of building permits. The geotechnical report would contain site-specific recommendations for design and engineering of project components, as required by the CBC and the County, which would be specifically intended to reduce hazards from geologic conditions as determined by soil borings and associated laboratory analyses. In addition, compliance with Sacramento County (2018) Improvement Standards, County Grading Permit requirements, and standard engineering practices, all of which would incorporate specific recommendations for construction in unstable soils (where necessary), would ensure that the proposed improvements are designed appropriately based on site-specific conditions. Therefore, this impact would be **less than significant**.

D) BE LOCATED ON EXPANSIVE SOIL, AS DEFINED IN TABLE 18-1-B OF THE UNIFORM BUILDING CODE (1994), CREATING SUBSTANTIAL DIRECT OR INDIRECT RISKS TO LIFE OR PROPERTY?

As described above, the project site consists of the Urban Land-Xerarents-Fiddyment complex, and a small area in the northwest corner is classified as Urban Land. These soil types are not rated by the NRCS in terms of soil characteristics (NRCS 2022). Given that portions of the project site were previously developed with urban uses consisting of a gasoline station and a commercial center, the artificial fill in these two areas at the project site is likely not expansive. The project applicant is required by the County and the CBC to prepare a site-specific geotechnical report, which would be submitted to the County for review and approval prior to issuance of building permits. The geotechnical report would contain site-specific recommendations for design and engineering of project components, as required by the California Building Code (CBC) and the County, which would be specifically intended to reduce hazards from geologic conditions as determined by soil borings and associated laboratory analyses. In addition, compliance with Sacramento County (2018) Improvement Standards, County Grading Permit requirements, and standard engineering practices, all of which would incorporate specific recommendations for construction in expansive soils (where necessary), would ensure that the proposed improvements are

designed appropriately based on site-specific conditions. Therefore, this impact would be **less than significant**.

E) HAVE SOILS INCAPABLE OF ADEQUATELY SUPPORTING THE USE OF SEPTIC TANKS OR ALTERNATIVE WASTE WATER DISPOSAL SYSTEMS WHERE SEWERS ARE NOT AVAILABLE FOR THE DISPOSAL OF WASTE WATER?

Development of the proposed project does not require or include installation of septic tanks or alternative wastewater disposal systems. The project site is located within an area that has been, and will continue to be, served by a municipal wastewater system. The proposed development would be served by the Sacramento Area Sewer District (SASD) for local sewer connection and conveyance and the Sacramento Regional County Sanitation District (RegionalSan) for regional wastewater treatment. Temporary, portable restrooms would be provided for construction workers during the construction phase. Thus, there would be **no impact** related to soil suitability for septic tanks or alternative wastewater disposal systems.

F) DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGIC FEATURE?

UNIQUE GEOLOGIC FEATURES

A unique geologic feature consists of a major natural element that stands out in the landscape, such as a large and scenic river, gorge, waterfall, volcanic cinder cone, lava field, or glacier. These features are considered outstanding examples that are regarded as the best of their kind. The project site and the immediately adjacent land are flat and are developed with urban uses. There are no unique geologic features at the project site or within the project viewshed. Thus, there would be **no impact** related to destruction of a unique geologic feature.

PALEONTOLOGICAL RESOURCES

Based on Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on paleontological resources if it would directly or indirectly destroy a unique paleontological resource or site. A “unique paleontological resource or site” is one that is considered significant under the following professional paleontological standards.

An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved, and it meets one of the following criteria:

- a type specimen (i.e., the individual from which a species or subspecies has been described);
- a member of a rare species;
- a species that is part of a diverse assemblage (i.e., a site where more than one fossil has been discovered) wherein other species are also identifiable, and important information regarding life history of individuals can be drawn;
- a skeletal element different from, or a specimen more complete than, those now available for its species; or

- a complete specimen (i.e., all or substantially all of the entire skeleton is present).

The value or importance of different fossil groups varies, depending on several factors: the age and depositional environment of the rock unit that contains the fossils; their rarity; the extent to which they have already been identified and documented; and the ability to recover similar materials under more controlled conditions (such as for a research project). Marine invertebrates generally are common, the fossil record is well developed and well documented, and they would generally not be considered a unique paleontological resource. Identifiable vertebrate marine and terrestrial fossils generally are considered scientifically important because they are relatively rare.

The project site is underlain by the Turlock Lake Formation. As discussed above, the Turlock Lake Formation is considered to be of high paleontological sensitivity due to the number of previously recorded vertebrate fossils that have been recovered from this formation in California. However, as also discussed above, two areas of the project site have been a heavily disturbed as a result of prior earthmoving activities dating back to the 1960s, with continuing disturbance since that time, related to construction and reconstruction of a gasoline station and a commercial center.

In particular, due to the construction, reconstruction, and remediation action activities associated with the former gasoline station from the late 1960s to 2009 (Wallace Kuhl 2019), there are no native Turlock Lake Formation deposits remaining in the 10 to 20 feet of soil beneath the ground surface in the northwest corner of the project site. Native deposits are present at depths that would not be encountered by project-related earthmoving activities, and thus construction of the proposed new gasoline station, car wash, and convenience store would have **no impact** related to damage to or destruction of unique paleontological resources.

In the 1960s, a small commercial center consisting of a bowling alley (Crestview Lanes) was developed in the east-central portion of the project site, immediately east of the existing off-site small commercial building on the east side of Manzanita Avenue (Wallace Kuhl 2018). Paved parking was also installed immediately west of the bowling alley. The bowling alley was demolished in 2015, but the paved parking is still present. The rest of the project site (aside from the former gasoline station) has never been developed. Because most of the project site has not been developed, sediments associated with the paleontologically-sensitive Turlock Lake Formation are likely still present at depths that would be encountered by project-related earthmoving activities. Therefore, construction-related earthmoving activities at most of the project site could result in accidental damage to or destruction of unique paleontological resources, and this impact is considered **potentially significant**.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would reduce project-related impacts on unique paleontological resources to a **less-than-significant** level because construction workers would be alerted to the possibility of encountering paleontological resources and, in the event that resources were discovered, fossil specimens would be recovered and recorded and would undergo appropriate curation.

GREENHOUSE GAS EMISSIONS

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

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

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

This section supplements the Initial Study Checklist by summarizing the Air Quality and Greenhouse Gas Emissions Technical Report completed by HELIX in December 2023 to evaluate potential greenhouse gas emission impacts of the proposed project. The HELIX report is contained in Appendix A.

ENVIRONMENTAL SETTING

Global temperatures are moderated by atmospheric gases. These gases are classified as GHGs because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and as a result of human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition. Anthropogenic emissions of GHGs lead to atmospheric levels in excess of natural ambient concentrations and have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change.

The temperature record shows a decades-long trend of warming, with 2016 and 2020 global surface temperatures tied for the warmest year on record since 1880 (National Aeronautics and Space Administration [NASA] 2023a). The newest release in long-term warming trends announced 2022 ranked as tied with 2015 for the sixth warmest year on record with an increase of 1.6 F compared to the 1951-1980 average (NASA 2023b). The Intergovernmental Panel on Climate Change (IPCC) concluded that variations in natural phenomena, such as solar radiation and volcanoes, produced most of the warming of the earth from pre-industrial times to 1950. Some variations in natural phenomena also had a small cooling effect. GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century (IPCC 2021).

PRINCIPAL GREENHOUSE GASES AND SOURCES

The principal GHGs that contribute to climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Carbon Dioxide. CO_2 is the most common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. As of August 2023, the atmospheric CO_2 concentration was 420 ppm, which is a 50-percent increase since the concentration of 280 ppm at the at the start of the Industrial Revolution in 1750 (National Oceanic and Atmospheric Administration 2023).

Methane. CH_4 is emitted during the production and transport of coal, natural gas, and oil. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Hydrofluorocarbons. Hydrofluorocarbons are commonly used in a wide variety of applications, including refrigeration, air conditioning (AC), building insulation, fire extinguishing systems, and aerosols. HFCs have high global warming potential (GWP).

Perfluorocarbons. Perfluorocarbons are synthetic compounds containing just fluorine and carbon. They are generally colorless, odorless, non-flammable gases at environmental temperatures and for the most part chemically unreactive. PFCs replace chlorofluorocarbons (CFCs) in manufacturing semiconductors. They are also used as solvents in the electronics industry, and as refrigerants of some specialized refrigeration systems.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi conductor manufacturing, and as a tracer gas for leak detection.

GLOBAL WARMING POTENTIAL

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called GWP. The GWP of a gas is a measure of both potency and lifespan in the atmosphere relative to CO_2. For example, a gas with a GWP of 10 is 10 times more potent than CO_2 over 100 years. CO_2 equivalence (CO_2e) is a quantity that enables total GHG emissions to be measured accounting for varying GWPs. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e.

Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline (i.e., has a value of 1). The atmospheric lifetime and GWP of principal GHGs are summarized in Table IS-11. For the purposes of estimating project-

related emissions of CO_2e, GWP values from the IPCC Fourth Assessment Report (AR4) report were used, consistent with current international reporting standards under the United Nations Framework Convention on Climate Change and the statewide and national GHG emissions inventories.

Table IS-11: Global Warming Potential and Atmospheric Lifetime of Principal GHGs

Greenhouse Gas	Atmospheric Lifetime (years)	IPCC AR4 GWP
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-134a	14	1,430
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Source: IPCC 2007
IPCC = Intergovernmental Panel on Climate Change; AR = Assessment Report; GHG = greenhouse gas; GWP = global warming potential; HFC = hydrofluorocarbon; PFC = perfluorocarbon

POTENTIAL EFFECTS OF CLIMATE CHANGE

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The IPCC's 2021 Synthesis Report indicated that warming of the climate system is unequivocal and, since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2021).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. As noted in the Sacramento Valley Regional Report of the California's Fourth Climate Change Assessment, climate change is expected to make the Sacramento region hotter, drier, and increasingly prone to extremes like megadroughts, flooding, and large wildfires. These changing conditions are likely to affect water and energy availability, agricultural systems, plants and wildlife, public health, housing, and quality of life.

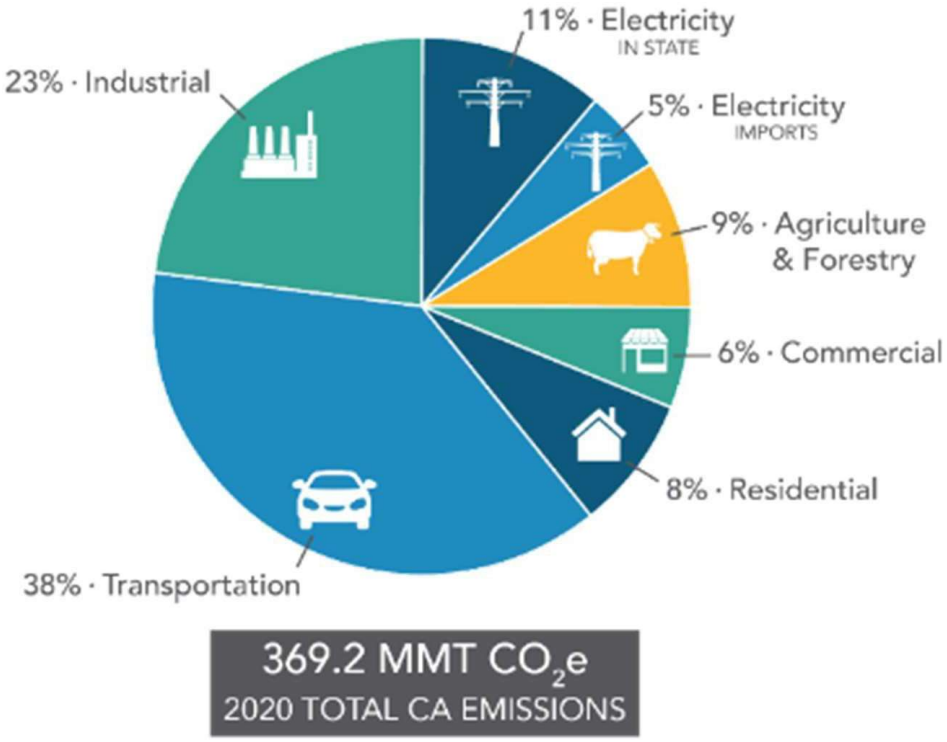
In Sacramento County, primary effects of climate change include increased temperature, changes in precipitation patterns, and sea level rise; secondary consequences include increased frequency, intensity, and duration of extreme heat days and heat waves/events, loss of snowpack and decreased water supplies, increased wildfire, and increased flooding (Sacramento County 2017, 2022).

EXISTING CONDITIONS

The CARB performs annual statewide inventories for GHG emissions by sector. As shown in Plate IS-13, I inventory is divided into five broad sectors of economic activity: agriculture,

commercial and residential, electricity generation, industrial, and transportation. Emissions are quantified in million metric tons (MMT) CO_2e.

Plate IS-13: 2020 California Greenhouse Gas Emissions Inventory by Sector



Source: CARB 2023

As shown in Plate IS-13, the statewide GHG source emissions totaled 369 MMT CO_2e in 2020. Transportation-related emissions consistently contribute the most GHG emissions, followed by industrial emissions and electricity generation (CARB 2023).

A GHG emissions inventory for the unincorporated portion of Sacramento County was prepared in 2015 and is summarized below in Table IS-12. The sectors included in this inventory are somewhat different from those in the statewide inventory. However, similar to the statewide emissions, transportation-related (on-road vehicles) GHG emissions are the largest contributor to overall community GHG emissions in Sacramento County with 36 percent of the total (Sacramento County 2022).

Table IS-12: Sacramento County Community Greenhouse Gas Emissions by Sector (MT CO_2e)

Sector	2015
Residential Energy	1,086,580 (23.0%)
Commercial Energy	843,168 (17.9%)
On-Road Vehicles	1,695,127 (35.9%)
Off-Road Vehicles	196,769 (4.2%)
Solid Waste	352,909 (7.5%)
Agriculture	254,899 (5.4%)
High-GWP Gasses	251,085 (5.3%)
Wastewater	27,253 (0.6%)
Water Related	15,222 (0.3%)
TOTAL	**4,723,011**

Source: Sacramento County 2022
MT = metric tons; CO_2e = carbon dioxide equivalent

Discussion

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

Project implementation would generate short-term construction and long-term operational GHG emissions. Construction-related GHG emissions would cease following construction of the project, however operational emissions are considered long-term and assumed to occur for the lifetime the project. Construction-related GHG emissions would be generated primarily from exhaust emissions associated with off- road construction equipment, construction worker commutes, and vendor and haul truck trips. Operational GHG emissions can be categorized into direct and indirect GHG emissions. Direct GHG emissions are those emissions that are generated at the location of consumption or use. For example, mobile-source emissions are direct emissions because GHG emissions are generated as a vehicle is operated. Conversely, indirect emissions are those emissions that occur at a different time or location from the point of consumption or use. For example, electricity-related GHG emissions are indirect emission because as a consumer uses electricity, the fuel combustion and emissions associated with creating that electricity likely occurred off-site or at a different time. Other indirect GHG emissions include emissions associated with solid waste disposal and water consumption.

Given the relatively small levels of emissions generated by a typical development in relationship to the total amount of GHG emissions generated on a national or global basis, individual development projects are unlikely to by themselves significantly contribute to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to climate change. Therefore, this impact is assessed within the cumulative context of the project's potential contribution to significant impacts on global climate change.

The determination of significance is governed by CEQA Guidelines 15064.4, entitled "Determining the Significance of Impacts from Greenhouse Gas Emissions." CEQA Guidelines 15064.4(a) states, "[t]he determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to … [use a quantitative model or qualitative model]" (emphasis added). In turn, CEQA Guidelines 15064.4(b) clarifies that a lead agency may consider the following three factors in assessing the significance of impacts from GHG emissions.

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Addressing GHG generation impacts requires an agency to make a determination as to what constitutes a significant impact. As stated in Appendix G of the CEQA Guidelines, the significance criteria established by the applicable air quality management district may be relied on to support determinations of significance. In April 2020, the SMAQMD Board of Directors adopted the Update to the Recommended GHG Emissions Thresholds of Significance. This document established thresholds of significance for GHG emissions designed to analyze a project's consistency with the State's near- and longer-term climate targets, including Assembly Bill (AB) 32, which required reduction of statewide GHG emissions to 1990 levels by 2020, SB 32, which established a reduction mandate of 40 percent below 1990 statewide emissions levels by 2030, Executive Order (EO) S-3-05 which established a State goal for the reduction of GHG emissions generation by 80 percent compared to 1990 levels by 2050, and EO B-55-18, which established a statewide emissions goal to achieve carbon neutrality no later than 2045. (SMAQMD 2020a).

SMAQMD states that projects whose emissions are expected to meet or exceed the significance criteria would have a potentially significant adverse impact on global climate change (SMAQMD 2020a). Sacramento County adopted SMAQMD's thresholds of significance (summarized below) on December 16, 2020 by Resolution #2020-0855. Therefore, consistent with CEQA Guidelines 15064.4, the GHG analysis for the project

appropriately relies upon a threshold based on the exercise of careful judgement and believed to be appropriate in the context of this particular project.

The SMAQMD construction period GHG emissions threshold is 1,100 MT CO_2e per year. Where a qualified GHG Reduction Plan has not been adopted by the lead agency, for operational period GHG emissions, the SMAQMD GHG thresholds require that a project implement Tier 1 Best Management Practices (BMPs). Projects that do not implement the Tier 1 Best Management Practices must conduct additional calculations to determine excess GHG emissions and provide measures either on-site or off-site to provide equivalent mitigation (SMAQMD 2020b). Tier 1 BMPs are as follows:

- BM– 1 - projects shall be designed and constructed without natural gas infrastructure.
- BM– 2 - projects shall meet the current CALGreen Tier 2 standards, except all electric vehicle capable spaces shall instead be electric vehicle ready.

Projects that implement BMP 1 and BMP 2 can utilize the screening criteria for operational emissions; projects that do not exceed 1,100 MT CO_2e per year are then screened out of further requirements. For projects which exceed 1,100 MT CO_2e per year operational screening level emissions, the SMAQMD requires implementation of Tier 2 BMPs (SMAQMD 2020b), as follows:

- BM– 3 - residential projects shall achieve a 15 percent reduction in vehicle miles traveled per resident, office projects shall achieve a 15 percent reduction in vehicle miles traveled per worker compared to existing average vehicle miles traveled for the county, and retail projects shall achieve a no net increase in total vehicle miles traveled to show consistency with SB 743.

SCAQMD's Tier 1 and Tier 2 BMPs were developed to demonstrate consistency with the 2017 Climate Change Scoping Plan to reduce GHG emissions to 40 percent below 1990 levels by 2030 and reduce GHG emissions to 80 percent below 1990 levels by 2050, in additional to the target set by EO-55-18 to achieve carbon neutrality by 2045.

Since these thresholds were last updated by SMAQMD, CARB has finalized the 2022 Climate Change Scoping Plan, which establishes the State's framework for reaching the target achieve carbon neutrality no later than 2045 established in EO B-55-18 and later promulgated into law through AB 1279. Carbon neutrality is not a standard to be achieved on an individual project basis, but through the implementation of best available technology, increasingly stringent regulations to reduce emissions from various sources, state and regional plans to reduce VMT and increase carbon-free vehicle use, and carbon capture and sequestration actions focused on the natural and working lands sector, as identified in the 2022 Scoping Plan. Evaluating consistency with the State's emissions reduction targets shows alignment with the State's approach to reduce the generation of GHG emissions from existing and anticipated future sources, a key component of the 2022 Scoping Plan (CARB 2022).

As discussed above, the SMAQMD considered consistency with the goal of carbon neutrality by 2045 when developing the District's GHG thresholds. Therefore, in order to demonstrate consistency with the State's long-term climate goals or strategies, and to determine whether implementation of the project would have a significant impact on the environment, this analysis will use the SMAQMD-established operational BMPs and numerical thresholds of 1,100 metric tons of CO_2e per year for construction and operational emissions also demonstrates consistency with the 2022 Scoping Plan.

CONSTRUCTION EMISSIONS

Project construction GHG emissions were modeled using the same methods and assumptions as those described in Air Quality, of this Initial Study. In addition to criteria air pollutants, the CalEEMod also estimates GHG emissions associated with construction and operational activities. For construction, GHG emissions were estimated for off-road construction equipment, material delivery trucks, haul trucks, and construction worker vehicles. Project-specific input was used in conjunction with default model settings to estimate reasonably conservative conditions. Additional details of construction activity, selection of construction equipment, and other input parameters, are included in the CalEEMod output in Appendix A and Appendix B.

Emissions of GHGs related to the construction of the project would be temporary. As shown in Table IS-13, the annual project construction emissions would not exceed the SMAQMD threshold. Therefore, this impact would be less than cumulatively considerable.

Table IS-13: Construction GHG Emissions

Year	Emissions
(MT CO_2e)	
2024	334
2025	388
Maximum Year	388
SMAQMD Threshold	*1,100*
Exceed Threshold?	No

Source: Modeled by HELIX 2023; Threshold SMAQMD 2020b
GHG = greenhouse gas; MT = metric tons; CO_2e = carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District

OPERATIONAL EMISSIONS

Project operational GHG emissions were estimated using CalEEMod as described above. For operational activities, CalEEMod estimates GHG emissions associated with mobile, area, and energy sources, similar to criteria air pollutant emissions, in addition to GHG emissions associated with refrigeration and solid waste disposal. Project design features were incorporated into CalEEMod to reflect compliance with the 2022 Title 24 standards, which include a requirement for new residential buildings with three or fewer residential floors, and most new commercial/retail buildings, to have on-site generation of electricity through photovoltaic (solar) panels. Additional details of operational activities, calculation of solar

panel electricity requirements, and other input parameters, are included in Appendix A and Appendix B.

Unmitigated project operational emissions are compared to the SMAQMD threshold in Table IS-14.

Table IS-14: Unmitigated Operational GHG Emissions

Emission Sources (MT CO_2e)	Emissions
Area	2
Energy	564
Mobile	7,260
Waste	79
Water	14
Refrigerants	183
TOTAL[1]	8,462
SMAQMD Screening Level	*1,100*
Exceed Screening Level?	Yes

Source: Modeled by HELIX 2023; Threshold SMAQMD 2020b 1 Totals may not sum due to rounding.
GHG = greenhouse gas; MT = metric tons; CO_2e = carbon dioxide equivalent

To use the SMAQMD's land use development project GHG emissions significance criteria, SMAQMD requires all project to implement the Tier 1 GHG reduction BMPs, regardless of the projects' GHG emission levels, or provide measures to implement equivalent mitigation. The project's retail/restaurant buildings may require the use of natural gas, primarily for cooking appliances. The actual amount of natural gas use depends on the tenants for the buildings and the type of cooking appliance installed, neither of which has been determined at the time of this analysis. CalEEMod calculations using default natural gas use setting for the 5 proposed retail/restaurant buildings show a total non-Title-24 (e.g., cooking appliance) natural gas use of 1,420,418 kBtu per year. Based on the CalEEMod default non-Title 24 natural gas use for restaurants, project restaurant cooking appliances would result approximately 75.6 MT CO_2e per year from the use of natural gas, or approximately 2,268 MT CO_2e over the typical 30-year lifespan of commercial/retail projects.

In addition, as shown in Table IS-15, the project's unmitigated operational GHG emissions would exceed the SMAQMD operational screening level of 1,100 MT CO_2e per year and the project would be required to implement the SMAQMD's Tier 2 BMPs. Tier 2 GHG reduction BMP 3 requires residential projects to achieve a 15-percent reduction in VMT per resident compared to existing average VMT for the county, and retail projects to achieve a no net increase in total VMT to show consistency with SB 743. The SACOG mapping tool[5] demonstrates that the residential portion of the project is located in an area that produces VMT that is 50-85 percent of the regional average (consistent with a 15 percent reduction in

[5] Sacramento Area Council of Governments Residential VMT Mapping Tool, available here: https://arcg.is/0vf0Tq

VMT per resident compared to existing conditions). In addition, according to the California Office of Planning and Research's (OPR's) Technical Advisory on Evaluating Transportation Impacts in CEQA, local serving retail tends to shorten trips and reduce VMT, thus in general local serving retail development would be assumed to have a less-than-significant transportation impact. The document states that stores larger than 50,000 square feet [in floor area] generally would not be considered local serving (OPR 2018). According to OPR, "local-serving retail development tends to shorten trips and reduce VMT" (OPR 2018, page 16). As established in the County's 2020 Transportation Analysis Guidelines, "[l]ocal serving retail generally shortens trips as longer trips from regional retail (or from neighborhood retail centers that are further away) are redistributed to the new local retail [use]" (Sacramento County 2020, page 10).[6] The project's total retail space would be approximately0 29,150 square feet in floor area and would be considered local serving (Sacramento County 2023). Therefore, the project's retail land uses would not result in a net increase in total VMT. The project would meet the requirements of SMAQMD's Tier 2 GHG reduction BMP 3.

Project operational GHG emissions would exceed the SMAQMD's screening level of 1,100 MT CO_2e threshold but would meet the VMT requirements of the SMAQMD's Tier 2 GHG reduction BMP 3 for projects with emissions exceeding the screening threshold. However, because the SMAQMD requires all land use development projects to implement the Tier 1 GHG reduction BMPs, without implementation of these BMPs the project's operational GHG emissions impact would be potentially cumulatively considerable. Mitigation Measure GHG-A would require implementation of the SMAQMD's recommended operational BMPs for GHGs.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure GHG-A would require the project to implement the SMAQMD's Tier 1 GHG reduction BMP 1 and BMP 2, prohibiting natural gas use for building heating or hot water, including electrical infrastructure sufficient to power electric commercial cooking appliances, and options to either offset the 75.6 MT CO_2e per year calculated in CalEEMod from cooking appliances, or offset GHG emissions calculated using natural gas consumption specifications for actual restaurant appliances.

Project mitigated operational emissions are compared to the SMAQMD threshold in Table IS-15, reflecting implementation of mitigation measure GHG-A. As shown in Table IS-15, mitigation measure GHG-A would reduce project energy source emissions from 564 MT CO_2e per year to 449 MT CO_2e per year in the first year of project operation (2026). Subsequent years of operation would be expected to have lower energy-related emissions as electric utilities shift towards decarbonization to meet the state's Renewable Portfolio Standards program.

With the implementation of Mitigation Measure GHG-A, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be less than cumulatively considerable with mitigation implemented.

[6] Sacramento County uses 125,000 square feet in floor area as the threshold for local serving retail.

Table IS-15: Mitigated Operational GHG Emissions

Emission Sources (MT CO_2e)	Emissions
Area	2
Energy	449
Mobile	7,260
Waste	79
Water	14
Refrigerants	183
TOTAL[1]	8,347
SMAQMD Screening Level	*1,100*
Exceed Screening Level?	Yes

Source: Modeled by HELIX 2023; Threshold SMAQMD 2020b
1 Totals may not sum due to rounding.
GHG = greenhouse gas; MT = metric tons; CO_2e = carbon dioxide equivalent

B) CONFLICT WITH AN APPLICABLE PLAN, POLICY OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES?

There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the Low Carbon Fuel Standard (LCFS), and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide level.

As discussed above, SMAQMD's Tier 1 GHG reduction BMP 1 and BMP 2 were developed to demonstrate consistency with the 2017 Climate Change Scoping Plan to reduce GHG emissions to 40 percent below 1990 levels by 2030 (per SB 32) and reduce GHG emissions to 80 percent below 1990 levels by 2050 (per EO S-03-05), in additional to the target set by EO-55-18 to achieve carbon neutrality by 2045. Therefore, consistency with SMAQMD's Tier 1 GHG BMPs would also ensure consistency with these GHG emission reduction goals.

The CARB 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. As discussed above, SMAQMD's Tier 1 GHG reduction BMP 1 and BMP 2 demonstrate consistency with the carbon neutrality target that is a key objective of the 2022 Climate Change Scoping Plan. Therefore, consistency with SMAQMD's Tier 1 GHG BMPs would also demonstrate consistency with the 2022 Scoping Plan and State regulations for GHG reduction targets. In addition, the project would be located in a low-VMT region and locally serving retail uses, demonstrating consistency with the statewide mobile emissions reduction measures identified in the 2022 Scoping Plan to achieve the State's GHG emissions reduction targets.

The project site has a General Plan land use designation of Transit Oriented Development and is zoned Shopping Center (SC), Light Commercial (LC), and Multiple Family Residential 40 The project would be consistent with the General Plan designations for the site. The project's retail portion would be consistent with the SC zone. However, the project's single-

family residential portion would require a rezone from SC and LC to Residential 10. As discussed above, the Sacramento County Department of Transportation concluded that the project's residential portion would result in VMT 15 percent or more below the regional average. The project's retail portion would be considered local serving, does not include any characteristics of regional retail, and therefore would not result in a net increase in regional VMT (Sacramento County 2023). In addition, the project retail area would include sidewalk improvements along the project street frontages, internal sidewalks connection the retail buildings, a pedestrian connection to the project residential area, and bicycle racks and bicycle lockers near the project retail buildings. By providing pedestrian and bicycle improvements and providing pedestrian connections between project residential and retail areas, the project would promote alternative transportation and reduce VMT. Therefore, since the proposed project is in a low residential VMT location and since the project proposes local serving retail that would tend to reduce trip lengths and reduce VMT, the proposed project would be consistent with components of the SACOG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) intended to reduce passenger vehicle VMT and associated GHG emissions.

Lastly, the project must also be constructed in accordance with the energy-efficiency standards, water reduction goals, and other standards contained in the applicable Title 24 Part 6 Building Energy Efficiency Standards and Part 11 (CALGreen) Building Standards, including the requirement for onsite solar electricity generation.

Notwithstanding the proposed project's consistency with policies, plans, and standards, without implementation of the SMAQMD Tier 1 GHG BMPs proposed under Mitigation Measure GHG-A, the project could result in the generation of GHG emissions at a level greater than its fair share of emissions reductions consistent with the State GHG reduction targets. Mitigation Measure GHG-A would require the project to meet the CALGreen Tier 2 standards and be designed and constructed without natural gas infrastructure (or provide electric-ready building infrastructure for cooking appliances and offset natural gas used for restaurant cooking appliances). Therefore, without mitigation, implementation of the proposed project could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact is potentially cumulatively considerable.

Environmental Mitigation Measures

The following mitigation measure would require the project to implement the SMAQMD Tier 1 GHG reduction BMPs or equivalent alternatives:

Significance After Mitigation

With the implementation of Mitigation Measure GHG-A, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and the impact would be less than cumulatively considerable with mitigation implemented.

HAZARDS AND HAZARDOUS MATERIALS

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

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

ENVIRONMENTAL SETTING

KNOWN HAZARDOUS MATERIALS

Two Phase I Environmental Site Assessments (ESAs) were prepared for the project site: one covering the northwest corner of the site (0.5 acre) at the corner of Manzanita Avenue and Winding Way (Wallace Kuhl & Associates [Wallace Kuhl] 2019), and the other covering the remainder of the project site (Wallace Kuhl 2018a). In addition, a soil sampling study was prepared for a portion of the project site where a bowling alley was formerly located (Wallace Kuhl 2018b). The Phase I ESAs included a search by EDR, Inc. of over 90 federal, state, and tribal databases related to hazardous materials, including the databases that are maintained under California Public Resources Code Section 65962.5 (i.e., the "Cortese List"[7]). The results of these studies are summarized below.

[7] The provisions of California Government Code Section 65962.5 are commonly referred to as the "Cortese List" (after the legislator who authored the legislation that enacted it). The Cortese List is a planning document used

PHASE I ESA – 4626 MANZANITA AVENUE

This portion of the project site (APN 245-011-018) consists of 0.51 acres of vacant land that was formerly developed with a gasoline station operated under the brands Texaco, Exxon Mobil, and New West. The initial service station configuration at the site operated from at least 1961 to 1977. The site was redeveloped with a new gasoline station configuration in 1977, which included installation of four 10,000-gallon underground storage tanks (USTs). In 1998, the four USTs were removed, and two 20,000-gallon USTs were installed. These two USTs were removed in 2009 when the service station ceased operations (Wallace Kuhl 2019). This parcel is listed as a closed Leaking UST site by the State Water Resources Control Board (SWRCB 2023a). Closed sites are not part of the Cortese List. An UST case qualifies to receive a "Uniform Closure Letter" (UCL) once the owner or operator meets appropriate corrective action (SWRCB 2023a).

During removal of the four 10,000-gallon USTs, petroleum hydrocarbons (including benzene, toluene, and xylene) and methyl-tert-butyl ether (a volatile organic compound) were detected in the soil at concentrations above environmental screening levels. Assessment and remediation activities (which included removal of near-surface contaminated soil and replacement with clean fill material, and operation of a soil-vapor extraction system) were conducted between 1986 and 2006. At the conclusion of remedial actions, the Sacramento County Environmental Management Department (SCEMD) issued a No Further Action letter in May 2007. After the two 20,000-gallon USTs were removed in 2009, no contamination was detected and SCEMD issued a No Further Action letter (Wallace Kuhl 2019).

Groundwater monitoring wells were installed during the remediation phase. Groundwater monitoring data at the project site indicated that the direction of groundwater flow is west-southwest, with a depth to groundwater approximately 75 feet below the ground surface (Wallace Kuhl 2019). Groundwater quality testing indicated that total petroleum hydrocarbons in groundwater were present at a very low level (below agency environmental thresholds), and natural attenuation over time was predicted to eventually reduce the contaminants to non-detect levels (Environmental Resolutions, Inc. 2007).

Wallace Kuhl (2019) conducted a preliminary screening for vapor encroachment and determined that no vapor encroachment hazard was present.

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by state and local agencies to comply with CEQA's requirement to provide information about the location of hazardous materials release sites. Government Code Section 65962.5 requires CalEPA to develop an updated Cortese List at least annually. DTSC and SWRCB are responsible for most of the information contained on the Cortese List. Other state and local government agencies, including the RWQCBs and local cities and counties, are also required to provide additional information for the Cortese List about releases of hazardous materials. In addition, Section 65962.5 requires all project applicants to consult the Cortese List and determine whether any site-specific project is within a hazardous materials site on the list. If so, the project applicant is required to notify the lead agency in writing prior to the issuance of a building permit, so the lead agency can determine the appropriate course of action (which generally includes environmental site assessments and site-specific remediation).

Wallace Kuhl (2019) concluded that no further investigation was necessary, and the low level of residual contamination did not represent a Recognized Environmental Condition.[8]

PHASE I ESA – 4450 MANZANITA AVENUE

This Phase I ESA covered most of the project site (APNs 245-011-012, 245-011-020, and 245-011-021), consisting of 24.3 acres of vacant land. Parcel 245-011-020 was formerly developed with a commercial building that included a bowling alley (known as Crestview Lanes) from at least 1964 to 2015. The commercial building was demolished in 2015. Wallace Kuhl (2018a) did not find any evidence of Recognized Environmental Conditions at the site. However, chlorinated solvents are known to have been used during maintenance of the machinery associated with bowling alleys. In addition, polychlorinated biphenols (PCBs) may have been present in hydraulic fluids possibly used in machinery at the bowling alley during the 1960s and 1970s. Therefore, Wallace Kuhl (2018a) recommended that further soil sampling be performed in case there may have been historic accidental spills, the results of which are described below.

SOIL SAMPLING REPORT – FORMER BOWLING ALLEY (4450 MANZANITA AVENUE)

As described by Wallace Kuhl (2018b), historic operations of bowling alleys have been linked to chlorinated solvent contamination as a result of spilled or improper disposal of cleaning solvents and/or hydraulic oils used in the operation of on-site machinery. Research conducted by Wallace Kuhl (2018b) determined that the hydraulic machinery used at the bowling alley was concentrated along the east side of the former structure. Wallace Kuhl collected four soil samples within the footprint of the former structure, along the eastern perimeter, which were evaluated for chlorinated solvents and PCBs.

No chlorinated solvents or PCBs were detected during the laboratory analysis, based on the laboratory detection limits. Therefore, no constituent was present at a concentration that exceeded the respective U.S. Environmental Protection Agency Regional Screening Level or California Department of Toxic Substances Control's Human Health Risk Assessment threshold for evaluating human health risks under a residential scenario. Thus, Wallace Kuhl (2018b) concluded that soil at the site is appropriate for the planned residential land use (which is the most restrictive in terms of constituent concentrations), as well as all other land uses.

OTHER KNOWN HAZARDOUS MATERIALS SITES

Several other closed hazardous materials sites are located immediately adjacent to the north, northwest, and west of the project site, and further to the north and west within 0.5 mile of the project site (SWRCB 2023b, California Department of Toxic Substances Control [DTSC] 2023). As part of the Phase I ESAs performed for the project site, Wallace Kuhl reviewed records associated with these off-site hazardous materials sites and determined that they

[8] A Recognized Environmental Condition is defined by the American Society for Testing and Materials (ASTM) Standard ASTM E1527-13 as the presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the property, or into the ground, groundwater, or surface water of the subject site.

had not resulted in environmental contamination at the project site and do not represent a hazard for the proposed project (Wallace Kuhl 2019, 2018a). In 2023, AECOM performed a search of the GeoTracker and EnviroStor hazardous materials contamination site databases maintained by SWRCB and DTSC, respectively. No additional contamination sites other than those previous evaluated by Wallace Kuhl (2019, 2018a) were reported (SWRCB 2023b, DTSC 2023).

SCHOOLS

Options for Youth, a public charter school serving grades 7–12 located at 5825 Windmill Way, is approximately 335 feet west of the project site. The Sacramento Adventist Academy, a private kindergarten through grade 12 (K–12) school located at 5601 Winding Way, is approximately 0.25 mile west of the northern portion of the project site. St. John the Evangelist, a private K–8 school located at 5701 Locust Avenue, is approximately 0.17 mile southwest of the southern portion of the project site.

AIRPORTS

Sacramento McClellan Airport, a privately owned public-use general aviation airport, is approximately 3.6 miles west of the project site.

WILDLAND FIRE HAZARDS

The project site is not located in or near a wildland fire hazard area, including a State Responsibility Area or a State or local very high fire hazard severity zone (California Department of Forestry and Fire Protection [CAL FIRE] 2022).

DISCUSSION

A) CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS?

Project operation would include the use of small amounts of household cleaners at new residential land uses, and new commercial uses would include the routine transport and use of gasoline and diesel, small amounts of pesticides and fertilizers for landscape maintenance, and cleaning agents at the proposed gasoline station/car wash. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and the Caltrans, and use of these materials is regulated by DTSC, as outlined in CCR Title 22. The project applicant and its construction contractors, along with future residents and businesses, would be required to use, store, and transport hazardous materials in compliance with applicable federal and State regulations during project construction and operation. Because the project would be required to implement and comply with existing hazardous material regulations, and because each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated quicker response to emergencies, this impact would be **less than significant**.

B) CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND/OR ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT?

Project operation would involve the use of gasoline, diesel, and cleaning agents at the proposed gasoline station/car wash. Operation of the gasoline station/car wash would require installation of UST(s). In addition, a small propane aboveground storage tank (AST) for refilling individual propane bottles could also be installed. The SCEMD is the local Certified Unified Program Agency (CUPA) for the County, as designated by the California Environmental Protection Agency. As the local CUPA, SCEMD is responsible for implementation and oversight of underground storage of hazardous substances, hazardous materials business plans, hazardous waste generators, the California Accidental Release Prevention (CalARP) Program, hazardous materials plans required by the California Uniform Fire Code, and spill prevention control plans for petroleum ASTs. As the Sacramento County CUPA, SCEMD performs the following functions:

- Surveying new and existing facilities to determine applicability;
- Permitting and inspection of regulated facilities;
- Providing educational guidance and notice of changing requirements stipulated in State or Federal laws and regulations;
- Investigations of complaints regarding spills or unauthorized releases; and
- Administrative enforcement actions levied against facilities that have violated applicable laws and regulations.

The SCEMD's UST Program is intended to protect public health, the environment, and groundwater from potential contamination or adverse effects associated with unintended releases from the underground storage of hazardous materials. SCEMD provides regulatory oversight for all USTs in the County, including:

- Permit issuance;
- Routine inspections of ongoing site operations;
- Review and approval of construction, repair, upgrade, and removal applications; and
- Inspections of construction, repair, upgrade, and removal activities.

The California Health and Safety Code (Chapter 6.7, Section 25284), California Code of Regulations (Title 23, Chapter 16, Sections 2711 and 2712), and Sacramento County Municipal Code (Title 6, Chapter 6.34, Section 6.34.030) require that a UST owner or operator must obtain a permit to install, upgrade, or repair a UST. SCEMD is the agency that issues these permits in Sacramento County. Documents that must be provided in support of permit applications include plans detailing the exact location, size, and nature of the proposed UST and all associated infrastructure (such as piping and sensors); depth to groundwater; distance from the nearest well; proof of training for the personnel installing the tank system; proof of installation of a monitoring system (for leak detection); and a written monitoring plan.

Operation of the proposed commercial buildings would also require the use of small amounts of hazardous materials such as refrigerants and coolants, along with herbicides for weed control and paints and solvent for ongoing maintenance. Similarly, the residential component of the proposed project would involve the use of small quantities of substances such as household cleaning products, herbicides for weed control, and paints and solvent for ongoing maintenance. However, none of these materials would be acutely hazardous, and they would not require USTs or ASTs. All end-product users are required to read and follow the manufacturer's labeling instructions for use, storage, and disposal of hazardous materials.

Modern USTs are double-walled to provide containment in the event of a leak, and are composed of materials such as reinforced plastic or fiberglass that do not corrode. Because the project applicant for the gasoline station would be required to install a modern UST with monitoring and leak detection systems and a written monitoring plan in compliance with SCEMD regulations, and because the hazardous materials used for maintenance of the commercial buildings and residences would be of small amounts and the users are responsible for following manufacturer directions, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment, and this impact would be **less than significant**.

C) EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF AN EXISTING OR PROPOSED SCHOOL?

The Options for Youth school is approximately 335 west of the project site. The Sacramento Adventist Academy is approximately 0.25 mile west of the project site, and St. John the Evangelist School is approximately 0.17 mile southwest of the project site. The project applicant and its construction contractors would be required to use, store, and transport hazardous materials in compliance with applicable federal and State regulations during project construction and operation. Minor amounts of cleaning products, herbicides, and paints used for household and commercial cleaning at the project site would not represent a hazard. The proposed project would not include the emissions or handling of acutely hazardous materials, substances, or wastes. As discussed in impact threshold b) above, the project applicant would be required to obtain a permit and comply with all SCEMD regulations related to USTs for gasoline, diesel, and car wash wastewater. Finally, as discussed in Air Quality, the proposed project would not result in construction- or operation-related hazardous air emissions for children or staff at either school. Therefore, this impact would be **less than significant**.

D) BE LOCATED ON A SITE WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES COMPILED PURSUANT TO GOVERNMENT CODE § 65962.5 AND, AS A RESULT, WOULD IT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT?

A Phase I ESA performed by Wallace Kuhl for 23.4 acres of the 23.8-acre project site found no evidence of prior contamination (Wallace Kuhl 2018a). However, the project site formerly included a commercial center with a bowling alley where hazardous materials (i.e., chlorinated solvents and/or PCBs) could have historically been used. The bowling alley was located immediately east of the existing small commercial building adjacent to the project site, and is proposed for redevelopment with residential uses. Wallace Kuhl (2018b)

performed soil sampling in the area where hydraulic machinery used at the bowling alley was located. No chlorinated solvents or PCBs were detected by the laboratory analysis. Thus, any chemicals that may have been used at the former bowling alley did not result in environmental contamination and there is no hazard for the proposed site redevelopment. Thus, there would be **no impact** related to hazardous materials from the proposed development on most of the 23.8-acre site.

As described in detail in the Environmental Setting, the northwest corner of the project site comprising approximately 0.5 acre is listed as a closed Leaking UST site by the SWRCB (SWRCB 2023a). Closed sites are not part of the Cortese List. The site was operated as a gasoline station from approximately 1961 to 2009, when the station was demolished, and all USTs and associated infrastructure were removed. Known contamination was associated primarily with soil, which was excavated and removed, and most of the remaining soil remediation was achieved through operation of a soil- vapor extraction system. Groundwater contamination levels were reported to be extremely low, well below the respective agency environmental thresholds. The depth to groundwater at the project site is approximately 75 feet below the ground surface. At the conclusion of remedial activities, SCEMD issued a No Further Action letter in 2007 and the case was closed. A Phase I ESA for this parcel performed by Wallace Kuhl in 2019 found that there was no hazard for the proposed redevelopment as related to potential vapor intrusion, and that the low level of residual constituents from soil and groundwater contamination did not represent a Recognized Environmental Condition. Because remediation has been achieved, there are no environmental controls in place at the site, and Wallace Kuhl (2019) did not recommend any further action.

Since the last soil and groundwater samples were obtained in 2005, natural attenuation has continued to occur over the last 18 years and therefore constituent concentrations in soil and groundwater today (if any are still present) would be below laboratory detection limits. Therefore, redevelopment of the 0.5-acre northwest corner of the project site with a new gasoline station would not represent a hazard to construction workers, future employees and residents, or the environment. This impact would be **less than significant**.

E) FOR A PROJECT LOCATED WITHIN AN AIRPORT LAND USE PLAN OR, WHERE SUCH A PLAN HAS NOT BEEN ADOPTED, WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT, WOULD THE PROJECT RESULT IN A SAFETY HAZARD FOR PEOPLE RESIDING OR WORKING IN THE PROJECT AREA?

The project site is not situated within 2 miles of a public or public-use airport. Please see the "Initial Study Checklist" at the end of this document for more details. There is **no impact**.

F) IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN?

All construction materials and equipment would be stored on the project site. Short-term and temporary lane closures on Winding Way and Manzanita Avenue during the construction phase may be required during installation of the project site access roads. However, the project site is an urbanized areas that is surrounded by a grid of north– south and east–west roadways that would provide alternate routes for use by emergency providers such as fire and police, if necessary.

The project site is in the Carmichael community of unincorporated Sacramento County. Carmichael is not an incorporated city, and therefore any necessary emergency evacuations would be coordinated by Sacramento County officials through the County Office of Emergency Services (OES). Sacramento County OES has prepared and maintains the Sacramento County Evacuation Plan (Sacramento County OES 2018). As discussed in the Evacuation Plan, the primary mode of transportation that would be used during an evacuation would be private transportation. Law enforcement would be the primary agency for managing the movement of people during an evacuation. Primary evacuation routes in Sacramento County consist of the major interstates, highways, and prime arterial roadways. Traffic conditions are monitored along evacuation routes, and operational adjustments would be made by County officials as necessary during an evacuation to maximize throughput. During an evacuation, County Department of Transportation (DOT) traffic engineers, along with Caltrans, would be able to quickly calculate traffic flow capacity and decide which of the available traffic routes should be used to move people in the correct directions and to adjust evacuation routes based on real-time conditions. The project site is situated within Evacuation District 2, Zone 23 (Sacramento County OES 2021). An evacuation in the project area would be coordinated by the Sacramento County Sheriff's Office North District. Winding Way and Manzanita Avenue would serve as the closest evacuation routes from the project site. Both of these roadways are four-lane divided highways that provide north–south and east–west access onto a grid of many other north–south and east–west roadways. Traffic from any necessary evacuation would be dispersed throughout this grid network as shown in the Evacuation Plan (Sacramento County OES 2018). Furthermore, the project site was formerly developed with a gasoline station and a commercial center, which included businesses that would have required evacuation in the event of an emergency, similar to the needs of the commercial development associated with the proposed project. The commercial development at the project site would be accessed from Manzanita Avenue and the proposed residential units would be accessed from Winding Way. Planned access ways would provide direct access to the residential areas within the project site (see Plate IS-3 in Project Description). Thus, the proposed design for development at the project site includes an appropriate roadway circulation network that meets Sacramento County standards for emergency access and evacuation.

Therefore, redevelopment of the project site would not substantially impair emergency access or implementation of an emergency evacuation plan, and this impact would be **less than significant**.

G) EXPOSE PEOPLE OR STRUCTURES, EITHER DIRECTLY OR INDIRECTLY, TO A SIGNIFICANT RISK OF LOSS, INJURY, OR DEATH INVOLVING WILDLAND FIRES?

The project site is located in an urbanized area of Sacramento County (Carmichael), and is not situated within or near a State Responsibility Area or a very high fire hazard severity zone. The project site and the surrounding area are within a Local Responsibility Area, and are not designated as very high or moderate fire hazard severity zones. There are no very high or moderate fire hazard severity zones delineated within the urbanized area of Sacramento, including the project site (CAL FIRE 2022).

The project site consists of vacant land covered with grasses, forbs, and a few trees situated in a line in a north–south direction in the middle of the project site. The site is surrounded by existing urban development on all sides: commercial uses are present to the north and northwest; a small commercial building with a paved parking area is present adjacent to the project site on the east side of Manzanita Avenue; an office building and multi-family residential are present to the west; and multi-family residential is present to the east. Land immediately south of the project site consists of a vacant, approximately 5-acre area (comprised of grasses and forbs) that is planned for future multi-family residential (not part of the proposed project), but does include project- related drainage improvements; immediately south of this parcel, single-family residential uses and a corner of Jan Park are present.

The project site is currently served by the Sacramento Metropolitan Fire District, and those services would continue in the future. The project site was formerly developed with a gasoline station and a commercial building; redevelopment of the project site with the proposed land uses would not exacerbate wildland fire risks. Thus, there would be **no impact**. (See "Wildfire", for additional analyses related to wildland fire hazards, which were determined to result in no impact.)

HYDROLOGY AND WATER QUALITY

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

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

    i) Result in a substantial erosion or siltation on- or off-site;

    ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff; or

    iii) Impede or redirect flood flows?

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

ENVIRONMENTAL SETTING

WATERSHEDS

The project site is situated within the Arcade Creek watershed delineated by the National Hydrologic Dataset (HUC-12), and within the Verde Cruz Creek subwatershed delineated by the Sacramento County Department of Water Resources (Sacramento County DWR 2021). The Verde Cruz Creek subwatershed encompasses approximately 1,226 acres; this land area drains north and west into Arcade Creek. Arcade Creek flows southwest into the Natomas East Main Drainage Canal (NEMDC/Steelhead Creek), which flows southwest and ultimately discharges into the Sacramento River just north of its confluence with the American River.

STORMWATER DRAINAGE

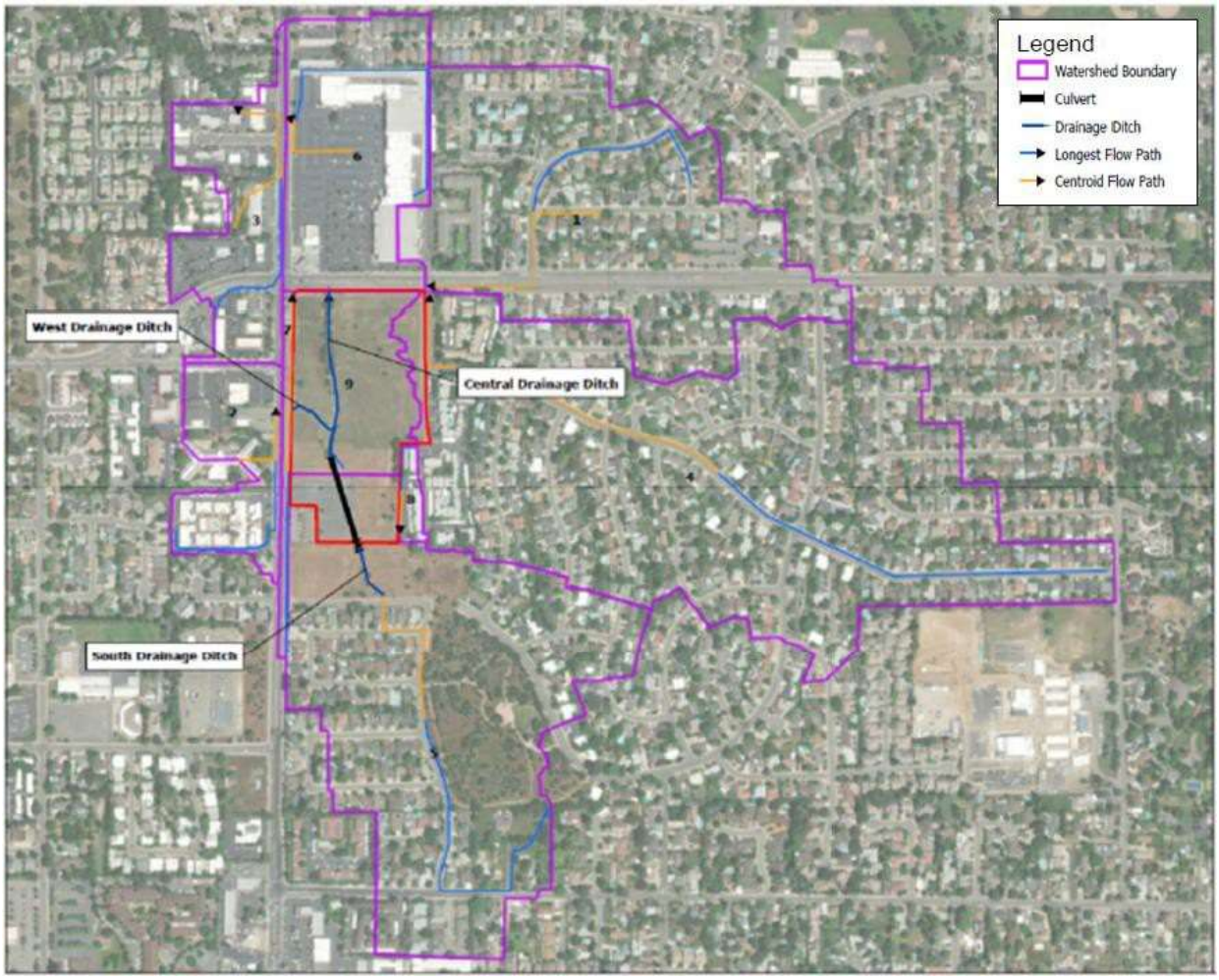
The topography at the project site is gently rolling; elevations range from 106 to 124 feet above mean sea level. The site drains to the north through several shallow drainage ditches located in the central, western, and southern portions of the project site, as shown in Plate IS-14.

These drainage ditches also collect upstream, off-site stormwater runoff as follows: (1) runoff from Jan Drive (south of the project site); (2) runoff west of Manzanita Avenue; and (3) runoff from a portion of the Crestview Apartment complex immediately east of the project site. The combined upstream off-site runoff and the on-site runoff are conveyed north to an existing downstream County-owned, 60-inch storm drain culvert that is located underneath Winding Way. Runoff eventually discharges through a 72- inch culvert into Verde Cruz Creek, northwest of the project site (Wood Rodgers 2023).

FLOODING

The project site is located in an area designated by the Federal Emergency Management Agency (FEMA) as unshaded Zone X—an area of minimal flood hazard (FEMA 2012).

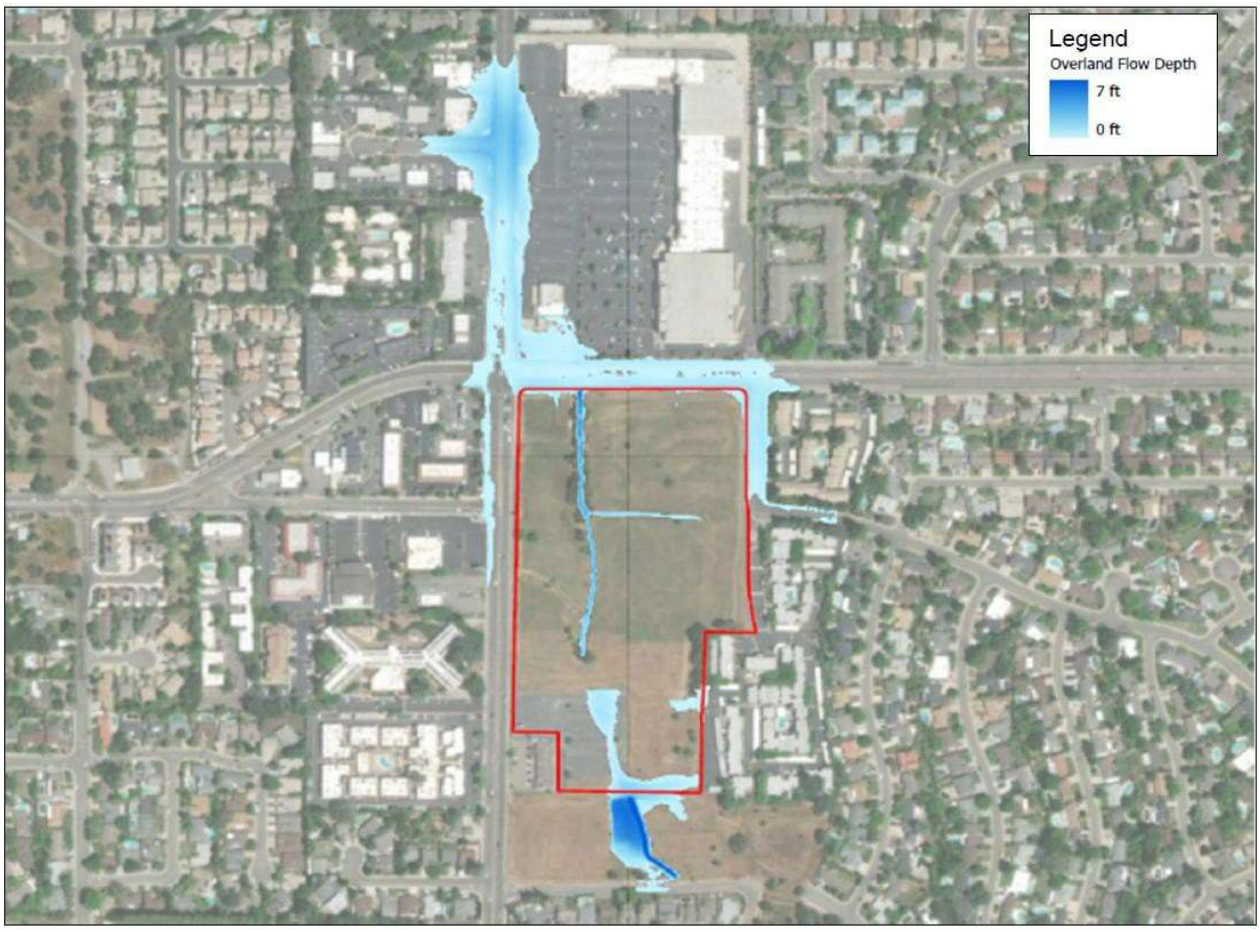
Plate IS-14: Existing Conditions Stormwater Drainage



Source: Wood Rodgers 2023

The existing on-site drainage system includes a 30-inch underground culvert that connects the South Drainage Ditch to the Central Drainage Ditch. The 30-inch culvert begins at the southern edge of the proposed development area, and traverses underneath the existing approximately 1.8-acre paved parking lot (this culvert is indicated by the thick black line in Plate IS-14). Under existing conditions, a 100-year storm event could result in ponding of water to depths up to 7 feet along the South Drainage Ditch south of the proposed development area, and approximately 1 foot or less over the parking lot and the southeastern edge of the proposed development area (Plate IS-15). In addition, under existing conditions a 100-year storm event could also result in ponding depths ranging from 1–4 feet along the Central Drainage Ditch north of the culvert, and along a smaller east–west drainage ditch that connects to the Central Drainage Ditch (Plate IS-15) (Wood Rodgers 2023).

Plate IS-15: Existing Conditions 100-Year Stormwater Ponding



Source: Wood Rodgers 2023

SURFACE WATER QUALITY

As required by the Porter-Cologne Water Quality Control Act, the Central Valley Regional Water Quality Control Board (Central Valley RWQCB) has designated beneficial uses for water body segments in its jurisdiction, along with water quality criteria necessary to protect these uses, as contained in the Sacramento and San Joaquin River Basin Plan (Central Valley RWQCB 2019). In addition, the federal Clean Water Act (CWA) Section 303(d) requires states to identify waters where the permit standards, any other enforceable limits, or adopted water quality standards are still unattained. The CWA also requires states to develop total maximum daily loads (TMDLs) to improve the water quality of impaired water bodies. TMDLs are the quantities of pollutants that can be safely assimilated by a water body without violating water quality standards. TMDLs are developed for impaired water bodies to maintain beneficial uses as designated in the applicable Basin Plan, achieve water quality objectives, and reduce the potential for future water quality degradation. NPDES permits for water discharges must take into account the pollutants for which a water body is listed as impaired.

Table IS-16 lists impaired water bodies included in the SWRCB's 303(d) list that could receive runoff from the proposed project, including the pollutants of concern and whether

they have approved TMDLs. Even if a stream is not included in the SWRCB's 303(d) list (such as Verde Cruz Creek), any upstream tributary to a 303(d)-listed stream could contribute pollutants to the listed segment.

GROUNDWATER

The project site is situated in the Sacramento Groundwater Basin, North American Subbasin (DWR Basin Code 5-021.64), which underlies northern Sacramento, southern Sutter, and western Placer counties. The North American Subbasin is not in a condition of overdraft. Groundwater in the project area is managed by the Sacramento Groundwater Authority, which is the designated Groundwater Sustainability Agency for the southern portion of the Subbasin (where the project site is situated), as required by the Sustainable Groundwater Management Act (SGMA). A Groundwater Sustainability Plan for the North American Subbasin was prepared and submitted to DWR in January 2022 (GEI Consultants 2021). As required by the SGMA, the Groundwater Sustainability Plan includes a description of the subbasin setting, hydrogeological conceptual model, comprehensive water budget, basin-wide monitoring network, sustainable management criteria, and projects and management actions necessary to ensure the Subbasin's sustainability. Generally, the quality of groundwater in the subbasin is suitable for nearly all uses, except for localized contamination plumes and localized, naturally-occurring and human-caused quality issues. Modeling conducted for the Groundwater Sustainability Plan, including the projected conditions water budget scenario (i.e., future development through 2040 with implementation of the specific management actions included in the Groundwater Sustainability Plan), indicates there will be greater inflows than outflows in the North American Subbasin, resulting in an increase in groundwater storage over time. The Groundwater Sustainability Plan contains a description of specific projects and management actions that will be undertaken in the North American Subbasin to promote groundwater sustainability, which includes continued conjunctive use (i.e., a mix of groundwater and surface water) in urban areas, and continued water demand management.

Table IS-16: Section 303(d) List of Impaired Waterbodies

Impaired Water Body	Pollutant	Pollutant Source	TMDL Status
Arcade Creek	Bifenthrin	Unknown	Expected in 2035
Arcade Creek	Copper	Unknown	Expected in 2021; not yet approved
Arcade Creek	Malathion	Unknown	Expected in 2035
Arcade Creek	Toxicity	Unknown	Expected in 2021; not yet approved
Arcade Creek	Pyrethroids	Unknown	Approved in 2019
Arcade Creek	Fipronil Sulfone	Unknown	Expected in 2035
Arcade Creek	Permethrin	Unknown	Approved in 2019
NEMDC/Steelhead Creek (downstream of Arcade Creek confluence)	Polychlorinated biphenyls (PCBs)	Unknown	Expected in 2020; not yet approved
NEMDC/Steelhead Creek (downstream of Arcade Creek confluence)	Mercury	Gold mining settlements and local mercury mining (historic); erosion and drainage from abandoned mines (ongoing)	Expected in 2027
NEMDC/Steelhead Creek (downstream of Arcade Creek confluence)	Indicator Bacteria	Unknown	Expected in 2035
NEMDC/Steelhead Creek (downstream of Arcade Creek confluence)	Trash	Unknown	Expected in 2035
Sacramento River (Knights Landing to the Delta)	Chlordane	Unknown	Expected in 2021; not yet approved
Sacramento River (Knights Landing to the Delta)	Dichlorodiphenyltrichloro-ethane (DDT)	Unknown	Expected in 2027
Sacramento River (Knights Landing to the Delta)	Mercury	Gold mining settlements and local mercury mining (historic); erosion and drainage from abandoned mines (ongoing)	Expected in 2012; not yet approved
Sacramento River (Knights Landing to the Delta)	Dieldrin	Unknown	Expected in 2022; not yet approved
Sacramento River (Knights Landing to the Delta)	Polychlorinated biphenyls (PCBs)	Unknown	Expected in 2021; not yet approved
Sacramento River (Knights Landing to the Delta)	Toxicity	Unknown	Expected in 2027
Sacramento River (Knights Landing to the Delta)	Temperature (Water)	Unknown	Expected in 2033

Notes: TMDL = total maximum daily load; NEMDC = Natomas East Main Drainage Canal Source: State Water Resources Control Board 2022a

No existing groundwater wells are present on the project site and no new wells would be drilled to supply water for the proposed project. The project site is served with potable water by the Carmichael Water District. Please see Utilities and Service Systems, of this IS/Mitigated Negative Declaration (MND) for additional details regarding water supply.

Discussion

A) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Water quality in the project region is regulated by the Sacramento County DWR at a local level, and by the Central Valley RWQCB through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) (Central Valley RWQCB 2019) at a regional level. Water quality at the state level is regulated by the SWRCB through issuance of NPDES permits (which control stormwater discharges and set pollutant thresholds during construction and operation) under the CWA. Pollutant thresholds in the NPDES permits and the Basin Plan are tied to TMDLs developed by the SWRCB and approved by the U.S. Environmental Protection Agency in compliance with Section 303(d) of the CWA.

Project-related construction activities would occur throughout the proposed development area, which comprises approximately 18.6 acres of the 24.8-acre project site. Within the southern 6.2-acre parcel that is zoned for future high-density residential development, the only project-related work would be associated with installation of a new underground stormwater drainage pipeline that would tie into the South Drainage Ditch just upstream (south) of the existing 30-inch culvert.

Project-related construction throughout the proposed development area would require demolition of the existing paved parking lot, vegetation removal, excavation, trenching, grading, and construction equipment staging and material stockpiling, which would temporarily disturb surface soils. These activities would expose soil to the erosive forces of wind and water. The soil could be transported via the existing open ditches and overland flow to Verde Cruz Creek, Arcade Creek, NEMDC/Steelhead Creek, and ultimately to the Sacramento River, thereby increasing turbidity and degrading water quality.

To receive a building permit from the County, compliance with Sacramento County Code Chapter 16.44 (Land Grading and Erosion Control) requires the project applicant to prepare and submit a Grading and Erosion Control Plan to the County Engineering Department. The plan must incorporate erosion and sediment control measures for stormwater runoff during construction, as well as existing and proposed operational storm drainage design features to control increased runoff from the project site.

The project is required by law to comply with the provisions of the SWRCB's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order WQ 2022-0057-DWQ, NPDES Permit No. CAS000002) (Construction General Permit) (SWRCB 2022b). The Construction General Permit regulates stormwater discharges for construction

activities under the CWA and applies to all land-disturbing construction activities that would disturb 1 acre or more. The project applicant must submit a notice of intent to discharge to the Central Valley RWQCB, and must prepare and implement a SWPPP that includes site-specific BMPs to minimize those discharges. All NPDES permits also have inspection, monitoring, and reporting requirements. The Central Valley RWQCB requires dischargers to implement construction and operational design features and BMPs that are specifically intended to reduce the potential for downstream hydromodification. The Construction General Permit also requires implementation of BMPs that are designed to prevent accidental spills of hazardous materials during the construction phase to the maximum extent practicable, and the SWPPP must include procedures for immediate cleanup should any releases occur. The Central Valley RWQCB also has the authority to issue waivers to reports of waste discharge (WDRs) and/or WDRs for broad categories of “low threat” discharge activities that have minimal potential for adverse water quality effects when implemented according to prescribed terms and conditions. If construction dewatering were required during project operation, the project applicant and its construction contractor would be required to comply with the terms of the Central Valley RWQCB’s Waste Discharge Requirements for Limited Threat Discharges to Surface Water (Order R5-2022-0006-01, NPDES Permit No. CAG995002) (Central Valley RWQCB 2023), which is specifically designed to prevent adverse water quality effects from activities such as construction dewatering.

Long-term operational discharges of urban contaminants into the stormwater drainage system and ultimate receiving waters would increase with the buildout of the proposed project, compared to existing conditions. The major factor in this increase is the added amount of impervious surfaces, primarily taking the form of parking lots, driveways, streets, rooftops, and sidewalks. New impervious surfaces associated with new development would result in an associated increase in urban stormwater runoff, which could be a source of surface water pollution.

Sacramento County has a NPDES Municipal Stormwater (MS4) Permit issued by the Central Valley RWQCB (Order No. R5-2016-0040-010) (Central Valley RWQCB 2016). To comply with TMDLs established by the Basin Plan, the Municipal Stormwater Permit requires the County to reduce pollutants in operational stormwater discharges to the maximum extent practicable, and to effectively prohibit non-stormwater discharges, through management practices, control techniques and systems, design and engineering methods, and other such provisions. The County has adopted a Stormwater Management and Discharge Control Ordinance (Sacramento County Code Chapter 15.12), to implement the provisions of the MS4 permit. The ordinance prohibits the discharge of unauthorized non-stormwater to the County’s stormwater conveyance system and local creeks. The ordinance requires dischargers to implement site-specific BMPs designed to reduce pollutants in operational stormwater runoff. The ordinance also includes inspection and monitoring requirements. The project site is not located within an area that is subject to hydromodification requirements (Sacramento Stormwater Quality Partnership 2021:Figure 5-2). However, the County requires implementation of Low Impact Development (LID) techniques designed to provide stormwater pre-treatment prior to discharge into the County storm drainage system. LID is a stormwater management strategy that emphasizes

conservation and use of existing natural site features integrated with distributed, small-scale stormwater controls to more closely mimic natural hydrologic patterns in residential, commercial, and industrial settings. LID measures are typically integrated into site landscaping (including open space, yards, streetscapes, road medians, and parking lot and sidewalk planters) or into the design of paved and other impervious areas. The types of site-specific BMPs and LID techniques that may implemented at each project site are contained in the Stormwater Quality Design Manual for the Sacramento Region (Sacramento Stormwater Quality Partnership 2021). Examples include performance standards, source control BMPs, treatment BMPs, structural BMPs, operational BMPs, building material specifications or limitations, site design requirements, signage and marking, and associated maintenance programs or schedules.

In conclusion, compliance with the above-listed regulations, standards, ordinances, and permit terms would require the proposed project to reduce pollution and runoff generated at the project site through implementation of operation-related LID technologies, BMPs, and pre-treatment, along with preparation of a SWPPP with associated BMPs designed to control construction-related erosion and pollutants. These measures would protect water quality as required by the Sacramento and San Joaquin River Basin Plan. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and this impact would be **less than significant**.

B) SUBSTANTIALLY DEPLETE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE SUCH THAT THE PROJECT MAY IMPEDE SUSTAINABLE GROUNDWATER MANAGEMENT OF THE BASIN?

The project site is situated in the Sacramento Groundwater Basin, North American Subbasin. This subbasin is not in a state of overdraft (GEI Consultants 2021). No existing groundwater wells are present on the project site and no new wells would be drilled to supply water for the proposed project. The project site is served with potable water by the Carmichael Water District (CWD), which obtains most of its water through surface water rights. In normal hydrologic years, CWD relies on groundwater to meet 15 to 30 percent of its total supply. In critically dry years, more groundwater is used; however, CWD has historically pumped substantially less than its allocated groundwater rights (Tully & Young 2021). Furthermore, as a result of its implementation of proactive conjunctive use, CWD has banked over 50,000 acre-feet of groundwater in the basin since 1998. This water may be available as a CWD resource for use in dry years. As determined in CWD's Urban Water Management Plan, CWD has sufficient water supplies to serve the proposed demand throughout its service area in all water years (Tully & Young 2021). Therefore, the proposed project would not substantially decrease groundwater supplies, and this impact would be **less than significant**. (Please see Utilities and Service Systems, of this IS/MND for additional details regarding water supply.)

Approximately 1.8 acres of existing impervious surfaces, in the form of a paved parking lot, are present at the southern end of the proposed development area. However, the remaining approximately 16.2 acres of the proposed development area consist of undeveloped land, which allows rainwater to percolate through to the groundwater table

under existing conditions. Project implementation would result in the installation of new impervious surfaces over most of the proposed development area. Proposed landscaping throughout the development area, including LID planters and tree/shrub planters in the commercial area, along with the turf grass lawns and LID planters in the residential area, would continue to allow groundwater recharge on portions of the proposed development area. However, most of the proposed development area would consist of impervious surfaces, primarily taking the form of parking lots, driveways, streets, rooftops, and sidewalks, which would reduce groundwater recharge as compared to current conditions.

Modeling conducted for the North American Subbasin Groundwater Sustainability Plan included a projected conditions water budget scenario, which includes future development through 2040 along with implementation of the specific management actions included in the Groundwater Sustainability Plan. Modeling results indicate there will be greater inflows than outflows in the North American Subbasin, resulting in an increase in groundwater storage over time (GEI Consultants 2021). Furthermore, the Groundwater Sustainability Plan contains a description of specific projects and management actions that will be undertaken in the North American Subbasin to promote groundwater sustainability, which includes continued conjunctive use (i.e., a mix of groundwater and surface water) in urban areas, and continued water demand management. Because future development through the year 2040 overlying the North American Subbasin—which would include development within the vicinity of the proposed project site—has been accounted for in the groundwater modeling performed for the Groundwater Sustainability Plan, and it has been determined that groundwater storage over this period would increase rather than decrease, implementation of the proposed project would not interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, and therefore this impact would be **less than significant**.

C) SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER OR THROUGH THE ADDITION OF IMPERVIOUS SURFACES, IN A MANNER WHICH WOULD:

i) Result in a substantial erosion or siltation on- or off-site?

As discussed in detail in (a) above, project implementation would result in excavation and grading throughout the approximately 18.6-acre proposed development area, along with a small area at the north end of the South Drainage Ditch. Construction activities would include filling and grading all of the existing on-site drainage ditches that are north of the 30-inch culvert (see Plate IS-14). Earthmoving activities throughout the project site could result in erosion and siltation. However, as discussed in detail in (a) above, the project applicant is required to comply with Sacramento County Code Chapter 16.44 (Land Grading and Erosion Control) by preparing and submitting a Grading and Erosion Control Plan to the County Engineering Department for review and approval prior to issuance of building permits. The plan must contain BMPs that would be implemented to control erosion and off-site sediment transport. The project applicant is also required to comply with the requirements of the SWRCB's Construction General Permit, which would require preparation of a SWPPP and implementation of site- specific BMPs designed to control construction-related erosion and sedimentation.

During the operational phase, the project must comply with the County's Stormwater Management and Discharge Control Ordinance (Sacramento County Code Chapter 15.12). As described in (b) above, most of the 18.6-acre proposed development area would consist of impervious surfaces. The County requires incorporation of LID features in new and redevelopment projects. The proposed detention basin would not be used as an LID feature. However, the proposed project includes other LID features (outside of the detention basin). Bio-retention planters are proposed in the landscaped residential area at the north and south ends of the detention basin, and along the property boundary south of Winding Way and west of Rampart Drive (Wood Rodgers 2023:Figure H1). The proposed commercial area consists of approximately 6.8 acres, of which approximately 4.76 acres would be new impervious surfaces (RSC Engineering 2021). Proposed LID treatment facilities within the project's commercial area would consist of stormwater bio-retention planter facilities, disconnected roof drains, and Contech storm filter units[9] to achieve stormwater pre-treatment (RSC Engineering 2021). Bio-retention planters are proposed throughout the landscaped commercial areas as shown in Plate IS-11, Conceptual Commercial Landscape Plan, in Aesthetics. Where stormwater bio-retention planters would not be feasible due to space constraints or topography, the Contech storm filter units would be used to treat the runoff from that area. The proposed LID features would provide appropriate stormwater pre-treatment as required by the County. A Level 2 Drainage Study, which includes proposed on-site stormwater drainage facilities and LID calculations, has been submitted to the County for review (Wood Rodgers 2023). A Level 4 Drainage Study, which would contain construction-level plans and additional details related to the proposed drainage system and LID features, along with an Operations and Maintenance Manual for ongoing maintenance of the detention basin, would be provided to Sacramento County DWR for review and approval when improvement plans are submitted.

For the reasons stated above, the drainage alterations and addition of impervious surfaces at the project site would not result in substantial erosion or siltation on- or off- site, and therefore this impact is considered **less than significant**.

ii) SUBSTANTIALLY INCREASE THE RATE OR AMOUNT OF SURFACE RUNOFF IN A MANNER WHICH WOULD RESULT IN FLOODING ON- OR OFFSITE, OR CREATE OR CONTRIBUTE RUNOFF WATER WHICH WOULD EXCEED THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS, OR PROVIDE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUNOFF?

A Level 2 Drainage Study (Wood Rodgers 2023) has been prepared for the proposed project, and relevant information from that study is presented below. The proposed on- site stormwater drainage system would be comprised of underground pipes and overland flow paths along curbed-and-guttered streets, and incorporating LID features for stormwater quality pre-treatment as described in (c)(i) above. The proposed development area (approximately 18.6 acres) would drain to a detention basin to be located at the north center of the project

[9] Contech storm filter units contain a series of water filters that are placed underground in a concrete vault. A water inlet and outlet is provided at each end of the vault, along with an access panel for the filters to be periodically replaced.

site, immediately south of Winding Way (see Plate IS-15). The detention basin would have a footprint of approximately 0.9 acres and a 100-year stormwater capacity of approximately 6 acre-feet with a minimum 1 foot of freeboard for flood control. The basin would drain to the existing County-owned, 60-inch culvert under Winding Way through a restricted orifice and overflow configuration. The detention basin would contain inflows from the both the proposed retail area and the proposed residential area.

The upstream off-site runoff from Jan Drive and the upstream runoff from the undeveloped parcel immediately south of the project site (zoned for future high-density residential) would be routed through a new 30-inch underground "bypass" pipeline.[10] The bypass pipeline would be installed beginning at the southern end of the existing 30- inch culvert associated with the South Drainage Ditch, and would extend northward underneath the street right-of-ways in the proposed residential area (see Plate IS-16). The bypass pipe would connect to the existing County-owned, 60-inch culvert under Winding Way. The bypass pipeline has been sized to accommodate 100-year flows from the upstream development based on the results of hydrologic modeling performed for the Level 2 Drainage Study, and would alleviate the existing conditions 100-year ponding throughout the proposed development area (Wood Rodgers 2023: Figure 8).

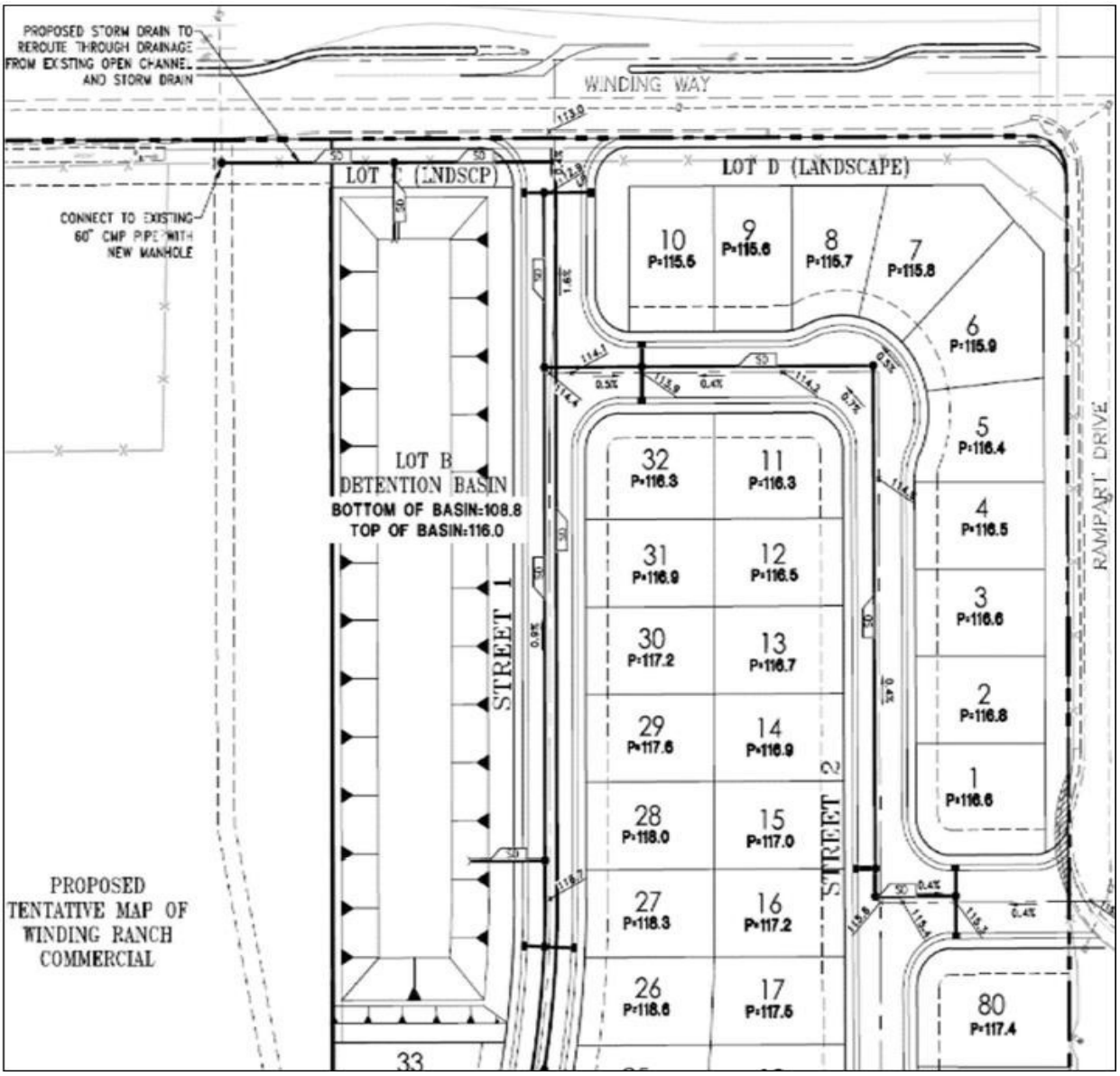
The proposed stormwater drainage system would redirect the off-site drainage originating west of Manzanita Avenue to a new dedicated 30-inch storm drain that would discharge to the County-owned, 60-inch storm drainage pipeline underneath Winding Way, by traveling north (parallel to Manzanita Avenue) and east within the project site through the proposed commercial development area (see Plate IS-18). The storm drainage facilities serving the existing roadway runoff from Manzanita Avenue and Winding Way would not be affected by the proposed project and would not be modified.

The on-site stormwater drainage system in the proposed residential area has been designed to continue to accommodate the existing off-site flows from the Crestview Apartments South, immediately adjacent to the project site's eastern property boundary.

All project-related facilities have been designed to accommodate the 100-year design storm flows as required by the County. Modeling performed for the Level 2 Drainage Study demonstrated that the developed condition flows would not exceed pre- development discharge conditions north (downstream) of the project site, and would successfully alleviate the existing conditions 100-year ponding conditions throughout the proposed development area (Wood Rodgers 2023).

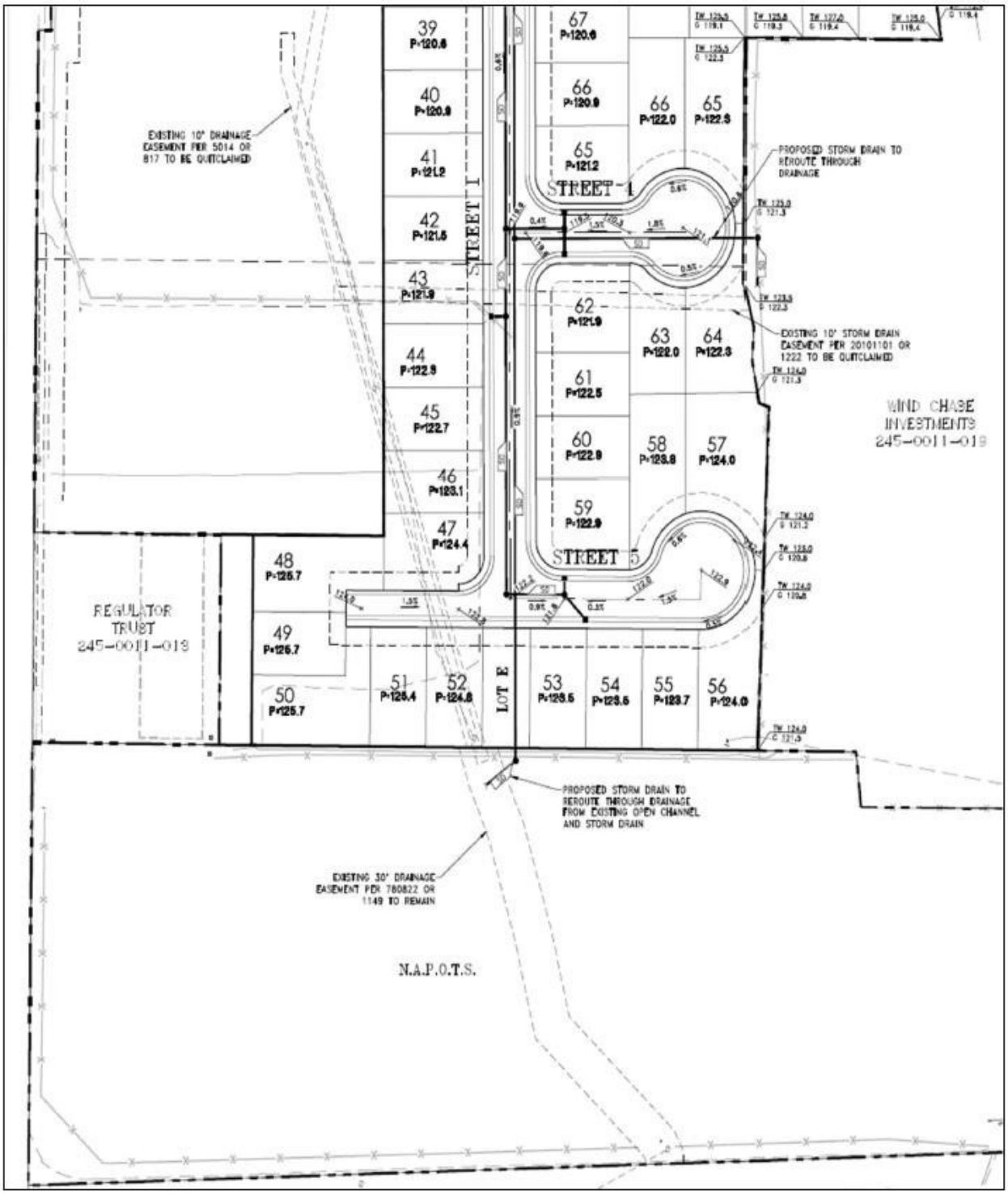
[10] Future high-density residential development on the parcel immediately south of the project site is not part of the proposed project. If and when a site-specific development proposal for that parcel is brought forward in the future, the property owner has agreed that that developer would be responsible for mitigating its own stormwater flows on that parcel (i.e., installing a detention basin).

Plate IS-16: Proposed Detention Basin and Residential Stormwater Connection to Existing County Drainage



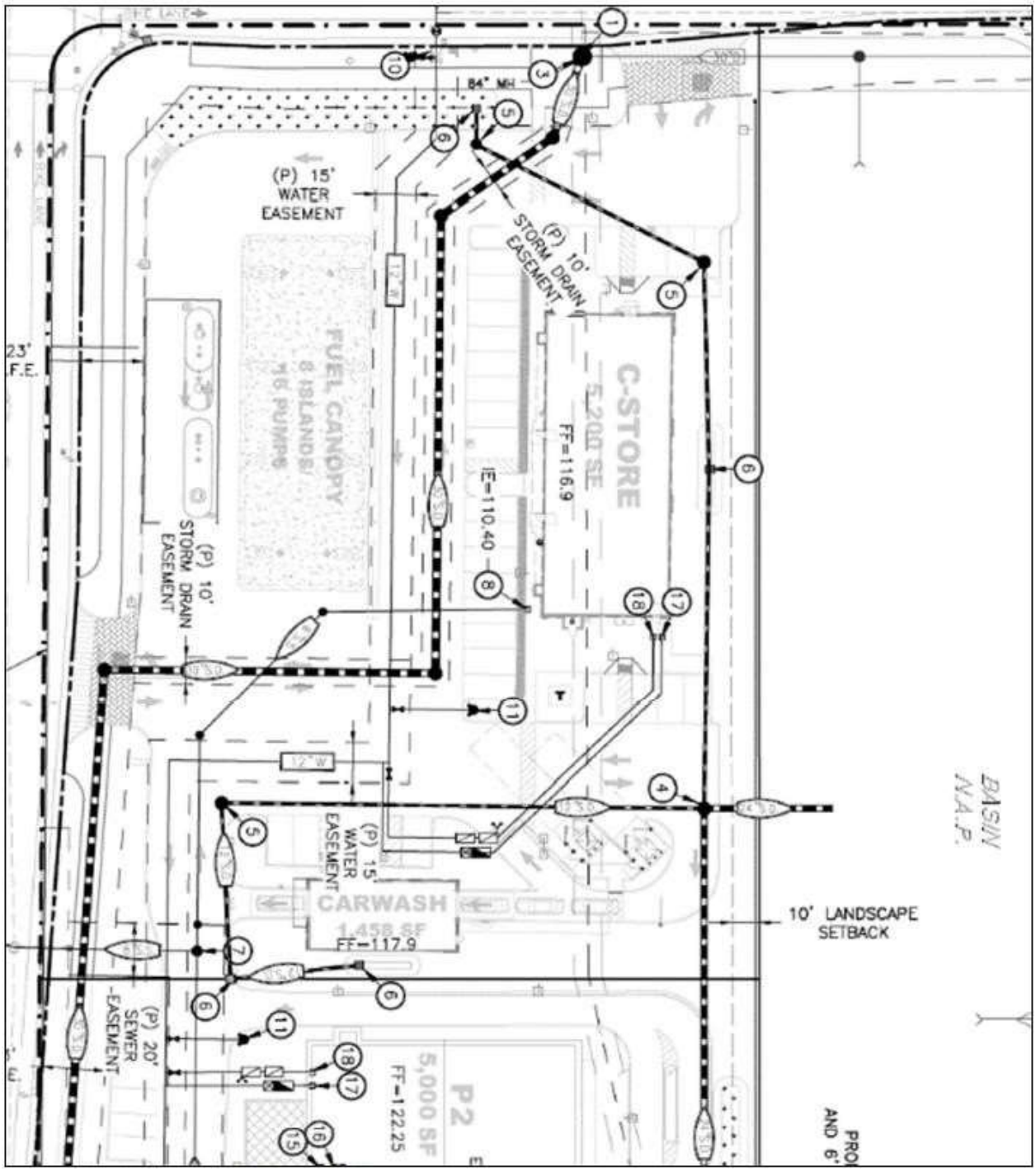
Source: Wood Rodgers 2021, Appendix F (Preliminary Stormwater Quality Report)

Plate IS-17: Proposed Stormwater Bypass Pipeline Connection at South Drainage Ditch



Source: Wood Rodgers 2021, Appendix F (Preliminary Stormwater Quality Report)

Plate IS-18: Proposed Off-Site Stormwater Bypass Pipeline Connection to County-Owned Line and On-Site Commercial Connection to Detention Basin



Source: Wood Rodgers 2021, Appendix F (Preliminary Stormwater Quality Report)

A Level 4 Drainage Study, which would contain construction-level plans and additional details related to the proposed drainage system and LID features, along with an Operations and Maintenance Manual for ongoing maintenance of the detention basin, would be provided to Sacramento County DWR for review and approval when improvement plans are submitted. Furthermore, the proposed LID features (discussed in [c][i], above) would provide appropriate stormwater quality pre-treatment as required by the County.

For the reasons stated above, the proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff; therefore, this impact is considered **less than significant**.

iii) IMPEDE OR REDIRECT FLOOD FLOWS?

The project site is not located in a 100-year flood zone; the site is designated by FEMA as unshaded Zone X—an area of minimal flood hazard (FEMA 2012). Furthermore, the project site is not located in an area subject to 200-year flooding as delineated under SB 5 (DWR 2023). However, as discussed in the Environmental Setting, under existing 100-year storm conditions, stormwater ponding from the existing drainage ditches could occur in various locations within the proposed development area at depths ranging from less than 1 foot to approximately 4 feet (see Plate IS-14). With project implementation, all of the drainage ditches in the proposed development area north of the 30-inch culvert would be filled and graded, and a network of underground stormwater pipelines would be installed, along with a detention basin. Modeling performed for the Level 2 Drainage Study demonstrated that the proposed stormwater drainage system would successfully eliminate all of the existing stormwater ponding throughout the proposed development area (Wood Rodgers 2023).[11] Therefore, the proposed project would not impede or redirect flood flows, and this impact is considered **less than significant**.

D) IN FLOOD HAZARD, TSUNAMI, OR SEICHE ZONES, RISK RELEASE OF POLLUTANTS DUE TO PROJECT INUNDATION?

The project site is not located in a 100-year flood zone; the site is designated by FEMA as unshaded Zone X—an area of minimal flood hazard (FEMA 2012). Furthermore, the project site is not located in an area subject to 200-year flooding as delineated under SB 5 (DWR 2023).

The Pacific Ocean is approximately 86 miles west of the project site; therefore, tsunamis would not represent a hazard. There are no large bodies of water in the immediate project

[11] As noted previously, the alleviation of existing conditions stormwater ponding on the parcel immediately south of the project site (zoned for future high-density residential development) would be the responsibility of that property owner and any future developer, via installation of an appropriately sized detention basin on that parcel.

vicinity that would be subject to seiche hazards; furthermore, the project region is generally not subject to strong seismic ground shaking (Branum et al. 2016).

As discussed in I(ii) above, Modeling performed for the Level 2 Drainage Study demonstrated that the proposed stormwater drainage system would successfully eliminate all of the existing conditions 100-year stormwater ponding throughout the proposed development area (Wood Rodgers 2023). Thus, there would be **no impact** from release of pollutants due to project inundation.

E) CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN?

As described in (a), above, compliance with the applicable laws, regulations, ordinances, and permit terms would require the project to reduce pollutants in construction and operational stormwater runoff generated in the proposed development area through implementation of a SWPPP with associated BMPs designed to control construction-related erosion and pollutants; and implementation of County-required, operation-related LID technologies, BMPs, and pollutant source control measures. These measures would protect water quality as required by the Basin Plan (Central Valley RWQCB 2019). Therefore, development of the proposed project would not violate any water quality standards, substantially degrade surface or groundwater quality, or conflict with the Basin Plan, and this impact would be **less than significant**.

As described in (b), above, there are no groundwater wells at the project site and no new wells are proposed. CWD's Urban Water Management Plan (Tully & Young 2021) indicates there is sufficient water supply (a portion of which is obtained from groundwater) available to meet demands within CWD's service area through the 2045 planning horizon. The North American Subbasin Groundwater Sustainability Plan (GEI Consultants 2021) determined that with implementation of projects contained in the plan that are designed to promote groundwater sustainability, groundwater supplies in the subbasin would increase through the 2040 planning horizon even with implementation of the projected new development throughout the groundwater subbasin planning area. Therefore, the proposed project would not conflict with or obstruct implementation of the North American Subbasin Groundwater Sustainability Plan (GEI Consultants 2021), and this impact would be **less than significant**.

LAND USE AND PLANNING

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

a. Physically divide an established community?

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

ENVIRONMENTAL SETTING

The project site is located at the corner of Manzanita Avenue and Winding Way in the unincorporated community of Carmichael. The site was formerly developed with a gasoline station at the northwest corner, and a commercial building that housed a bowling alley near the center of the site; these buildings were demolished in 2009 and 2015, respectively. However, the 1.8-acre paved parking lot from the former bowling alley is still present on the project site. The remainder of the site is currently undeveloped and is primarily composed of nonnative annual grasses, with a few patches of mixed oak woodland.

The project site is surrounded by existing urban development on all sides: commercial uses are present to the north and northwest; a small commercial building with a paved parking area is present adjacent to the project site on the east side of Manzanita Avenue; an office building and multi-family residential are present to the west and southwest; and multi-family residential is present to the east. Single-family residential uses on the south side of Jan Drive, and the northwest corner of Jan Park, are present south of the project site.

The project site comprises approximately 18.6 acres proposed for development with commercial and single-family residential lands. Within the 6.2-acre undeveloped parcel in the southern portion of the project site, the only project-related activities would consist of installation of a new underground storm drainage pipeline at the northern (downstream) end of an existing drainage ditch.

The project site is within the area encompassed by the Carmichael Community and Old Foothill Farms Community Plan (Sacramento County 1975) and Carmichael Community Action Plan (Sacramento County 2006), and is also within the Fair Oaks Boulevard Corridor Plan area (Sacramento County et al. 2011). The Carmichael Community and Old Foothill Farms Community Plan land use diagram (updated in 2007) consistent with the Sacramento County Zoning Code (Sacramento County 2023), designates and zones most of the proposed development area for Shopping Center (SC) uses (i.e., approximately 15.8 acres of the 18.6-acre development area). The remaining 2.8 acres of the proposed development area, in the vicinity of the former bowling alley, are designated and zoned for Light Commercial (LC) uses. The 6.2-acre parcel in the southern portion of the project site where drainage improvements are proposed is designated and zoned for Multiple Family Residential (RD-40) uses (see Plate IS-4Plate IS-4 in Project Description).

DISCUSSION

A) PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY?

The project site is situated in the developed community of Carmichael, surrounded by the urbanized areas of Fair Oaks, Citrus Heights, North Highlands, Arden-Arcade, and Rancho Cordova. The proposed project consists of urban infill development (commercial and residential) in an area surrounded by existing commercial and residential uses. The project site is bounded by Winding Way to the north, Manzanita Avenue and a commercial building to the west, and by residential development to the south and east. The proposed project includes a pedestrian/bicycle pathway between the proposed on-site residential and commercial development that would provide for connectivity. The proposed project

would not physically divide the established community of Carmichael as a whole or the established development immediately adjacent to the project site. Thus, there would be **no impact**.

B) CAUSE A SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO A CONFLICT WITH ANY LAND USE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT?

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan Land Use Element sets forth County policy on urban growth within the County, specifically concerning build-out of infill sites. The County's Urban Growth Accommodation Strategy as addressed in the Land Use Element (Sacramento County 2022a:page 26) includes a goal to "on average, achieve buildout of vacant and underutilized infill parcels at existing zoned densities, while recognizing that individual projects may be approved or denied at higher or lower densities based on their community and site suitability." The General Plan Land Use Element defines "infill" to mean "any new development within an established urban area where basic urban infrastructure and services exist, including: development of vacant parcels, redevelopment of abandoned or derelict structures, and intensification of uses on underutilized lands" (Sacramento County 2022a:page 26). It is the strategy of the County to "accommodate as much residential, commercial, and employment capacity as feasible within the existing urban area during the timeframe of the [General] Plan so as to:

- implement the [Sacramento Area Council of Government's] Blueprint Vision for more compact urban growth;
- upgrade the quality of existing neighborhoods and commercial corridors;
- enhance public transit use and efficiency;
- promote walking and biking as viable transportation alternatives;
- balance land uses and create a jobs/housing balance;
- utilize existing public infrastructure and services in an efficient manner; and
- provide a variety of household types affordable to all income groups within each community." (Sacramento County 2022a:page 26)

LAND USE ELEMENT

The policies listed below from the County General Plan Land Use Element (Sacramento County 2022a) are those that are particularly relevant to the proposed project and are intended to avoid adverse environmental impacts.

Policy LU-3: It is the intent of the County to focus investment of public resources on revitalization efforts within existing communities, especially within commercial corridors, while also allowing planning and development to occur within strategic new growth areas.

Policy LU-4: The County shall give priority to residential development on vacant or underutilized sites within existing urban areas that have infrastructure capacity available.

Policy LU-6: Provide for the development of vacant or underutilized portions of commercial projects and industrial-office parks with medium or high-density residential uses or mixed-use development where appropriate, such as near existing or planned transit service.

Policy LU-11: It is the intent of the County to comprehensively plan for the revitalization of the targeted commercial corridors and invest the resources necessary to achieve the following: stimulate private investment; encourage development of vacant and underutilized parcels; support reuse and/or rehabilitation of abandoned or blighted buildings; encourage rezoning of excess industrial and commercial lands to allow for medium and high density residential or mixed use projects, and; avoid non transit supportive uses, such as industrial uses, low density residential, and uses that would necessitate large parking lots fronting on the street.

Policy LU-21: Promote a better balance of employment, neighborhood services, and different housing types by reviewing development projects and the surrounding community and designing new projects wherever feasible so that they maintain or improve the mix of uses in the community.

Policy LU-24: Support private development requests that propose pedestrian- and transit-friendly mixed use projects in commercial corridors, town centers, and near existing or proposed transit stops.

Policy LU-34: Developments in the areas designated on the Land Use Diagram as Transit Oriented Development shall be designed in a manner that conforms to the concepts of transit-oriented development, including:

- High intensity, mixed-use development concentrated in a Core Area within an easy walk (one quarter mile) of a transit stop on the Trunk or Feeder Line Network.
- An emphasis on neighborhood support commercial services at street level in the Core Area that can serve the residents of the Core and surrounding Secondary Areas, with other employment encouraged in the Transit Oriented Developments (TODs) created along the Trunk Line Network.
- A pleasant walking environment created through good land use design, short distances, amenities, and streetscape features.
- Direct, multiple linkages, especially for bicycles and pedestrians, between the Core Area and the surrounding Secondary Area.

Policy LU-41: Encourage placement of active uses, such as retailers, restaurants, and various services, on the ground floor of buildings in areas where the greatest levels of pedestrian activity are sought.

Policy LU-89: Support planning for and development of mixed use centers and urban villages along commercial corridors to improve quality of life by creating diverse neighborhood gathering places, supporting enhanced transit service and non- automotive travel, stimulating local economic development, eliminating blight and balancing land uses.

Policy LU-90: Focus investment of County resources in commercial corridors to facilitate improvements to streetscapes, sidewalks, landscaping, undergrounding of utilities, and other infrastructure and public amenities to encourage and stimulate private investment.

Policy LU-91: Support district planning efforts that focus on specific areas in need of reinvestment and revitalization.

Policy LU-99: Support development of a variety of housing opportunities to meet the County's diverse needs.

Policy LU-101: Support conversion of excess, vacant or underperforming commercial and industrial properties to residential uses or mixed use developments.

With regard to Policy LU-3, the project proposes development of an existing developed property, consistent with this policy. With regard to Policy LU-4, the project proposes residential development on currently vacant land, consistent with this policy. With regard to Policy LU-6, the project proposes development of vacant property with a mix of uses, consistent with portions of this policy. With regard to Policy LU-11, the project proposes rezoning of a portion of the project site for residential development, which is partly consistent with this policy. With regard to Policy LU-21, the project proposes a mix of land uses, consistent with this policy. With regard to Policy LU-24, the project is a private application that proposes development along a commercial corridor, consistent with this policy. With regard to Policy LU-34, the project proposes a mix of uses, consistent with a portion of this policy. With regard to Policy LU-41, the project proposes retail and commercial services on the ground floor of buildings, consistent with this policy. With regard to Policy LU-89, the project proposes redevelopment along a commercial corridor, consistent with this policy. With regard to Policy LU-90, the project proposes frontage improvements, landscaping, and undergrounding of utilities along a commercial corridor, consistent with this policy. With regard to Policy LU-91, the project proposes reinvestment in an existing developed property, consistent with this policy. With regard to Policy LU-99, the project proposes single-family housing development and preserves 6.2 acres for higher-density housing development, consistent with this policy. With regard to Policy LU-101, the project proposes development of vacant, former commercial land, consistent with this policy.

The project site is designated Transit Oriented Development under the General Plan. The Transit Oriented Development identifies areas "associated with Transit Oriented Developments" and "other developments that are near transit opportunities where a

'pedestrian friendly' design is desired" (Sacramento County 2020, page 10). The Land Use Element defines pedestrian friendly as "supportive of pedestrian and other non- vehicular modes of travel including those used by persons with disabilities." The proposed sidewalks and pedestrian connection between the non-residential and residential portions of the project are consistent with the Land Use Element and proposed pedestrian features will be required by the County to be consistent with standards that facilitate use by persons with disabilities. The County's Land Use Element suggests that transit-oriented developments should have a residential density of between 7 and 50 units per acre. The project proposes 79 single-family residential lots on a parcel of 11.6 acres in land area, which is a density of just under 7 units per acre. The Land Use Element also defines the minimum and maximum amount of land that can be dedicated to four general land use categories: public (10 percent+); commercial (10-15 percent); housing (40-80 percent); and office (up to 40 percent). If the RD-40 zoned property is not considered, the project proposes 38 percent commercial and 62 percent residential land uses. The commercial component would exceed the range suggested in the Land Use Element and the residential proportion would be consistent with the Land Use Element guidance. If the RD-40 zoned property is considered, the project proposes 29 percent commercial and 71 percent residential land uses. The commercial component would exceed the range suggested in the Land Use Element and the residential proportion would be consistent with the Land Use Element guidance.

The project site is also designated by the Land Use Element as a "Mixed Use Corridor." The Mixed Use Corridor identifies commercial corridors that are targeted by the County for revitalization with "mixed-use, retail, employment and residential uses that are both compact and transit oriented" (Sacramento County 2020). Policy LU-32 of the Land Use Element assigns the Planning Director to evaluate consistency with the intent of the County's policy to support and encourage Transit Oriented Development. Sacramento Regional Transit serves the vicinity of the project site with Route 25, which travels along Manzanita Avenue and connects the Louis and Orlando Transit Center with the Marconi/Arcade light rail station (Sacramento Regional Transit 2021). The closest station to the project site is the stop at Madison Avenue and Manzanita Avenue, approximately 0.75 miles to the north. What constitutes "compact" and "transit oriented" as a part of the Mixed Use Corridor land use designation is defined in Table 7 in the Land Use Element, but only for project sites within up to ½ mile of a transit stop.

Sacramento County's Transit-Oriented Development Design Guidelines provide further definition for what constitutes transit-oriented development in the unincorporated County (Sacramento County 2011, page 2):

> "The location, mix, and configuration of land uses in TODs are designed to encourage convenient alternatives to the auto, to provide a model of efficient land utilization, to better serve the needs of Sacramento's diverse households, and to create more identifiable, livable communities. For example, moderate to high residential densities close to shopping and services within TODs allow for a variety of housing types and lifestyles. Auto use, traffic congestion, and air pollution may be reduced in several ways: proximity of housing and retail uses allow residents to walk or bike

> for some daily trips; provision of jobs within walking distance of transit will encourage transit use for commuting; and conveniently- located retail areas allow shopping to and from work and home…The combination of uses and accessibility in TODs makes for places that are more human-scaled and community-oriented than typical strip and subdivision developments.
>
> TODs not only promote transit use, but are also a formula to provide affordable communities. Communities that are affordable to the environment because they require efficient use of land, help to preserve open space, and reduce air pollution; affordable for the diverse households moving to Sacramento because a variety of housing types, at various costs and densities are encouraged in convenient locations…and affordable to the public taxpayer because the TOD infrastructure is efficient, streets are safe, and public amenities are well-used.

Neighborhood transit-oriented developments are defined by the County's TOD Design Guidelines as being "located on feeder bus lines within 10 minutes travel time from light rail stops or bus transfer stations… [t]hese TODs should place a greater emphasis on residential uses and local-serving shopping" (Sacramento County 2011, page 2). Assuming that the travel time is to be determined according to transit travel time, the closest bus station to the project site is outside of this area, located approximately 20 minutes from the Louis & Orlando transit center and approximately 30 minutes travel time from the Marconi/Arcade light rail station.

With respect to the Land Use Element and the County's Transit-Oriented Development Design Guidelines, the County will make a determination of General Plan consistency as a part of the review of the proposed project, including whether the proposed project is consistent with these policies, and whether, notwithstanding the applicant's requested deviations from development standards, the project is consistent with applicable plans and in substantial compliance with the Countywide Design Guidelines.

Housing Element

The Sacramento County General Plan Housing Element identifies and analyzes existing and projected housing needs for all income groups; and include goals, policies, and programs to provide enough sites for new housing development to occur during the 2021–2029 planning period. The following policies from the County General Plan Housing Element (Sacramento County 2022b) are particularly relevant to the proposed project and are intended to avoid adverse environmental impacts.

Policy HE 1.1.1: The County will provide an adequate supply of land for housing affordable to all income groups with public services and facilities needed to facilitate the development of housing to accommodate projected housing needs based on the SACOG Regional Housing Needs Plan. The Plan requires that the County accommodate 4,466 very low-income units, 2,692 low-income units, 4,186 moderate- income units, and 9,928 above moderate-income units.

Policy HE 1.2.1: The County will promote and facilitate the build-out of vacant and underutilized urban land through infill and reuse activities, as appropriate, for housing.

Policy HE 1.2.2: The County will ensure that infill projects are integrated into the surrounding neighborhoods and communities to the greatest extent feasible.

Policy HE 1.2.3: When feasible, the County will integrate housing with compatible non-residential uses in an effort to locate affordable housing near employment opportunities and take maximum advantage of infill development opportunities.

Policy HE 2.2.2: The County will provide flexibility of development standards, or flexibility within the adopted development ordinances, to accommodate residential projects that provide housing that helps to address identified needs in the County.

HE Implementation Program A1. Countywide Rezone Program: To accommodate the remaining lower-income Regional Housing Needs Allocation (RHNA) of 2,884 units, the County will identify and rezone at least 165 acres of land to allow multifamily residential uses by-right, at a minimum density of 20 units per acre and a maximum density that allows at least 30 units per acre. In accordance with Government Code Section 65583.2(h), at least 50 percent of the County's remaining lower income RHNA need will be accommodated on parcels designated exclusively for residential uses. Identified sites will also be large enough to accommodate at least 16 units. In accordance with Government Code Section 65583.2(i), "use by-right" shall mean that the review of the residential use may not require a conditional use permit, planned unit development permit, or discretionary local government review or approval. [The County will] [p]ermit owner occupied and rental multifamily uses by-right in which at least 20 percent of units are affordable to lower income households. [The County will] [i]dentify and rezone sites equivalent to 30 percent of the remaining lower-income RHNA focused where available along commercial corridors in highest, high and moderate resource areas to affirmatively further fair housing choice.

While the project proposes a new underground stormwater drainage pipeline on the RD-zoned parcel south of the site and an emergency access to this parcel from the north, the project would not decrease the land available for housing development or constrain future multi-family development of this property in any way.

CARMICHAEL COMMUNITY PLAN/CARMICHAEL COMMUNITY ACTION PLAN

The Carmichael Community Action Plan was adopted by the County in 2006, as an appendix to the original 1975 Carmichael Community Plan. The 2006 Community Action Plan did not change any of the original land use or zoning designations; therefore, an amendment to the underlying Carmichael Community Plan (Sacramento County 2007) is required to change the land use designations and zoning in the eastern portion of the project site from commercial to residential.

The Carmichael Action Plan was prepared to provide updated goals and policies to create a distinct and identifiable community identity for Carmichael, and to create an attractive and revitalized business district that is oriented to serving Carmichael residents. The

Carmichael Community Action Plan includes the following land use policies related to the proposed project.

Policy C4: An effort should be made to actively recruit businesses that will enhance Carmichael, such as restaurants, boutiques and businesses that are oriented to families.

Policy C5: An effort should be made to encourage more variety in the types of businesses located in Carmichael.

Policy L4: Projects within residentially zoned high-density and commercially zoned areas along the major streets should be developed as mixed-use (retail and high- density residential in the same development) which are compatible with adjacent residential neighborhoods and promote public transit.

With regard to Policy C4, the project proposes retail and commercial services, including those that would be available to families. With regard to Policy C5, the project proposes property for new businesses, potentially consistent with this policy. With regard to Policy L4, the project proposes a mix of uses, consistent with a portion of this policy.

FAIR OAKS BOULEVARD CORRIDOR PLAN

The project site is situated within the area encompassed by the Fair Oaks Boulevard Corridor Plan (Corridor Plan) (Sacramento County et al. 2011). The Corridor Plan was prepared to guide the revitalization and enhancement of a 3- mile-long stretch of Fair Oaks Boulevard and Manzanita Avenue. The Corridor Plan encompasses commercial and contiguous residential parcels located between Oak Avenue and Manzanita Avenue to Winding Way in the north, and west on Fair Oaks Boulevard to Marshall Avenue. Fair Oaks Boulevard runs between the original 2,000- and 1,000-acre rural “colonies” created by Daniel W. Carmichael in 1909. The Corridor Plan includes four districts; the project site is within the Manzanita District, within Area A “Community Shopping Center and Large Vacant Parcels.” The Corridor Plan identifies opportunities for future use within Area A as potential commercial development and a new transit oriented mixed-use neighborhood. The project site is identified in the Corridor Plan as the largest “Opportunity Site” for future reuse within the Manzanita District.

The Corridor Plan states that properties located within the East Fair Oaks Boulevard, South Gateway, and Manzanita Districts will be governed by Section 110-30.6 of the Zoning Code, which identifies restricted, permitted, and conditionally permitted uses. Section 6.7 of the County’s Zoning Code indicates that allowable uses for the Manzanita District shall be consistent with those allowed under the underlying zoning with the exception of uses listed under Section 6.7.3.A that require a conditional use permit.

The Corridor Plan also includes some alternative development standards that may be utilized, if approved by the County, in lieu of some of the County Zoning Code requirements. These alternatives are related primarily to setbacks, dwelling units, floor area ratios, building heights, and signage.

With regards to consistency with the Corridor Plan, Sacramento County Zoning Code Section 6.7.3.B states the following:

1. Although not mandatory, projects outside of the Main Street District are encouraged to, and may at applicant's option, follow any or part of the development and design standards contained in the Fair Oaks Boulevard Corridor Plan.

2. Development projects proposed within the East Fair Oaks Boulevard, Manzanita, and South Gateway districts of the Fair Oaks Boulevard Corridor Plan may, at the applicant's option, utilize the alternative development and design standards, as described in the Fair Oaks Boulevard Corridor Plan instead of the development and design standards contained in the Zoning Code.

The project site is located outside of the Main Street District. The applicant has chosen not to participate in the Fair Oaks Boulevard Corridor Plan. Therefore, the project design must comply with relevant County Zoning Code Development standards.

METROPOLITAN TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

The most recent MTP/SCS was adopted by the SACOG in November 2019. The 2020 MTP/SCS includes a land use strategy to improve mobility and reduce travel demand from passenger vehicles by prioritizing compact and transit-oriented development, reducing the growth in vehicle miles traveled and associated greenhouse gas emissions. The 2020 MTP/SCS also includes projections for the location of growth within the region, between jurisdictions and among housing place types (particularly infill development). The 2020 MTP/SCS includes transit improvements along Fair Oaks Boulevard and Manzanita Avenue as a priority project with a goal for completion by 2036.

The 2020 MTP/SCS show the vicinity of the project site as an "Established Community," where [l]ocal land use plans aim to maintain the existing character and land use pattern (SACOG 2019). Supporting policies of the MTP/SCS include the following under Policy 1:

- Development in communities where services, amenities, and transportation infrastructure already exist;
- Revitalization of urban, suburban, and rural centers and corridors;
- Higher density housing options such as small-lot or attached single-family products, accessory dwelling units, and multi-family housing options where appropriate;
- A diversity of housing to provide options for all residents;
- Complete streets that provide safe, comfortable, and equitable facilities for people of all ages and abilities to walk, bike, and ride transit

Consistent with the supporting policies under Policy 1, the project site is a previously developed site and the project proposes development along existing developed corridors. Consistent with bullets three and four above, the proposed project includes housing development and the southern portion of the project site is zoned to provide the future opportunity for multi-family development. The proposed project would provide sidewalks

throughout the project site and a pedestrian connection between the residential portion of the proposed project on the east and the non-residential portion on the west.

The MTP/SCS is intended to reduce environmental effects – specifically to reduce mobile source criteria air pollutant emissions and passenger vehicle greenhouse gas emissions (SACOG 2019, page 16) (please see Air Quality, and Greenhouse Gas Emissions for more detail on these topics). As detailed in Transportation of this IS/MND, the project site is located in a transportation efficient area – specifically an area where SACOG analysis shows that residential generated vehicular travel demand (measured according to VMT) is 50 to 85 percent of the regional average per capita. Screening methods to evaluate impacts related to VMT allow analysts to presume that projects located in transportation efficient areas would have less-than-significant effects associated with VMT. In addition, since local-serving retail could reduce vehicular trips or allow more people to access retail and services on foot or on a bicycle, small commercial projects of less than 125,000 square feet in floor area can be presumed also to have less-than-significant effects related to VMT. Given the project site and project location, the proposed project is consistent with aspects of the MTP/SCS focused on reducing mobile source criteria air pollutant emissions and passenger vehicle greenhouse gas emissions.

LAND USE AND ZONING DESIGNATIONS

The proposed land use and zoning changes within the 18.6-acre proposed development area, for which amendments are rezoning are required, are listed in Table IS-17. The existing zoning and proposed changes are also shown on Plate IS-4.[12]

Table IS-17: Proposed Land Use and Zoning Changes

Land Use Plan/Zoning Code	Existing Acreage	Existing Designation/Zoning	Proposed Acreage	Proposed Designation/Zoning
Carmichael Community Plan Amendment	8.8	Shopping Center (SC)	8.8	Residential, 10 dwelling units per acre (RD-10)
Carmichael Community Plan Amendment	2.8	Light Commercial (LC)	2.8	Residential, 10 dwelling units per acre (RD-10)
Zoning Code Amendment	8.8	Shopping Center (SC)	8.8	Residential, 10 dwelling units per acre (RD-10)
Zoning Code Amendment	2.8	Light Commercial (LC)	2.8	Residential, 10 dwelling units per acre (RD-10)

Source: Data compiled by AECOM in 2023

No changes are proposed to allowable land use or zoning for the existing 7.0-acre parcel adjacent to Manzanita Avenue that is currently designated for Shopping Center uses.

[12] The existing and proposed zoning districts are identical to the existing Community Plan land uses and proposed changes to the Community Plan land uses portrayed in this figure.

Conclusion

As explained in detail above, the proposed project appears consistent or partly consistent with a variety of General Plan policies and supporting policies in SACOG's MTP/SCS. The County will make a determination of General Plan consistency as a part of the review of the proposed project, including whether the proposed project is consistent with these policies, and whether, notwithstanding the applicant's requested deviations from development standards, the project is consistent with applicable plans and in substantial compliance with the Countywide Design Guidelines. The changes to the Community Plan designations and zoning districts will enable a different set of land uses than originally contemplated within the Community Plan and County Zoning Code – changed uses that are the focus of analysis throughout this IS/MND.

The proposed Community Plan Amendment and rezoning will be required to accommodate the proposed project. Additionally, the proposed project includes a Use Permit and Special Development Permit to allow minor variances from County requirements (described in detail in Project Description) would ensure that project site plans and project operation meet County standards.

All direct and reasonably foreseeable impacts associated with the proposed project are evaluated in this IS/MND in sections that are specific to each resource area (e.g., air quality, biological and cultural resources, noise, and transportation). These resource-specific sections provide a detailed analysis of all relevant physical environmental effects that could result from implementation of the proposed project, and identify mitigation measures, as necessary, to reduce impacts. There is no aspect of the project's consistency with relevant policies or code requirements that would lead to a significant adverse physical environmental effect that is not fully addressed in this IS/MND in the appropriate chapter.

Therefore, the proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and this impact is considered **less than significant**.

Noise

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

a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Generate excessive groundborne vibration or groundborne noise levels?

c. For a project within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted, within two miles of a

public airport or public use airport, expose people residing or working in the project area to excessive noise levels?

The proposed project is located south of Winding Way and east of Manzanita Avenue in Sacramento County, California. The project proposes single-family residential development and commercial (retail) uses. Existing land uses in the immediate project vicinity include a mix of commercial and residential (single- and multi-family). Vehicular traffic on surrounding roadways and to a lesser extent, activities associated with surrounding residential and other developed properties also generate noise in the area.

This section supplements the Initial Study Checklist by summarizing the Technical Noise Study completed by Bollard Acoustical Consultants, Inc. (BAC) in August 2023 to evaluate if the project traffic or project-generated noise or vibration levels would exceed applicable federal, state, or local (Sacramento County) standards at existing or proposed sensitive uses. The BAC evaluation is contained in Appendix G. It describes the existing noise and vibration environments, evaluates at both temporary and permanent increases in noise and vibration levels at sensitive uses near the project site; provides a quantitative and qualitative analysis of impacts associated with the project; and identifies appropriate mitigation measures.

Environmental Setting

Sound, Noise, and Acoustics

Sound is the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is defined as sound that is unwanted (i.e., loud, unexpected, or annoying). Acoustics is the physics of sound.

The amplitude of pressure waves generated by a sound source determines the perceived loudness of that source. A logarithmic scale is used to describe sound pressure level in terms of decibels (dB). The threshold of human hearing (near-total silence) is approximately 0 dB. A doubling of sound energy corresponds to an increase of 3 dB. In other words, when two sources at a given location are each producing sound of the same loudness, the resulting sound level at a given distance from that location is approximately 3 dB higher than the sound level produced by only one of the sources.

For example, if one automobile produces a sound pressure level of 70 dB when it passes an observer, two cars passing simultaneously do not produce 140 dB; rather, they combine to produce 73 dB.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ears decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). All noise levels reported in this section are in terms of A-weighting. There is a strong correlation between A-weighted sound levels and community response to noise.

As discussed above, doubling sound energy results in a 3-dB increase in sound. In typical noisy environments, noise-level changes of 1 to 2 dB are generally not perceptible by the healthy human ear; however, people can begin to detect 3-dB increases in noise levels. An increase of 5 dB is generally perceived as distinctly noticeable and a 10-dB increase is generally perceived as a doubling of loudness. The following are the sound level descriptors commonly used in environmental noise analysis:

- Equivalent sound level (L_{eq}): An average of the sound energy occurring over a specified time period. In effect, the L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted equivalent sound level (L_{eq}[h]) is the energy average of A-weighted sound levels occurring during a 1-hour period.
- Maximum sound level (L_{max}): The highest instantaneous sound level measured during a specified period.
- L_{dn} (Day-Night Noise Level): The 24-hour L_{eq} with a 10 dB "penalty" applied during nighttime noise-sensitive hours, 10:00 p.m. through 7:00 a.m. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.
- Ln (Statistical Descriptor): The noise level exceeded n percent of a specific period of time, generally accepted as an hourly statistic. An L10 would be the noise level exceeded 10 % of the measurement period.

Sound from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, and the sound level attenuates (decreases) at a rate of 6 dB for each doubling of distance from a point/stationary source. Roadways and highways and, to some extent, moving trains consist of several localized noise sources on a defined path; these are treated as "line" sources, which approximate the effect of several point sources. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. Therefore, noise from a line source attenuates less with distance than noise from a point source with increased distance.

GROUNDBORNE VIBRATION

Groundborne vibration is energy transmitted in waves through the ground. Vibration attenuates at a rate of approximately 9 vibration decibels (VdB) for each doubling of distance from the source. This approach considers only the attenuation from geometric spreading and tends to provide for a conservative assessment of vibration level at the receiver.

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. Vibration typically is described by its peak and root-mean- square (RMS) amplitudes. The RMS value can be considered an average value over a given time interval. The peak vibration velocity is the same as the "peak particle velocity" (PPV), generally presented in units of inches per second. PPV is the maximum instantaneous positive or negative peak of the vibration signal and is generally used to assess the potential for damage to buildings and structures. The RMS amplitude typically is used to

assess human annoyance to vibration, and the abbreviation "VdB" is used in this document for vibration decibels to reduce the potential for confusion with sound decibels.

EXISTING NOISE ENVIRONMENT

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places, where people live, sleep, recreate, worship, and study, are generally considered to be sensitive to noise because intrusive noise can be disruptive to these activities. The nearest existing noise-sensitive land uses that would potentially be affected by the project consist of schools, and single- and multi-family residential dwelling units.

The existing ambient noise environment within the vicinity of the project site is defined primarily by noise from traffic on Winding Way and Manzanita Avenue, and by nearby commercial operations and residential activities. To quantify the existing ambient noise environment within the vicinity of the project site, BAC conducted short-term (20 minute) ambient noise level measurements at four (4) locations on August 9th, 2022.

Specifically, several 20-minute measurement samples were taken at each monitoring site during daytime (7:00 a.m. to 7:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours. The locations of the noise survey sites are shown in Plate IS-19. The results of the noise survey are shown in Table IS-18. As shown in Table IS-18, measured ambient noise levels at the noise-sensitive land uses closest to the project site range from 45 dBA to 70 dBA L50, and 70 to 92 dBA L_{max}.

Table IS-18: Summary of Ambient Noise Level Survey Results in the Vicinity of the Project Site – August 9th, 2022

Site	Location	Time	L50	L_{max}
Site 1	Northeast end of the project area	8:53 a.m.	58	73
		4:09 p.m.	59	80
		11:55 p.m.	45	71
Site 2	East end of the project area	8:00 a.m.	69	81
		5:31 p.m.	68	92
		11:26 p.m.	54	63
Site 3	South of the project area across Jan Drive	8:27 a.m.	60	74
		5:03 p.m.	65	84
		10:31 p.m.	50	70
Site 4	West of the project area across Manzanita Avenue	7:31 a.m.	70	79
		4:39 p.m.	69	79
		10:58 p.m.	60	80

Notes: dBA = A-weighted decibels; L50 = noise level exceeded 50 % of the measurement period.; L_{max} = maximum instantaneous sound level.
Larson Davis Laboratories (LDL) Model LxT precision integrating sound level meters were used to complete the noise level surveys. The meters were calibrated immediately before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all specifications of the American National Standards Institute requirements for Type 1 sound level meters (ANSI S1.4).
Source: Data compiled by Bollard Acoustical Consultants, Inc. 2022.

Plate IS-19: Ambient Noise Survey

EXISTING TRAFFIC NOISE LEVELS ALONG PROJECT AREA ROADWAY NETWORK

The existing traffic noise levels at the distances representing the nearest sensitive land uses (residential) to the project area roadways and distances from the centerlines of selected roadways to the 60 dB, 65 dB, and 70 dB L_{dn} contours are summarized in Table IS-19. The data in Table 16-2 includes offsets where appropriate to account for the presence of existing intervening shielding (e.g., building screening). Appendix B of BAC Technical Noise Study (Appendix G of this Initial Study) contains the Federal Highway Administration (FHWA) Model inputs for existing conditions.

Table IS-19: Existing Traffic Noise Modeling Results

Seg	Roadway	Segment Description	Noise Level (L_{dn}) at Nearest Sensitive Receptor	Distance to Contour (ft)		
				70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
1	College Oak Drive	North of Winding Way	60	20	43	93
2	College Oak Drive	North of Winding Way	61	12	26	56
3	Winding Way	West of College Oak Drive	48	2	3	7
4	Winding Way	College Oak to Manzanita Avenue	63	18	39	84
5	Winding Way	Manzanita Ave to Rampart Drive	59	38	83	178
6	Winding Way	East of Rampart Drive	63	37	79	170
7	Manzanita Avenue	North of Winding Way	64	38	83	178
8	Manzanita Avenue	Winding Way to Windmill Way	53	40	85	184
9	Manzanita Avenue	Winding Way to Lincoln Avenue	66	43	92	199
10	Manzanita Avenue	Lincoln Ave to Cypress Avenue	59	43	94	202
11	Manzanita Avenue	South of Cypress Avenue	57	49	105	226
12	Windmill Way	West of Manzanita Avenue	52	9	20	42
13	Lincoln Avenue	West of Manzanita Avenue	27	0	1	1
14	Lincoln Avenue	East of Manzanita Avenue	57	10	23	49
15	Cypress Avenue	West of Manzanita Avenue	58	16	35	76
16	Cypress Avenue	East of Manzanita Avenue	37	3	7	14
17	Rampart Avenue	North of Winding Way	38	1	2	5
18	Rampart Avenue	Winding Way to Mary Lynn Lane	36	1	2	5
19	Rampart Avenue	South onto Mary Lynn Lane	35	0	1	2
20	Rampart Avenue	East of Mary Lynn Lane	49	3	7	15

Source: FHWA-RD-77-108 with inputs from Wood Rodgers. BAC Inc. 2023 BAC = Bollard Acoustical Consultants, Inc.
FHWA = Federal Highway Administration

DISCUSSION

A) GENERATION OF A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES?

PROJECT CONSTRUCTION

During project construction, heavy equipment would be used for grading, excavation, paving, and structure construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. Noise exposure at any single point outside the project work area would also vary depending upon the proximity of equipment activities to that point.

Table IS-20 includes the range of maximum (L_{max}) noise levels for equipment commonly used in construction projects at full-power operation at a distance of 50 feet. Not all of these construction activities would be required for this project. Table IS-20 also includes predicted maximum equipment noise levels at the nearest existing residential uses, which assume a standard spherical spreading loss of 6 dB per doubling of distance.

Table IS-20: Reference and Projected Noise Levels for Typical Residential Construction Equipment

Equipment Description	Reference Maximum Noise Level at 50 Feet (dBA)	Projected Maximum Noise Levels Nearest Receivers (dB)				
		NE-Multi-Family Residential (100 feet)	E-Multi-Family Residential (40 feet)	S-Single-Family Residential (70 feet)	SW-Single-Family Residential (100 feet)	W-Multi-Family Residential (100 feet)
Air compressor	80	74	82	77	74	74
Backhoe	80	74	82	77	74	74
Ballast equalizer	82	76	84	79	76	76
Ballast tamper	83	77	85	80	77	77
Compactor	82	76	84	79	76	76
Concrete mixer	85	79	87	82	79	79
Concrete pump	82	76	84	79	76	76
Concrete vibrator	76	70	78	73	70	70
Crane, mobile	83	77	85	80	77	77
Dozer	85	79	87	82	79	79
Excavator	85	79	87	82	79	79
Generator	82	76	84	79	76	76
Grader	85	79	87	82	79	79
Impact wrench	85	79	87	82	79	79
Loader	80	74	82	77	74	74
Paver	85	79	87	82	79	79
Pneumatic tool	85	79	87	82	79	79
Pump	77	71	79	74	71	71

Equipment Description	Reference Maximum Noise Level at 50 Feet (dBA)	Projected Maximum Noise Levels Nearest Receivers (dB)				
		NE-Multi-Family Residential (100 feet)	E-Multi-Family Residential (40 feet)	S-Single-Family Residential (70 feet)	SW-Single-Family Residential (100 feet)	W-Multi-Family Residential (100 feet)
Saw	76	70	78	73	70	70
Scarifier	83	77	85	80	77	77
Scraper	85	79	87	82	79	79
Shovel	82	76	84	79	76	76
Spike driver	77	71	79	74	71	71
Tie cutter	84	78	86	81	78	78
Tie handler	80	74	82	77	74	74
Tie inserter	85	79	87	82	79	79
Truck	84	78	86	81	78	78
Low	70	78	73	70	70	
High	79	87	82	79	79	
Average	76	84	79	76	76	

Source: 2018 Federal Transit Administration Noise and Vibration Impact Assessment Manual, Table 7-1 and BAC.
BAC = Bollard Acoustical Consultants, Inc.
dB = decibel
dbA = A-weighted decibel

Sacramento County Municipal Code Section 6.68.090I exempts noise sources associated with construction activities provided such activities do not occur between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday and on each Sunday after the hour of 8:00 p.m. It is reasonably assumed for the purposes of this analysis that all on-site noise-generating project construction equipment and activities would occur pursuant to and in compliance with Municipal Code Section 6.68.090I and would thereby be exempt from County noise level criteria.

However, noise from project on-site construction activities would add to the noise environment in the immediate vicinity of the work area. In terms of determining the temporary noise increase due to project-related construction activities, an impact would occur if construction activity would noticeably increase ambient noise levels above background levels. The threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For this analysis, a noticeable increase in ambient noise levels is assumed to occur where noise levels increase by 5 dB or more over existing ambient noise levels.

The ambient plus project construction noise level increases were calculated at the nearest residential uses and the results of those calculations are presented in Table IS-21.

Table IS-21: Ambient Plus Project Construction Noise Increases at Residential Uses – Daytime L_{max}

Residential Use	Highest Predicted Noise Level, Lmax (dB)1	Measured Ambient Daytime Noise Level, Lmax (dB)2	Ambient Plus Project, Lmax (dB)3	Increase in Ambient, Lmax (dB)4
Northeast – Multi-Family Residential	79	76.8	81.1	4.3
East – Multi-Family Residential	87	86.9	89.9	3.0
South – Single-Family Residential	82	79.0	83.8	4.8
Southwest – Single-Family Residential	79	79.1	82.1	3.0
West – Multi-Family Residential	79	79.1	82.0	3.0

1 Highest predicted maximum equipment noise levels from Table 28.
2 Calculated average of measured daytime noise levels from Table 2.
3 Sum of highest predicted equipment noise levels and measured daytime maximum noise levels.
4 Calculated increase in ambient daytime noise levels.
dB = decibels
L_{max} = Maximum Noise Level

The results shown indicate that the increases in ambient noise levels from on-site project construction activities are calculated to be below the applied significance criterion of 5 dB. However, because these increases are estimated, the potential for annoyance at nearby noise-sensitive uses would be **potentially significant**.

PROJECT OPERATION

INCREASES IN EXISTING TRAFFIC NOISE LEVELS DUE TO THE PROJECT

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to quantify increases in existing traffic noise levels at the existing sensitive land uses nearest to the project area roadway network. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop L_{dn} values from L_{eq} values.

Traffic data in the form of peak hour intersection turning movements were provided by the project transportation consultant (Wood Rodgers). Those data were converted to ADT segment volumes by applying a factor of 5 to the sum of AM and PM peak hour conditions. Other inputs were obtained from BAC observations and noise measurement data. Appendices B and D of BAC Inc. contains the FHWA Model inputs for existing and existing plus project conditions, respectively. The existing and existing plus project traffic noise levels at the distances representing the nearest sensitive land uses to the project area roadways (residential uses) are summarized in Table IS-22. Table IS-22 also shows the thresholds for determination of a significant traffic noise increase (relative to applied Field Condition [FICON] criteria), whether the roadway segment contains sensitive uses, and whether or not significant noise impacts are identified for each segment.

It should be noted that the FHWA Model predictions presented in Table IS-22 are based on inputs that include weekday peak-hour traffic volumes[13], day/night, and truck type percentages (e.g., medium and heavy trucks), vehicle speed, and distance from roadway centerlines. Further, the FHWA Model does not account for non-traffic ambient noise sources such as nearby wildlife (e.g., birds chipping) or other anthropogenic noise sources within an area (e.g., distant traffic from other roadways, recreational activities, commercial or industrial operations, etc.).

As indicated in Table IS-22, the proposed project's contribution is calculated to result in increases ranging from approximately 23 to 42 dB L_{dn} along roadway segments 21-27. Of those roadway segments, seven are access points to the proposed development and are located on-site (segments 22-26). The remaining two identified roadway segments are located off-site and have been identified as access points/parking aisles associated with the existing gas station/convenience store and shopping center to the north of the project area (segments 21 and 27).

As stated previously, the FHWA Model does not account for non-traffic ambient noise sources such as nearby wildlife or other anthropogenic noise sources within an area. Consideration of such sources typically results in higher ambient noise levels (i.e., existing no project) than those predicted by the FHWA Model alone. Thus, baseline ambient conditions can be higher than baseline traffic noise levels alone. After consideration of the measured existing ambient environment within the vicinity of the project site (BAC noise survey) and taking into consideration typical noise levels associated with the existing commercial uses located north of the project area (e.g., parking movements, on-site traffic circulation, truck deliveries, etc.), project-related traffic noise level increases along roadway segments 21-27 are not expected to be substantial relative to the applicable FICON criteria[14]. Further, although existing residential uses were identified along a portion of those roadway segments, it should be noted that the predicted Existing Plus Project traffic noise levels for those segments are below the Sacramento County General Plan exterior noise level standard of 65 dB L_{dn} applicable to traffic noise affecting residential uses.

Based on the analysis presented above, including consideration of measured ambient noise conditions within the project area and noise associated with nearby existing commercial operations, off-site traffic noise impacts related to increases in traffic resulting from the implementation of the project are identified as being **less than significant**.

[13] Average daily traffic (ADT) volumes were conservatively estimated by applying a factor of 5 to sum of AM and PM peak hour conditions.
[14] A significant project-related impact with respect to ambient conditions would occur if the project were to result in a +5 dB traffic noise level increase relative to ambient (no project) traffic noise levels less than 60 dB L_{dn}, a +3 dB increase relative to ambient levels of 60–65 dB L_{dn}, or a +1.5 dB increase relative to ambient levels above 65 dB L_{dn}.

Table IS-22: Predicted Traffic Noise Level Increases at Existing Sensitive Receptors Existing vs. Existing Plus Project Conditions

No.	Roadway	Segment Description	Predicted Noise Level (L_{dn}) (dB)			Significance Threshold (dB)[1]	Threshold Exceeded?	Sensitive Receptors Present?	Significant Impact Identified?
			E	E+ P	Increase				
1	College Oak Drive	North of Winding Way	59.5	59.8	0.3	5	No	Yes	No
2	College Oak Drive	South of Winding Way	60.8	61.2	0.5	3	No	Yes	No
3	Winding Way	West of College Oak Drive	47.6	47.6	0	5	No	Yes	No
4	Winding Way	College Oak to Manzanita Avenue	63.4	64	0.6	3	No	Yes	No
5	Winding Way	Manzanita Ave to Rampart Drive	59.2	59.6	0.3	5	No	Yes	No
6	Winding Way	East of Rampart Drive	63.5	63.7	0.2	6	No	Yes	No
7	Manzanita Avenue	North of Winding Way	63.8	64.1	0.3	3	No	Yes	No
8	Manzanita Avenue	Winding Way to Windmill Way	53.5	54.1	0.6	5	No	No	No
9	Manzanita Avenue	Winding Way to Lincoln Avenue	66.4	66.6	0.3	1.5	No	Yes	No
10	Manzanita Avenue	Lincoln Ave to Cypress Avenue	58.6	58.9	0.3	5	No	Yes	No
11	Manzanita Avenue	South of Cypress Avenue	57.2	57.4	0.2	5	No	Yes	No
12	Windmill Way	West of Manzanita Avenue	51.8	51.8	0	5	No	Yes	No
13	Lincoln Avenue	West of Manzanita Avenue	27.1	27.1	0	5	No	Yes	No
14	Lincoln Avenue	East of Manzanita Avenue	57.2	57.5	0.3	5	No	Yes	No
15	Cypress Avenue	West of Manzanita Avenue	58.2	58.3	0.1	5	No	Yes	No
16	Cypress Avenue	East of Manzanita Avenue	36.9	38.4	0	5	No	No	No
17	Rampart Avenue	North of Winding Way	37.8	37.8	0	5	No	Yes	No
18	Rampart Avenue	Winding Way to Mary Lynn Lane	35.6	36.6	1	5	No	Yes	No
19	Rampart Avenue	South onto Mary Lynn Lane	35.2	35.2	0	5	No	Yes	No

No.	Roadway	Segment Description	Predicted Noise Level (L_{dn}) (dB)			Significance Threshold (dB)[1]	Threshold Exceeded?	Sensitive Receptors Present?	Significant Impact Identified?
			E	E+ P	Increase				
20	Rampart Avenue	East of Mary Lynn Lane	49.4	49.4	0	5	No	Yes	No
21	Gas Station Driveway	North of Winding Way	NA[2]	42.1	42.1	--	--	No	No
22	Project Driveway 1	South onto Project Site	NA[2]	37.8	37.8	--	--	No	No
23	Project Driveway 2	East onto Project Site	NA[2]	35	35	--	--	No	No
24	Project Driveway 3	East onto Project Site	NA[2]	37.9	37.9	--	--	Yes	No
25	Project Driveway 4	East onto Project Site	NA[2]	35.9	35.9	--	--	Yes	No
26	Project Driveway 5	East onto Project Site	NA[2]	40.9	40.9	--	--	Yes	No
27	Shopping Center Driveway	North of Winding Way	NA[2]	42.1	42.1	--	--	No	No
28	Project Street 1	South onto Project Site	NA[2]	22.5	22.5	--	--	Yes	No
29	Project Street 6	West of Rampart Ave	NA[2]	24.4	24.4	--	--	Yes	No

FICON significance thresholds provided in Table 4 of this report.

The project traffic study did not contain existing conditions data for segments 21-27. Source: Traffic noise estimates conducted by BAC Inc. 2023

dB = decibel E = existing

E+P = existing plus project

-- = no data

BAC = Bollard Acoustical Consultants, Inc.

FICON = field condition

Ldn = Day-Night Average Sound Level

NA = not applicable

OFF-SITE NOISE IMPACTS ASSOCIATED WITH PROPOSED ON-SITE COMMERCIAL OPERATIONS

The commercial component of the development consists of a gas station/convenience store (with car wash tunnel) and five (5) building pads for retail/restaurant uses (three of which will have drive-through lanes). In order to understand the potential impacts of the proposed project, it is necessary to provide noise analyses for project car wash operations (i.e., drying assembly), vacuum equipment, and drive-through operations (i.e., amplified menu speaker boards). Impact discussions for each of the identified noise sources at nearby existing single-family residential and multi-family residential uses are provided in the following section.

For noise generated by on-site commercial operations, the Sacramento County General Plan's non-transportation noise standards for residential uses (shown in Table 8 of Bollard Technical Study Report) were applied to the project. The General Plan's noise level limits are to be assessed at the outdoor areas of residential uses, which are considered to be backyards for single-family residential uses and common outdoor spaces such as pools or parks for multi-family residential uses. In terms of determining the noise level increase due to on-site noise sources, a significant impact would occur if those sources would noticeably increase ambient noise levels existing noise levels. The threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For the following analyses of commercial operations noise source, a clearly noticeable Increase in ambient noise levels is assumed to occur where noise levels increase by 5 dB or more over existing ambient noise levels at existing nearby residential uses.

CAR WASH DRYING ASSEMBLY NOISE AT NEAREST EXISTING RESIDENTIAL USES

The project proposes the installation of a 40 Horsepower (HP) AquaDri Freestanding Drying System (Model FS-40) manufactured by Mark VII / WashTec within a car wash tunnel. The location of the proposed car wash tunnel is shown in Figure 3 of BAC Technical Noise Study (Appendix G). The County's maximum (L_{max}) noise level standards would be applicable to the project car wash drying assembly.

The car wash drying assembly noise levels presented below are based on the manufacturer's reference sound level data and includes offsets[15] associated with the orientation to tunnel entrance/exit, for the worst-case scenario. The results include consideration of shielding that would be provided by the masonry wall proposed for construction along the eastern and southern portion of the planned commercial areas (ranging from 6 to 7' in height). Noise attenuation due to distance was calculated based on standard spherical spreading loss from a point source (-6 dB per doubling of distance from

[15] Offsets account for existing and proposed building shielding (-7 to -10 dB) and proposed walls (-6 dB). It should be noted that although the proposed masonry wall includes an opening for pedestrian passage between the residential and commercial land uses toward the middle of the site (approximately 555' south of Winding Way), the proposed car wash and other noise-generating commercial uses would not be located in the line-of-site of this opening. In addition, the break in the wall would be no more than 10 feet in width. Therefore, this opening would have a minimal effect on the ability of the wall to shield residential uses to the east of the project site.

a stationary noise source). Distances from the proposed car wash drying equipment to the nearest existing residential uses were scaled using the proposed project site plans. Car wash drying assembly noise exposure at the closest existing residential uses (approximately 650 feet for the Crestview Apartments to the east and up to 1,200 feet for residential uses west of Manzanita Avenue) was calculated and ranged between 34 dB L_{max} to 50 dB L_{max}. Therefore, project car wash drying assembly noise level exposure is predicted to satisfy the applied Sacramento County General Plan daytime (80 dB L_{max}) and nighttime (75 dB L_{max}) exterior noise level standards at the nearest existing residential uses by a wide margin. In addition, standard residential construction (e.g., stucco siding, Sound Transmission Class [STC]-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. Given this exterior-to-interior noise reduction typically achieved from standard residential construction and based on the predicted exterior noise levels, project car wash drying assembly noise level exposure is expected to be below the General Plan's daytime and nighttime interior noise level standards of 35 to 55 dBA, L50 (Table 8 of BAC Technical Report) within the nearest existing residences.

With respect to increase above ambient levels, ambient plus project car wash drying assembly noise levels at the nearest residential uses are estimated to range from 34 dB L_{max} to 50 dB v during the daytime, and from 34 dB L_{max} to 50 dB L_{max} during the nighttime. The increases in ambient noise levels from project car wash drying assembly equipment are calculated to be less than 0.1 dB, which is well below the applied significance criterion of 5 dB.

Because noise exposure from project car wash drying assembly equipment is predicted to satisfy applicable Sacramento County General Plan noise level standards at the nearest existing residential uses, and because noise exposure from those activities is not calculated to significantly increase ambient noise levels at those uses. However, the final specifications for the carwash drying assembly equipment are not available, it is not certain that the actual noise generated would be below the threshold; therefore, this impact would be **potentially significant**.

VACUUM EQUIPMENT NOISE AT NEAREST EXISTING RESIDENTIAL USES

A vehicle vacuum area is proposed to be located adjacent to the proposed car wash tunnel within the planned commercial portion of the proposed project. According to information provided to BAC, the project proposes the installation of JE Adams Super Vac Model #9200 series vacuum units.

Because the operation of the project vacuum equipment could exceed 30 continuous minutes in duration during a given worst-case busy hour, and pursuant to the noise source duration, the County's median (L50) noise level standards would be applicable to the vacuum equipment. Based upon the manufacturer's data (Appendix F of the Environmental Noise & Vibration Assessment in Appendix G of this Initial Study), the operations assumptions above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), worst-case (combined) project vacuum equipment noise exposure at the nearest existing residential uses were calculated and ranged from 26 dB

L50 to 48 L50. The results include consideration of shielding that would be provided by the masonry wall proposed for construction along the eastern and southern commercial component project boundary (ranging from 6 to 7' in height). The results indicate that worst-case vacuum equipment noise level exposure is predicted to satisfy the applied Sacramento County General Plan daytime (55 to 60 dBA, L_{50}) and nighttime (50 dBA, L_{50}) exterior noise level standards (Table 8 of BAC Technical Report) at the nearest existing residential uses. In addition, given the exterior-to-interior noise reduction typically achieved from standard residential construction (approximately 25 dB with windows closed and approximately 15 dB with windows open), and based on the predicted exterior noise levels of 26 dB L_{50} to 48 dB L_{50}, project vacuum equipment noise level exposure is expected to be below the General Plan's daytime and nighttime interior noise level standards (35 to 50 dBA, L_{50}, Table 8 of BAC Technical Report) within the nearest existing residences.

Similarly, with respect to the increase above existing ambient conditions, noise levels from project vacuum equipment are calculated to be less than 0.1 dB, which is below the applied significance criterion of 5 dB.

Because noise exposure from project vacuum equipment is predicted to satisfy applicable Sacramento County General Plan noise level standards at the nearest existing residential uses, and because noise exposure from those activities is not calculated to significantly increase ambient noise levels at those uses, However, the final specifications for the vacuum assembly equipment are not available, it is not certain that the actual noise generated would be below the threshold; therefore, this impact would be **potentially significant**.

DRIVE-THROUGH OPERATIONS NOISE AT NEAREST EXISTING RESIDENTIAL USES

According to the proposed project site plans, the project proposes drive-through lanes at Building Pads P2 through P6. Information on the menu speaker board models for the proposed drive-through lanes was not available at the time of the preparation of the BAC report. To quantify the noise emissions of proposed drive-through operations (i.e., menu speaker board and vehicle passages), BAC utilized noise level measurement data collected by BAC at other similar drive-through facilities located within the Sacramento region in recent years. Reference drive-through noise levels of 63 dBA L50 and 67 dBA L_{max} were used for speakers and reference levels of 60 dBA L50 and 70 dBA L_{max} were used for vehicles.

Because project drive-through operations could exceed 30 continuous minutes in duration during a given worst-case busy hour, the County's median (L50) noise level standards were applied. Using the BAC speaker and drive-through vehicle pass-by reference noise levels presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), project noise levels were projected from each of the proposed drive-through lane/speaker board areas to the nearest existing residential uses. The resulting noise levels ranged from 20 dBA L50 to 26 dBA L50. These results include consideration of shielding that would be provided by the masonry wall proposed for construction along the eastern and southern commercial component project boundary (ranging from 6 to 7' in height).

Project drive-through operations noise level exposure is predicted to satisfy the applied Sacramento County General Plan daytime (60 dBA L50) and nighttime (50 dBA L50) exterior noise level standards at the nearest existing residential uses by a wide margin. In addition, given the exterior-to-interior noise reduction typically achieved from standard residential construction approximately 25 dB with windows closed and approximately 15 dB with windows open), and based on the predicted exterior noise levels, project drive-through operations noise level exposure is expected to be below the General Plan's daytime and nighttime interior noise level standards within the nearest existing residences. It should be noted that the predicted noise levels would also comply with the County's 5 dB downward adjusted noise criteria, which would be applicable to noise sources consisting primarily of music or speech.

With respect to the increase above ambient, project drive-through operational noise levels would cause less than 0.1 dB increase above ambient levels, which is well below the applied significance criterion of 5 dB.

Because noise exposure from project drive-through operations is predicted to satisfy applicable Sacramento County General Plan noise level standards at the nearest existing residential uses, and because noise exposure from those activities is not calculated to significantly increase ambient noise levels at those uses, this impact would be **less than significant**.

CUMULATIVE (COMBINED) PROJECT NOISE AT EXISTING NEAREST RESIDENTIAL USES

The calculated combined median (L50) noise level exposure from analyzed on-site noise sources at the nearest existing residential uses range from 31 dBA L50 to 48 dBA L50 during the daytime and nighttime. Therefore, cumulative median (L50) noise level exposure from on-site operations would comply with the applied Sacramento County General Plan daytime and nighttime exterior noise level standards at the nearest existing residential uses. In addition, given the exterior-to-interior noise reduction typically achieved from standard residential construction (approximately 25 dB with windows closed and approximately 15 dB with windows open), combined on-site operations noise level exposure is expected to be below the General Plan's daytime and nighttime interior noise level standards within the nearest existing residences.

With respect to the increase above ambient, project cumulative operational noise levels would cause less than 0.1 dB increase above ambient levels, which is well below the applied significance criterion of 5 dB.

Because the calculated cumulative (combined) noise exposure from project on-site operations is predicted to satisfy applicable Sacramento County General Plan noise level standards at the nearest existing residential uses, and because cumulative noise exposure is not calculated to significantly increase ambient noise levels at those uses, this impact would be **less than significant**.

COMMERCIAL USES NOISE IMPACT TO PROPOSED RESIDENTIAL DEVELOPMENT

CEQA impact analysis is focused on impacts of proposed projects on the environment, including the noise environment. In general, it is not necessary to focus on impacts of the

environment on a proposed project. However, the noise study prepared for the proposed project not only provides an analysis of impacts of the proposed project on existing off-site residences, but also a detailed analysis of impacts of the commercial portion of the proposed project on the residential portion. Vacuum noise, including the benefit of shielding from the proposed masonry wall, would be 49 L_{50} dB, consistent with the County's daytime noise standard of 55 L_{50} dB. The drive-through operations noise is estimated to be between 33 and 41 L_{50} dB, depending on the commercial use, which is consistent with the County's daytime standard. The cumulative noise attributable to the operation of vacuums and drive-through operations is anticipated to be 49 L_{50} dB, consistent with the County's daytime standard. Please see Appendix G for more detail.

B) GENERATION OF EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS?

PROJECT CONSTRUCTION

During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The nearest existing sensitive structures have been identified as residential.

Table IS-23 includes the range of vibration levels for equipment commonly used in general construction projects at a distance of 25 feet. The results shown in Table IS-23 also include projected equipment vibration levels at the nearest existing sensitive structures (residences) to the project area.

Table IS-23: Reference and Projected Vibration Source Amplitudes for Construction Equipment – Projected PPV in Inches per Second

Equipment	Reference PPV at 25 Feet (in/sec)[1]	NE-Multi-Family Residential (100 feet)	E-Multi-Family Residential (40 feet)	S-Single-Family Residential (70 feet)	SW-Single-Family Residential (100 feet)	W-Multi-Family Residential (100 feet)
Vibratory roller	0.210	0.026	0.104	0.045	0.026	0.026
Hoe ram	0.089	0.011	0.044	0.019	0.011	0.011
Large bulldozer	0.089	0.011	0.044	0.019	0.011	0.011
Caisson drilling	0.089	0.011	0.044	0.019	0.011	0.011
Loaded trucks	0.076	0.010	0.038	0.016	0.010	0.010
Jackhammer	0.035	0.004	0.017	0.007	0.004	0.004
Small bulldozer	0.003	<0.	0.001	0.001	<0.001	<0.001

1. PPV = Peak Particle Velocity
BAC = Bollard Acoustical Consultants, Inc.
FTA = Federal Transit Administration
In/sec = inches per second
Source: 2018 FTA Transit Noise and Vibration Impact Assessment Manual (Table 7-4) and BAC.

The results shown in Table IS-23 indicates that vibration levels generated from on-site project construction activities at the nearest existing residences are predicted to be below the Caltrans thresholds for damage to residential structures of 0.5 in/sec PPV (building structure vibration criteria). In addition, the projected equipment vibration levels in Table IS-23 would range from well below a "barely/slightly perceptible" human response to a "perceptible" human response as defined by Caltrans (vibration annoyance potential threshold criteria). Based on the analysis provided above, construction activities within the project area are not expected to result in excessive groundborne vibration levels at nearby existing residences.

The project would not result in the exposure of persons to excessive groundborne vibration levels at the proposed uses of the project. The project consists of the development of residential and commercial uses. These uses do not typically have equipment that generates appreciable vibration. Further, it is our understanding that the project does not propose equipment that will produce appreciable vibration.

Because vibration levels due to and upon the proposed project are expected to satisfy the Caltrans groundborne impact vibration criteria, which the County has elected used to evaluate potential effects of the proposed project in this IS/MND, this impact would be **less than significant**.

Significance After Mitigation

Mitigation Measure NOI-1 would employ noise reduction measures to reduce the potential for annoyance at nearby noise-sensitive uses during construction, reducing the impact of temporary increase in ambient noise levels to **less than significant with mitigation incorporated**. Mitigation Measure NOI-2 would require testing of car wash drying equipment prior to commercial operation and, if necessary, control measures, to ensure that the increase in ambient noise levels at the nearest residential use would not exceed the significance threshold of 5 dB. This would reduce the impact of a long-term increase in ambient noise levels to **less than significant with mitigation incorporated**.

Population and Housing

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

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Environmental Setting

The project site is within the Carmichael & Old Foothill Farms Community Area Plan boundaries and is within the Fair Oaks Boulevard Corridor Plan Area. The Carmichael & Old Foothill Farms Community Area Plan, consistent with the Sacramento Zoning Code,

designates the project site as a mixture of shopping center (SC), light commercial (LC), and multiple family residential (RD-40).

As of April 1, 2020, the population of the community of Carmichael was 79,793 and the population of Sacramento County was 1,585,055. Currently, County of Sacramento has approximately 601,226 housing units (California Department of Finance 2023).

Discussion

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed project includes 6 new commercial buildings and 79 lots for single-family residential development. This additional housing in the community of Carmichael would accommodate a slight increase in population. The additional population would be minor, and would not be substantial compared to the existing populations of Carmichael (estimated 79,793 people in 2020) and Sacramento County (estimated 1,585,055 people in 2020). The direct and reasonably foreseeable indirect effects associated with implementing the proposed project, including the residential component, are addressed throughout this IS/MND. The additional population accommodated through the plan amendment and rezoning included as a part of this project, due to the small scale, would not lead to any significant environmental effect associated with additional employment development, the need to expand public facilities, or any other physical change induced by the proposed project. This impact would be **less than significant**.

Public Services

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

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

   Fire protection?

   Police protection?

   Schools?

   Parks?

   Other public facilities?

ENVIRONMENTAL SETTING

FIRE PROTECTION

Fire protection services in the project area are provided by the Sacramento Metropolitan Fire Department (Metro Fire). Metro Fire serves over 745,000 citizens within a 357-square-mile area. The nearest fire station is No. 109, 5634 Robertson Avenue, approximately 2 miles southwest of the project site. State No. 109 includes two fire engines and a water truck.

POLICE PROTECTION

Police protection services in the project area are provided by the Sacramento County Sheriff's Office, North Division. The North Division provides law enforcement services to the following communities: Antelope, Arden-Arcade, Carmichael, Elverta, Fair Oaks, Foothill Farms, McClellan Park, North Highlands, Rio Linda, and Orangevale. The nearest police station is located at 4510 Orange Grove Avenue, approximately 2 miles west of the project site.

SCHOOLS

The project site is situated within the San Juan Unified School District (SJUSD) service area. SJUSD provides public school services for grades K–12. SJUSD operates 68 schools in a 75-square-mile area, serving the communities of Arden-Arcade, Carmichael, Citrus Heights, Fair Oaks, Gold River, and Orangevale. Students from the new residences developed at the project site would be directed to the SJUSD schools presented in Table IS-24.

Table IS-24: SJUSD Schools Serving the Project Site

School Name and Address	Grades Served	Attendance[1]
Thomas Kelly Elementary School 6301 Moraga Drive Carmichael, CA	K–5	345
John Barrett Middle School 4243 Barrett Road Carmichael, CA	6–8	672
Del Campo High School 4925 Dewey Drive Fair Oak, CA	9–12	1,649

[1] Total number of students during the 2022-23 school year. SJUSD = San Juan Unified School District
Source: California Department of Education 2023

Several private schools are also located in the project vicinity, including the Sacramento Adventist Academy (K–12) and Saint John the Evangelist School (K–8).

PARKS

The project site is within the boundaries of the Carmichael Recreation and Park District. The nearest park is Jan Park, approximately 435 feet southeast of the project site. Please see Recreation, of this IS/MND for additional ails related to parks.

DISCUSSION

A) RESULT IN SUBSTANTIAL ADVERSE PHYSICAL IMPACTS ASSOCIATED WITH THE PROVISION OF NEW OR PHYSICALLY ALTERED GOVERNMENTAL FACILITIES, NEED FOR NEW OR PHYSICALLY ALTERED GOVERNMENTAL FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL IMPACTS, IN ORDER TO MAINTAIN ACCEPTABLE SERVICE RATIOS, RESPONSE TIMES, OR OTHER PERFORMANCE OBJECTIVES FOR ANY OF THE PUBLIC SERVICES:

Fire protection?

The proposed project consists of redevelopment and new development at an urban infill site in Carmichael. The project site formerly contained a gasoline station and a commercial building with a bowling alley, which were served by Metro Fire before these buildings were demolished. The proposed project includes 6 new commercial buildings totaling 29,150 square feet, which represents a reduction in the total commercial square footage as compared to the previous development. The proposed project also includes 79 lots for single-family residential development.

Metro Fire currently provides fire protection services to the project site and the surrounding area. The project applicant is required to incorporate California Fire Code, California Health and Safety Code, and federal Occupational Health and Safety Administration (OSHA) requirements into the project design to address access and finished surfaces for firefighting equipment; fire hydrant placement and sufficiency of fire hydrants; and fire flow availability. Sacramento County requires project applicants to submit project plans for review and approval to ensure California Fire Code and City standards are incorporated into project designs prior to the issuance of building permits.

Metro Fire receives its funding primarily through property taxes; additional funding comes from fees for services, and grants (Sacramento Metropolitan Fire District 2022). New development projects are required to pay fire protection development fees that are used fund additional facilities and equipment (Sacramento County Municipal Code Title 16, Chapter 16.152).

The need for fire protection services for the proposed commercial component of the project would not increase as compared to the former commercial development. Operation of the proposed 79 single-family residences would result in a minor increase in the need for fire protection services by Metro Fire and the project, due to its small scale, would not lead to any significant environmental effects due to the need to expand fire suppression facilities.

Incorporation of California Fire Code, California Health and Safety Code, and OSHA requirements into project design, as well payment of developer impact fees and property

taxes imposed by the County, would reduce the dependence on fire department equipment and personnel by reducing fire hazards, assisting in fire suppression, promoting fire safety at the project site, and helping to pay for fire protection services. Therefore, this impact would be **less than significant**.

POLICE PROTECTION?

As described above, the need for police protection services for the proposed commercial component of the project would not increase as compared to the former commercial development. Operation of the proposed 79 single-family residences would result in a minor increase in the need for police protection services by the Sacramento County Sherriff's Office and the project, due to its small scale, would not lead to any significant environmental effects due to the need to expand law enforcement facilities.

The Sacramento County Sheriff's Office is funded by property taxes and development impact fees. The proposed development at the project site would not affect the Sacramento County Sherriff's Office response times or other performance objectives because project applicants for future projects would pay development impact fees to ensure police protection personnel and equipment is provided to meet demand for police protection services. The minor increase in population at the project site would not result in the need for new police facilities or a change in service ratios or response times. Furthermore, property taxes from project operation would be used to fund ongoing needs for Sherriff's Office services. Therefore, this impact would be **less than significant**.

SCHOOLS?

The project site is situated within the service area of SJUSD. The proposed new 79 single-family residences at the project site would generate a small, but increased, need for public K–12 school services by SJUSD. Alternatively, some parents may choose to send their children to private schools.

SJUSD receives funding from developer impact fees, property taxes, and grants. Most recently, to help address a $2.4 billion need for updates and new construction outlined in SJUSD's Facilities Master Plan, Measure P was placed on the November 8, 2016 ballot. Voters approved Measure P with 69 percent of the vote, giving SJUSD authority to sell $750 million in general obligation bonds over the next 15 to 20 years to address school facility needs. Measure P funds may not be used to pay staff salaries, purchase school supplies, or for other general school operating expenses. Investors who buy the bonds are repaid through the collection of property taxes.

The SJUSD student generation rate is 0.3563 students per residential dwelling unit (Schoolworks, Inc. 2021). Since the project proposes 79 lots for single-family residential development, this equates to a potential for 28.5 new K–12 students that could be generated by the proposed project. Of these new students, 14 would be grades K–6; 4 would be grades 7–8; and 10.5 would be grades 9–12 (Schoolworks, Inc. 2021). These students would likely attend the schools shown in Table IS-24; however, depending on enrollment conditions in the future when student services are required, project- generated students could be directed by SJUSD to other schools in the District.

As required by SB 50, the project applicant would be required to pay all applicable State-mandated school impact fees to SJUSD. As of 2021, SJUSD fee amounts are $4.08 per square foot for residential construction and $0.66 per square foot for commercial/industrial construction (Schoolworks, Inc. 2021). The assessable square footage that would be subject to the fee would be determined by SJUSD at the time of development. The California Legislature has declared that payment of the applicable school impact fee is deemed to be full and adequate mitigation under CEQA for impacts on school facilities (California Government Code Section 65996). Therefore, this impact is considered **less than significant**.

PARKS?

Please see Recreation, of this IS/MND for the analysis related to parks and recreation, which was determined to result in **less-than-significant** impacts.

OTHER PUBLIC FACILITIES?

The minor increase in population at the project site would not result in the need for construction of other public facilities. Thus, there would be **no impact**.

RECREATION

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

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

ENVIRONMENTAL SETTING

The project site is situated within the boundaries of the Carmichael Recreation and Park District (CRPD), which oversees planning, implementation, and management of 176.8 acres of parkland, recreation facilities, programs, and events. All of CRPD's 13 park facilities are owned and operated exclusively by CRPD. CRPD serves an approximately 9.25-square-mile area with a population of approximately 40,408. CRPD provides 4.17 acres of parkland per 1,000 residents (Gates+Associates 2021). Assuming the Department of Finance 2023 average household size of 2.68, with no vacancy, the residential portion of the proposed project would increase the local population by approximately 212. The proposed single-family residential lots at the project site would be approximately 435 feet northwest of CRPD's Jan Park. Jan Park is a 13.6-acre neighborhood park that includes a playground, turf grass area, picnic areas, and concrete and dirt trails for walking through oak woodland habitat. Interpretive signage is interspersed along the trails to educate visitors about the plant and animal communities found at the park. A portable restroom is available at the picnic area. Several new upgrades and improvements were recently implemented by CRPD at Jan Park, including

a new playground, dog waste stations, drinking fountains, picnic areas, and improved signage (Gates+Associates 2021). The park boundaries are marked with painted wood boundary posts; there is no fencing. There is no parking area within the park, which is bounded by Jan Drive on the east, Salmaan Drive on the west, and single-family residential development on the south. However, parking is permitted along Jan Drive (adjacent to the park), which has a roadway width of 50 feet adjacent to the park that is designed to accommodate parallel parking for park recreationists.

In addition, there are 12 other CRPD parks within the Carmichael area that could be used by new residents and employees, such as Del Campo Park at the end of Heathcliff Drive approximately 0.5 mile northeast of the project site. Del Campo Park is 21.6 acres, which includes 12 acres of developed land and 9.6 acres of undeveloped Oak Woodland. The developed area is primarily lawn with a concrete walking loop. A playground, portable restroom, and an un-striped soccer field are also provided. Dirt and concrete walking trails are available through the park. Parking is available both within and adjacent to the park (Gates+Associates 2021).

Del Paso Regional Park, operated by the City of Sacramento Department of Parks and Recreation, is approximately 2.5 miles southwest of the project site. The park comprises 624 acres and includes outdoor lighted sports fields (baseball and softball), a museum, equestrian trails, natural habitat areas with interpretive trails, picnic areas, and the Haggen Oaks Golf Complex (City of Sacramento 2022). Haggen Oaks includes two public 18-hole golf courses, a driving range, and instructional programs for children and adults.

Discussion

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed project includes 79 lots for single-family development, the occupation of which would increase the population within the Carmichael area and result in increased use of CRPD park facilities; in particular, the use of the nearby 13.6-acre Jan Park would likely increase.

In addition to residents, employees of the businesses within the CRPD service area also use and place demands on the CRPD park facilities. The proposed project includes 29,150 square feet of retail and restaurant development, which would provide new employment opportunities that would also increase the use of CRPD facilities. Employees use park and recreational facilities in a variety of ways: they participate in lunchtime activities, community center functions, before-work and after-work group functions, weekend company functions, company sponsored sports leagues, lunchtime trail use, etc. However, one employee is generally not considered to have the same demand for or impact upon park facilities as one resident. In general, CRPD residents can use park and recreation facilities at any time of day year-round. Conversely, park and recreation facility use by local business employees is generally limited to shorter periods of time before and after work and during lunch or breaks. Therefore, per CRPD standards, one employee is

considered to have the equivalent park facilities demand of 0.09 residents (SCI Consulting Group, Inc. 2010).

The Sacramento County Park Development Impact Fee Programs fund the recreation and park facilities needed to serve infill development within eight respective recreation and park districts, including CRPD. All development within the area served by CRPD, which includes the proposed project, is required to pay a Park Development Impact Fee at the time of building permit issuance, per County Municipal Code Title 16, Chapter 16.155. The Park Development Impact Fee is determined by the CRPD Park Impact Fee Nexus Study (SCI Consulting Group, Inc. 2010). Fees are calculated differently based on the type of proposed land use. In 2010, the fee for single-family residential development was $5,864 per dwelling unit, and the fee for high-density multi-family residential was $4,022. Since different commercial/industrial land uses have varying employment densities, the nonresidential park impact fee is expressed on a per-square- footage basis based on the respective employment density for each land use category. The fee for retail/restaurant development was $0.43 per square foot. Beginning in 2014, the CRPD park impact fees are automatically adjusted based on the change in the Engineering News Record Construction Cost Index (SCI Consulting Group, Inc. 2010).

Because the project applicant is required to pay the Park Development Impact Fee at the time of building permit issuance (per County Municipal Code Title 16, Chapter 16.155), which is used by CRPD to fund maintenance and improvements to existing parks, this impact is considered **less than significant**.

B) DOES THE PROJECT INCLUDE RECREATIONAL FACILITIES OR REQUIRE THE CONSTRUCTION OR EXPANSION OF RECREATIONAL FACILITIES THAT MIGHT HAVE AN ADVERSE PHYSICAL EFFECT ON THE ENVIRONMENT?

The proposed project consists of new retail/restaurant uses, and single-family and multi-family residential development. Recreational facilities are not proposed as part of the project.

As described above, the project applicant is required to pay the Park Development Impact Fee at the time of building permit issuance, which is used by CRPD to fund maintenance and improvements to existing parks.

Because the proposed project does not include new recreational facilities or require the construction or expansion of recreational facilities that could have a physical effect on the environment, there would be **no impact**.

TRANSPORTATION

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

a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

b. Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

d. Result in inadequate emergency access?

Environmental Setting

The proposed project site is southeast of the intersection of Manzanita Avenue and Winding Way Intersection, and consists of four currently undeveloped parcels (245- 0011-018, -020, -021, -012). The closest regional roadway to the project site is Interstate 80 (I-80), approximately 2.6 miles to the west. The two major roadways in the project area are Winding Way and Manzanita Avenue.

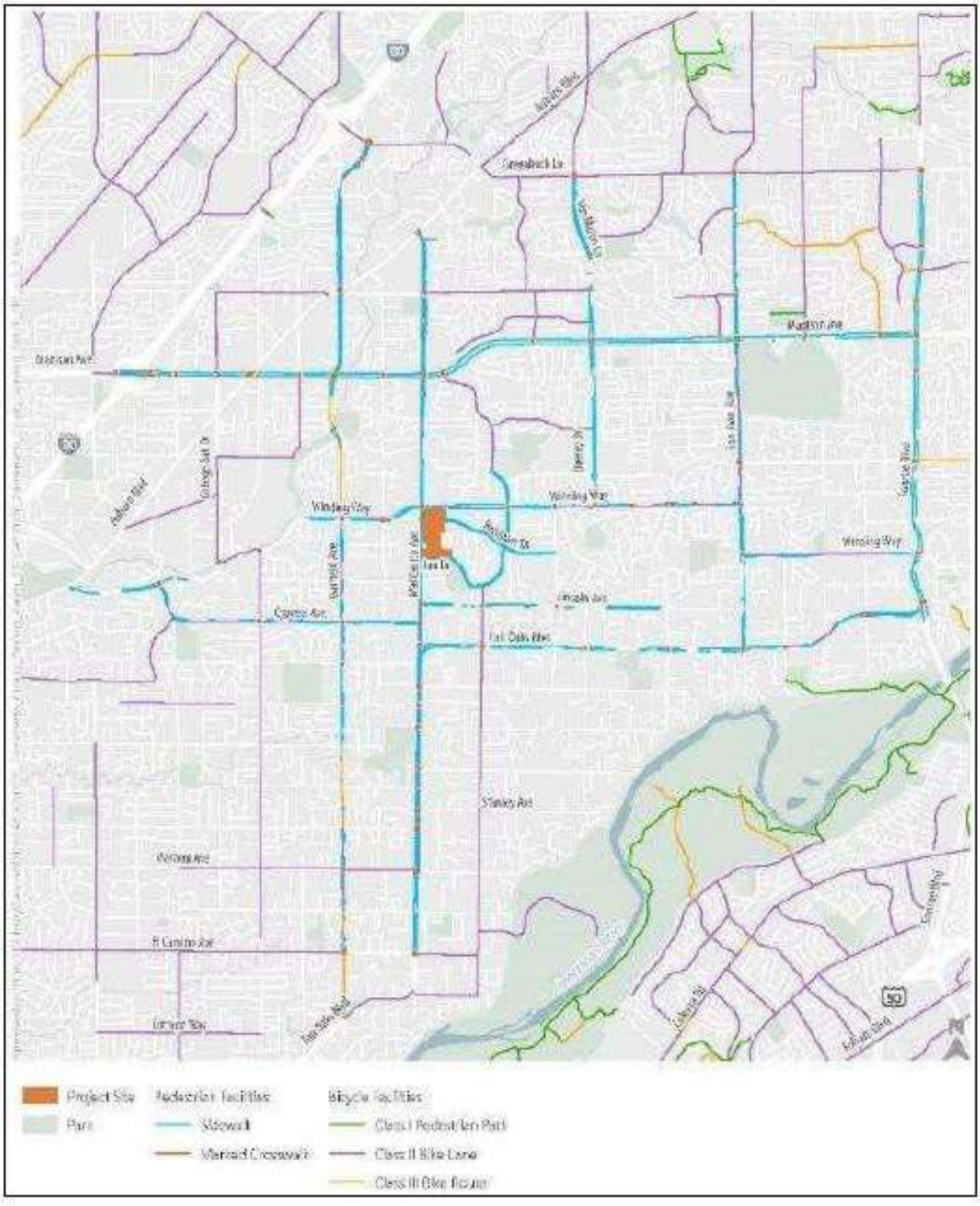
Winding Way is a four-lane, east-west arterial that extends from Hazel Avenue in the east to College Oaks Drive in the west. Winding Way is adjacent to the northern portion of the proposed project site. Manzanita Avenue is a four-lane, north-south arterial that extends from Auburn Boulevard in the north to Fair Oaks Boulevard in the south. Manzanita Avenue is adjacent to the western portion of the proposed project site. Winding Way and Manzanita Avenue also include existing Class II bike lanes and sidewalks, although the sidewalks on the project site frontage are not continuous. The project site, local roadways, and existing pedestrian and bicycle facilities in the area are shown in Plate IS-20 below.

Sacramento Regional Transit (SacRT) provides fixed route and on-demand transit service near the project site. Routes 25 and 129 connect the project site to Marconi/Arcade light rail station and Downtown Sacramento respectively via bus.

Collision history data for the project area from 2019 to 2021 was obtained from the Transportation Injury Mapping System (TIMS) as part of the project's Transportation Impact Technical Memorandum (Fehr & Peers 2023). A total of 1,536 collisions were reported during the analysis period, of which approximately 30 percent occurred at intersections, 70 percent occurred mid-block, and 12 percent of collisions involved pedestrians or bicyclists. Of these, 15 collisions involving pedestrians and one collision involving a bicyclist resulted in fatalities.

In addition to collisions in the entire project area, collisions in the area within a half-mile radius of the Manzanita Avenue-Winding Way intersection were investigated in detail. Approximately 46 collisions were reported in this area during the analysis period, of which 11 percent involved pedestrians and bicyclists. Approximately 20 percent of these collisions resulted in fatalities or severe injuries.

Plate IS-20: Local Roadways and Existing Pedestrian and Bicycle Facilities



REGULATORY SETTING

SENATE BILL 743

On September 27, 2013, SB 743 was signed into law, supporting previous climate-focused and transportation legislation, including the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the California Global Warming Solutions Act of 2006 (AB 32), as well as the Complete Streets Act (AB 1358), which requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users. In December 2018, the OPR issued a final advisory to guide lead agencies in implementing SB 743, Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018).

The Technical Advisory observes that VMT is the most appropriate metric to use in evaluating a project's transportation impact under CEQA. VMT for residential and office projects is generally assessed using efficiency metrics, i.e., on a "per rate" basis. Specifically, the OPR-recommended metrics are VMT per capita for residential projects and VMT per employee for office projects. The Technical Advisory does not recommend a threshold approach for school projects. Lead agencies have the discretion to set or apply their own significance thresholds in lieu of those recommended in the Technical Advisory, provided they are based on substantial evidence. Cities and counties still have the ability to use metrics such as LOS for other plans, studies, or network monitoring. However, LOS and similar metrics that measure the social inconvenience of traffic congestion are not to be used for evaluating significant environmental impacts under CEQA.

CEQA GUIDELINES SECTION 15064.3

CEQA Guidelines Section 15064.3, Determining the Significance of Transportation Impacts, states that VMT is the most appropriate measure of transportation impacts and provides lead agencies with the discretion to choose the most appropriate methodology and thresholds for evaluating VMT. This was determined after the passage of SB 743, which called for the use of a new metric to assess transportation impacts of land use projects.

The County of Sacramento has adopted the Transportation Analysis Guidelines to assist transportation engineers and planners in the preparation of CEQA transportation analyses for land development and transportation projects, pursuant to SB 743 (Sacramento County 2020).

SACRAMENTO COUNTY GENERAL PLAN CIRCULATION ELEMENT

The Sacramento County General Plan Circulation Element provides a framework to guide the future of the County's transportation system (Sacramento County 2022a). It includes the following policies that may be relevant to the project:

CI-1: Provide complete streets to provide safe and efficient access to a diversity of travel modes for all urban, suburban and rural land uses within Sacramento County except within certain established neighborhoods where particular amenities (such as sidewalks) are not desired. Within rural areas of the County, a complete street may be

accommodated through roadway shoulders of sufficient width or other means to accommodate all modes of travel.

CI-3: Travel modes shall be interconnected to form an integrated, coordinated and balanced multi-modal transportation system, planned and developed consistent with the land uses to be served.

CI-4: Provide multiple transportation choices to link housing, recreational, employment, commercial, educational, and social services.

CI-8: Maintain and rehabilitate the roadway system to maximize safety, mobility, and cost efficiency.

CI-10: Land development projects shall be responsible to mitigate the project's adverse impacts to local and regional roadways.

CI-18: The County shall plan and prioritize the implementation of intersection improvements, where feasible, in corridors identified as congested.

CI-29: The County shall work with transit service providers to establish and implement development guidelines to maximize the ability of new development and redevelopment to support planned transit services. New development and redevelopment shall have an orientation to travel patterns that are conducive to transit service. This will include concentration of development in centers and along linear corridors such that trip origins and destinations are concentrated near transit services.

CI-32: Develop a comprehensive, safe, convenient and accessible bicycle and pedestrian system that serves and connects the County's employment, commercial, recreational, educational, social services, housing and other transportation modes.

CI-38: Design and construct pedestrian facilities to ensure that such facilities are accessible to all users.

SACRAMENTO COUNTY ACTIVE TRANSPORTATION PLAN

The 2022 Active Transportation Plan (ATP) establishes goals and recommendations for active transportation (e.g., bicycle and pedestrian) improvements throughout unincorporated Sacramento County (Sacramento County 2022b). It includes a list of future improvements, organized by priority. It also specifies that a "Study Corridor" for potential Class IV bike lanes is proposed on Manzanita Avenue and Winding Way.

In conformance with the policies above, the project would improve the roadways and construct sidewalks and bike lanes along the project site's full frontage on Manzanita Avenue and Winding Way.

DISCUSSION

A) CONFLICT WITH A PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE AND PEDESTRIAN FACILITIES?

CONSTRUCTION

Construction would take place on the project site and adjoining frontages, including periods of lane closures. Construction may temporarily generate new vehicle trips (e.g., hauling and worker commute trips). Project construction is anticipated to be completed in one phase (including both the retail and residential components), and would last approximately 24 months. Construction activities would include demolition (removal of existing asphalt pavement), site preparation, grading, paving, building construction, and exterior treatment of buildings (e.g., painting).

Given the temporary nature of construction and existing capacity on local roadways, project construction is not anticipated to conflict with any applicable plan, policy or ordinance related to the transportation system that could result in a substantial adverse environmental effect. Therefore, the impact would be **less than significant**.

OPERATIONS

This section is based on the Transportation Impact Technical Memorandum prepared for the project in October 2023 (Fehr & Peers 2023), which is located in Appendix H.

ROADWAY ACCESS

Five new commercial driveways are proposed along Winding Way and Manzanita Avenue, as well as residential entry streets at Winding Way and Rampart Drive/Mary Lynn Lane. These new changes to the roadway configuration would result in reduced level of service (LOS) at certain intersections in the vicinity of the project site. This may conflict with General Plan Policy CI-18, which states that the County shall plan and prioritize the implementation of intersection improvements, where feasible, in corridors identified as congested.

The project's potential effects on LOS were found to be within the limits established in the Sacramento County General Plan. While LOS is no longer used as a metric for transportation impacts of land development projects under CEQA, this still reinforces that the roadway access components of the project would be compliant with local policies. Therefore, the proposed roadway access changes would not conflict with applicable transportation plans or policies, and the impact would be **less than significant**.

BICYCLE AND PEDESTRIAN ACCESS

The project would construct bicycle and pedestrian facilities on Winding Way and Manzanita Avenue. The project would also construct sidewalks on all internal roadways. This would be in line with policies CI-1, CI-3, CI-4, CI-32, and CI-38 of the Sacramento County General Plan, as well as the guiding principles of the Sacramento County Active Transportation Plan. Because the project would improve bicycle and pedestrian access, there would be no conflict with related policies and therefore **no impact**.

TRANSIT ACCESS

The nearest transit stops to the project area are on northbound and southbound Manzanita Avenue, and serve Sacramento Regional Transit bus route 25. The project's pedestrian improvements would improve connectivity to those transit stops. Additionally, the project is proposing a new bus stop on Winding Way. While the project may slightly increase transit demand through its residential component, the additional trips would not be significant. Additionally, the proposed development would align with existing transit patterns, as envisioned by Policy CI-29. Based on the small number of additional transit trips, and the project's transit connectivity improvements, the impact would be **less than significant**.

SUMMARY

For the reasons discussed above, the project would not conflict with any program, plan, ordinance, or policy related to circulation that would lead to any significant adverse physical environmental impact. The impact is **less than significant**.

B) CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES § 15064.3, SUBDIVISION (B)?

CONSTRUCTION

VMT analysis is intended to capture the long-term impacts of a proposed project. Therefore, construction activities are not typically subject to VMT analysis. As a result, no analysis of construction VMT is warranted (Sacramento County 2020). Therefore, consistent with the Transportation Analysis Guidelines, there is no conflict with CEQA Guidelines Section 15064.3 and impacts associated with construction would be **less than significant**.

OPERATIONS

This section is based on the Transportation Impact Technical Memorandum prepared for the project in October 2023 (Fehr & Peers 2023), which is located in Appendix H. The technical memorandum was prepared in accordance with the County's Transportation Analysis Guidelines.

The project was screened from further VMT analysis based on the guideline's screening criteria for local-serving retail and projects in VMT-efficient areas. Local-serving retail projects are defined as those with less than 125,000 square feet of total gross floor area that do not have regional-serving uses per Appendix A of the Transportation Analysis Guidelines. The project's retail component (primarily drive-through uses) is approximately 29,150 square feet, which is well below this threshold, and does not have regional-serving uses (Sacramento County 2020). Additionally, the project was determined to be in a VMT-efficient area, based on mapping provided by the SACOG. Therefore, both the commercial and single-family residential components of the project can be screened from VMT analysis, and the impact associated with operations would be **less than significant**.

C) SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE (E.G., SHARP CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G., FARM EQUIPMENT)?

CONSTRUCTION

Geometric design features are associated with a project's design, and thereby, its operational phase. Therefore, there would be **no impact** associated with construction.

OPERATIONS

All project elements would be designed and constructed in compliance with County of Sacramento and SacRT design standards, including signage, speed limits, and crosswalk markings on driveways, which would ensure adequate sight distance and reduce the potential for conflict. Therefore, hazardous design features such as sharp curves or dangerous intersections would not be included. Additionally, the project would not result in a change to the volume, mix, or speed of traffic that would be incompatible with the design of existing roadways and transportation facilities; the project is not anticipated to substantially affect traffic at nearby intersections; and internal features such as drive-throughs are expected to safely accommodate predicted queues. Therefore, no increase in hazards or incompatible uses would occur, and the impact associated with operation would be **less than significant**.

D) RESULT IN INADEQUATE EMERGENCY ACCESS?

CONSTRUCTION

The project may require temporary lane closures during construction, and may result in temporary disruptions to traffic, which could impede access for emergency responders. Therefore, the impact associated with project construction would be **potentially significant**.

OPERATIONS

All project elements will be designed and constructed in compliance with Sacramento County and SacRT design standards, which would ensure that emergency response vehicles have adequate access routes to the project site (i.e., a sufficient number of access routes that can accommodate fire, ambulance, and police vehicles). Emergency vehicles would be able to access the project site through the designated emergency access routes in the southern part of the residential component, as well as driveways and residential entry streets, all of which have a minimum 20 feet of unobstructed road width. Therefore, emergency access through the project area would remain adequate, and the impact associated with project operations would be **less than significant**.

SIGNIFICANCE AFTER MITIGATION

The impact of project construction on emergency access would be reduced to a **less-than-significant** level through implementation of Mitigation Measure TRANS-1 because coordination with emergency responders and the use of signage would ensure that emergency vehicles would be able to travel on project area roadways even with temporary road closures or detours.

TRIBAL CULTURAL RESOURCES

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

a. 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:

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

   ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. The Cultural Resources section above contains a more detailed description of the environmental setting for the project site, relating to cultural and TCRs.

TCRs include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to California Native American tribes. Tribal cultural resources may contain physical cultural remains or may be places within a landscape such as gathering places, sacred sites, landscape features, plants, or other locations that help maintain religious and cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institution of a living tribal community. This category of resources under CEQA is intended to recognize that tribes have unique knowledge and information about sensitive resources important to the self-identity of tribal communities and can only be identified by members of the Native American community, thus requiring consultation under CEQA.

Regulatory Context

AB 52 (effective July 1, 2015) added Public Resources Code Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to CEQA, relating to consultation with California Native American tribes, consideration of “tribal cultural resources,” and confidentiality. AB 52 provides procedural and substantive requirements for lead agency consultation with California Native American tribes and consideration of effects on tribal cultural resources, as well as examples of mitigation measures to avoid or minimize impacts to tribal cultural resources. AB 52 establishes that if a project may cause a substantial adverse change in the significance of a tribal cultural resource, that project may have a significant effect on the environment. Lead agencies must avoid damaging effects to tribal cultural resources, when feasible, and shall keep information submitted by tribes confidential.

AB 52 requires consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a proposed project, if the tribe requested, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation. Public Resources Code Section 21080.3.1(d) states that within 14 days of determining that an application for a project is

complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project location and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to requests consultation pursuant to this section.

SACRED LANDS RESEARCH

On December 19, 2019, HELIX requested that the Native American Heritage Commission (NAHC) conduct a search of their Sacred Lands File for the presence of Native American sacred sites or human remains in the vicinity of the proposed project area.

A written response received from the NAHC on December 23, 2019, stated that the Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate area. On January 6, 2020, HELIX sent letters to eight Native American contacts that recommended by the NAHC as potential sources of information related to cultural resources in the vicinity of the project area. To date two tribes have responded, and both have stated that they consider the project area to be culturally sensitive. A second Sacred Lands File search request addressing the expanded 24.8-acre APE was sent to the NAHC on June 11, 2022. The NAHC responded on July 22, 2022, and again failed to indicate the presence of Native American cultural resources in the immediate area. On July 26, 2022, HELIX sent letters to ten Native American contacts that were recommended by the NAHC as a result of this second Sacred Lands File search. On October 14, 2022, a representative from the Shingle Springs Band of Miwok Indians responded and indicated that they are not aware of any known cultural resources within the project site. They have requested ongoing consultation as the project develops and consultation upon any inadvertent discovery of cultural resources.

NATIVE AMERICAN CONSULTATION

On June 22nd, 2023, Sacramento County PER distributed SB-18 notification letters to Buena Vista Rancheria of Me-Wuk Indians, Colfax-Todds Valley Consolidated Tribe, Shingle Springs Band of Miwok Indians, and Tsi Akim Maidu, per the recommended contacts provided by the NAHC.

Sacramento County PER did not receive responses from SB-18 notified tribes.

The applicant's consultant (Helix) provided a Cultural Resources Assessment for the property in which they reached out to AB-52 consulting tribes on behalf of the proposed project.

- On January 29th, 2020, Wilton Rancheria contacted Helix requesting consultation with the Lead Agency when the application was deemed complete.

- On February 5th, 2020, United Auburn Indian Community (UAIC) responded requesting worker awareness training as part of the Tribal Cultural Resources mitigation for the proposed project.

On November 15th, 2023, Sacramento County PER held a monthly tribal consultation meeting with UAIC and reintroduced this project. UAIC declined to consult further.

On November 16th, 2023, Sacramento County PER invited all consulting tribes to a project-specific meeting to reintroduce the project and confirm tribal consultation requests. Venesa Kremer, representing Wilton Rancheria requested a site visit lead by a tribal monitor to evaluate the project APE.

On December 7th, 2023, Wilton Rancheria representative Tecante Williams visited the site and performed a Tribal Cultural Resources Survey. Candise Vogel, County PER Archaeologist accompanied to take notes and comments. No TCRs were identified. Mr. Williams asked that trees older than 100 years be considered for protection within the project design.

There are no further tribal inquiries. Although no TCRs were identified, it cannot be ruled out that unanticipated TCRs could encountered during ground-disturbance activities that are part of project construction. This impact would be potentially significant. Mitigation requiring procedures for unanticipated discoveries, worker awareness training, and on-site tribal monitoring during the construction phase are the have been requested by Wilton Rancheria to reduce potential impacts to tribal cultural resources.

Discussion

A) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. The Cultural Resources section above contains a more detailed description of the environmental setting for the project site, relating to cultural and TCRs.

Under Public Resources Code 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]).

While the Sacred Land File search for the project area was negative, the California Native American Tribes were consulted as required under CEQA. A representative from the Shingle Springs Band of Miwok Indians indicated that they are not aware of any known cultural resources within the project site. A representative from Wilton Rancheria confirmed the area may be culturally sensitive.

While there is no evidence of tribal cultural resources present within the project area, the project could uncover and adversely impact undiscovered tribal cultural resources during construction. Additionally, the United Auburn Indian Community requested that mitigation measures be in place to incorporate a cultural component to the worker environmental awareness training and a procedure for inadvertent discovery be in place. This impact would be **potentially significant**.

Significance After Mitigation

Implementation of Mitigation Measure CUL-1 would require a worker awareness training be given to all construction personnel to inform them on what a tribal cultural resource would look like if found, what to do if found, and the legal consequences for not following the procedures surrounding inadvertently found tribal cultural resources. Mitigation Measure CUL-3 outlines the procedure if human remains are discovered during construction. Mitigation Measure TCR-1 outlines the required procedure if tribal cultural resources are found during construction, including guidance around stopping work and who to notify. With implementation of Mitigation Measures CUL-1, CUL-3, and TCR-1, impacts to tribal cultural resources would be avoided and minimized, reducing the impact to **less than significant with mitigation incorporated**.

Utilities and Service Systems

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

a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment facilities or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

b. Have sufficient water supplies available to serve the project and reasonably foresee future development during normal, dry and multiple dry years?

c. Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing

commitments?

d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

ENVIRONMENTAL SETTING

The proposed project consists of redevelopment and new development at an infill site in Carmichael. The project site is served by a variety of utility providers; water supply, wastewater conveyance and treatment, and solid waste are discussed in more detail below. A variety of telecommunications providers, including telephone and television, have existing facilities in the project area and have provided services to the project site in the past and would continue to do so in the future.

Energy of this IS/MND addresses energy demand and facilities. Potential environmental impacts associated with construction of new stormwater drainage facilities are addressed in this IS/MND in Hydrology and Water Quality.

WATER SUPPLY

The project site is served with potable water by the CWD. The CWD service area encompasses approximately 8 square miles north of the American River. CWD serves primarily residential and commercial customers in the Carmichael area. CWD's 2020 Urban Water Management Plan (UWMP) (Tully & Young 2021) demonstrates water supply reliability in a normal year, single-dry year, and droughts lasting at least 5 years over a 20-year planning horizon as required by California Water Code Sections 10631–10635. Relevant information from the UWMP is presented below.

CWD has surface water rights for water from the American River, groundwater supplies derived from its well system, alternative water supplies for reclaimed water related to its contractual relationship with Aerojet Corporation, and stored water supplies derived from its long-term conjunctive use activities. Surface water diverted from the American River is treated at CWD's Bajamont Water Treatment Plant on Bajamont Way in Carmichael. CWD derives groundwater supplies from its four primary (active) wells and is developing additional well capacity to meet dry year demands. The treated surface water supplies are blended with the groundwater supplies and delivered to customers throughout the CWD service area as part CWD's conjunctive use program.

Surface water diverted from the American River is CWD's main source of supply. CWD's surface water supplies are secured through two licensed water rights and one permitted water right. CWD uses these three post-1914 appropriative rights[16] to the natural flow of

[16] Appropriative water rights rely on a "first in time, first in right" rule for diversion of water for use on land that is separated from a watercourse. In 1914, California's water laws were changed to provide for state

the American River to divert up to 50 cubic feet per second, depending on the season of use and the correlating hydrological conditions. In addition, CWD also has rights to groundwater extraction and treatment (GET) water supplies under a contract with Aerojet. CWD may also have access to the City of Sacramento's Area D water rights and entitlements as well as San Juan Water District water supplies. CWD maintains connections with neighboring water agencies, including the Fair Oaks Water District and Sacramento Suburban Water District, and has received water supplies from those systems in the past to support CWD's water portfolio management actions. CWD's three primary surface water rights, from which it obtains most of its surface water supply, are summarized below in Table IS-25.

Table IS-25: CWD Primary Surface Water Supply Sources

Water Right	Type of Water Use	Contractual Amount
License 1387 (1915 appropriative)	Domestic and Irrigation	10,859 AFY
License 8731 (1925 appropriative)	Domestic, Irrigation, and Municipal	3,669 AFY
Permit 7356	Domestic and Municipal	18,099 AFY

Note: AYF = acre-feet per year
CWD = Carmichael Water District
Source: Tully & Young 2021: Table 3-1

CWD's groundwater wells are situated within the Sacramento Groundwater Basin, North American Subbasin. This subbasin is not in a condition of overdraft. The North American Subbasin is categorized as a "high priority basin" by the California Department of Water Resources (DWR) because there is a large population overlying the basin that relies on the basin's supplies to meet potable and raw water needs. CWD's service area is part of the "North Basin" identified in the 2000 Water Forum Agreement. In normal hydrologic years, CWD relies on groundwater to meet 15 to 30 percent of its total supply. In critically dry years, more groundwater is used. Contra Costa Water District (CCWD) has the appropriative right to pump naturally-occurring percolating groundwater from the water-bearing formations in the North American Subbasin, subject to the terms identified in the North American Subbasin Groundwater Sustainability Plan (GEI Consultants 2021). The total amount of groundwater available for CWD pumping is 6,646 acre-feet per year (AFY; however, historical groundwater pumping by CWD has been substantially less, ranging from 1,200 to 4,700 AFY (Tully & Young 2021: Table 3-11). As a result of its implementation of proactive conjunctive use, CWD has banked over 50,000 acre-feet of groundwater in the basin since 1998. This water may be available as a CWD resource for use in dry years.

administration of appropriative water rights by the State Water Resources Control Board (SWRCB). Pre-1914 appropriative rights fall outside the jurisdiction of the SWRCB. However, pre-1914 right holders are now required to file a Statement of Water Diversion and Use with SWRCB, and they may not waste water or unreasonably affect public trust resources.

CWD's water supplies and demands in normal, dry, and multiple-dry years are shown in Table IS-26. As shown below, CWD's total annual water supplies are more than 40,000 AFY in a normal hydrologic year. In dry years, CWD has more than 20,000 AFY to serve the projected demands of approximately 10,000 AFY—nearly double the required volume to meet demands.

Table IS-26: CWD Water Supply and Demand (Acre-Feet Per Year)

Water Year Type	**2025**	**2030**	**2035**	**2040**	**2045**
Normal Year Supply	43,920	43,920	43,920	43,920	43,920
Normal Year Demand	8,860	8,950	9,070	9,160	9,280
Single Dry Year Supply	28,788	28,788	28,788	28,788	28,788
Single Dry Year Demand	9,303	9,398	9,524	9,618	9,744
Multi-Year Drought					
Year 1 Supply	43,920	43,920	43,920	43,920	43,920
Year 1 Demand	9,300	9,400	9,520	9,620	9,740
Year 2 Supply	25,771	25,771	25,771	25,771	25,771
Year 2 Demand	9,320	9,424	9,540	9,640	9,760
Year 3 Supply	25,771	25,771	25,771	25,771	25,771
Year 3 Demand	9,340	9,448	9,560	9,660	9,780
Year 4 Supply	43,920	43,920	43,920	43,920	43,920
Year 4 Demand	9,360	9,472	9,580	9,680	9,800
Year 5 Supply	43,920	43,920	43,920	43,920	43,920
Year 5 Demand	9,380	9,496	9,600	9,700	9,820

Source: Tully & Young 2021: Tables 3-17, 5-2, and 5-3
AFY = acre feet per year

CWD = Carmichael Water District

Although it is not reflected in Table IS-26 above, detailed modeling performed by Tully & Young (2021) for the UWMP determined that in single-dry and multiple-dry years, CWD would experience a water shortage during the months of June through October. During these time periods, CWD would implement some of the provisions in its Water Shortage Contingency Plan. To make up the shortfall in these water years, the Water Shortage Contingency Plan relies on a two-pronged approach: implement a 20 percent (or more) reduction in customer demand through water restrictions; and (if necessary) augment CWD water supplies through a variety of coordinated activities with neighboring agencies including increasing groundwater supply deliveries, receiving surface water from the American River, and opening interties to receive additional water assets.

WASTEWATER CONVEYANCE AND TREATMENT

The Sacramento Area Sewer District (SacSewer) was previously known as two separate agencies: Sacramento Area Sewer District and RegionalSan. The former SacSewer provided sewage collection services, and the former RegionalSan provided treatment and resource recovery services. In January 2024, the two agencies legally merged into one, resulting in a consolidated sewer utility called SacSewer. Sewer conveyance for development in the project area is provided by SacSewer, which is a publicly owned

sewer collection system that provides wastewater collection and treatment services to approximately 386 square miles of the greater Sacramento area, including the community of Carmichael. SacSewer owns and operates sewer gravity mains (greater than 10 inches) in Manzanita Avenue and Winding Way adjacent to the project site. These pipelines convey wastewater west and south to larger SacSewer trunk sewer pipelines near Folsom Boulevard (SacSewer 2020). SacSewer has prepared a System Capacity Plan to evaluate existing sewer system service areas that require upgrades or improvements under existing conditions and considering future development (SacSewer 2020). When designing conveyance pipelines, SacSewer considers three sources of inflow: domestic wastewater, groundwater infiltration through joints in pipes and manhole walls, and surface water infiltration from stormwater runoff. New sewer conveyance systems are designed to accommodate projected peak wet weather flows, without surcharging.[17] SacSewer's System Capacity Plan includes proposed projects to achieve identified upgrade and improvement goals to alleviate surcharging, and identifies placement and sizing of facilities in new areas where wastewater conveyance will be needed in the future (SacSewer 2020).

SacSewer's local conveyance lines tie into larger regional interceptor lines That convey wastewater directly to the EchoWater Resource Recovery Facility, which is located east of the Sacramento River near Elk Grove. The recently completed upgrades and improvements now enable the EchoWater Facility to produce 135 million gallons per day (mgd) of tertiary-treated water, which will contribute to increased recycled water use (thereby reducing water demand) throughout the region (SacSewer 2023a). The EchoWater Facility is permitted to discharge an average dry-weather flow of 181 mgd of treated wastewater to the Sacramento River (Central Valley Regional Water Quality Control Board 2021). SacSewer expects per capita consumption to fall 25 percent in the future through the ongoing installation and use of water meters and compliance with conservation mandates such as the state Water Conservation Act of 2009 (SB X7-7). Therefore, SacSewer expects that water conservation measures throughout its service area would allow the existing 181 mgd average dry-weather flow capacity to be adequate for at least 40 years (Ascent Environmental 2014:6-2).

SOLID WASTE AND RECYCLING

The Sacramento County Department of Waste Management & Recycling (DWMR) manages the operations, maintenance, and development of the solid waste management system within unincorporated Sacramento County, including the community of Carmichael. DWMR operates and manages the North Area Recovery Station and the Kiefer Landfill. The North Area Recovery Station in North Highlands (approximately 3 miles west of the project site) accepts standard business and household waste (DWMR 2023a). Waste from the North Area Recovery Station is ultimately transported to Kiefer Landfill, southeast of Sacramento near Sloughhouse. Standard residential refuse and recycling collection service in the project area is provided by Sacramento County DWMR

[17] Surcharging occurs when the sanitary sewer lines become overloaded, either with wastewater or a combination of wastewater and infiltrated water (groundwater and/or surface water runoff).

(DWMR 2023b, 2023c). Commercial waste, recycling, and organics collection services are provided by Sacramento County DWMR's local franchised waste haulers (DWMR 2023d).

The Florin Perkins Resource Recovery Facility (approximately 9 miles southwest of the project site) is a certified facility that handles recycling of construction and demolition debris (GreenWaste 2023). Any materials that Florin Perkins is not able to recycle are transported to the North Area Recovery Station. The L&D Landfill (approximately 10 miles south of the project site), accepts business, commercial, and household wastes and is also a certified facility that handles recycling of construction and demolition debris (L&D Landfill 2023).

The North Area Recovery Station is permitted to receive up to 2,400 tons per day (California Department of Resources Recycling and Recovery [CalRecycle] 2019a). Kiefer Landfill is permitted to accept a maximum of 10,815 tons per day, has a remaining capacity of 112,900,000 cubic yards, and an estimated closure date of 2064 (CalRecycle 2019b). The Florin Perkins Resource Recovery Facility is permitted to receive up to 1,000 tons per day (CalRecycle 2019c). The L&D Landfill is permitted to receive 4,125 tons per day, and the remaining maximum landfill capacity is 3,115,900 cubic yards, with an estimated landfill closure date of December 2030 (CalRecycle 2019d).

Discussion

a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment facilities or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The proposed project would include new development that requires new or expanded municipal water, wastewater treatment, storm water drainage, and electrical service. Further discussion of stormwater management facilities is in Hydrology and Water Quality. Construction and expansion of water supply, wastewater, stormwater drainage, and electrical facilities would result in physical environmental impacts that are addressed in each technical section of this IS/MND, as appropriate. Where development of the proposed project would result in **potentially significant** or significant environmental impacts, mitigation measures are identified to reduce those impacts. There are no additional **potentially significant** or significant impacts associated with construction of the proposed project beyond those comprehensively considered throughout the other sections of this IS/MND. Therefore, impacts related to relocation of existing utility infrastructure, or construction of new or expanded utility infrastructure, would be **less than significant**.

b) Have sufficient water supplies available to serve the project and reasonably foresee future development during normal, dry, and multiple dry years?

The proposed project includes 6 new commercial buildings, a car wash, and 79 lots for single-family residential development, which would increase the demand for potable and landscape water irrigation within CWD's service area.

Based on the formulas used by CWD for calculation of water demand[18], the six proposed commercial buildings at the project site would require a total of approximately 12 AFY, and the proposed 79-unit residential development would require a total of approximately 32.8 AFY. The proposed car wash would likely require more than 2 AFY, but this analysis assumes that additional water over and above the 2 AFY would be recycled wash water. Thus, the total water demand for the proposed project would be approximately 46.8 AFY; however, this figure is likely higher than the actual project water demand because it does not reflect compliance with state-mandated legislation requiring water conservation.

As part of its UWMP, CWD determined that in normal water years, its water supplies will be sufficient to meet demand. CWD also determined that in single-dry and multiple-dry years during the 2025–2045 planning horizon, it will be able to meet overall yearly demands, but during the months of June through October in these water years CWD will need to implement some of the provisions contained in its Water Shortage Contingency Plan (Tully & Young 2021). Because the project's additional water demand of approximately 46.8 AFY is well within CWD's projected available water supplies through the 2045 planning horizon (see Table IS-26), there would be sufficient water supplies available to serve the proposed development and other reasonably foreseeable future development in all water years. This is particularly true when considering that all new residential and non-residential customers must meet the water use requirements of the California Green Building Code as well as the outdoor requirements described by the State's Model Water Efficient Landscape Ordinance, which would reduce overall water demand. Therefore, this impact would be **less than significant**.

c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The proposed project includes 6 new commercial buildings, a car wash, and 79 single-family residential dwelling units, which would increase the demand for wastewater conveyance and treatment within the SacSewer service area. Based on the formulas used by SacSewer for calculation of estimated sewer flows (SacSewer 2021),[19] the six proposed commercial buildings at the project site would generate a total of approximately 13,300 gallons per day (gal/day) of wastewater, and the proposed 80-unit residential development would generate a total of approximately 24,800 gal/day. For purposes of this analysis, it is assumed that the car wash would use recycled wash water.

SacSewer owns and operates sewer gravity mains (greater than 10 inches) in Manzanita Avenue and Winding Way adjacent to the project site. The proposed project would include installation of on-site underground wastewater collection pipelines that would tie into the existing off-site SacSewer gravity mains. The sewer gravity mains in the project area were

[18] Single-Family Residential: 0.21 acre-feet per dwelling unit per year (af/du/yr) for indoor use plus 0.20 af/du/yr for outdoor use, for a total annual demand factor of 0.41 af/du/yr. Commercial: 2 acre-feet per year per connection.

[19] Single-Family Residential: 310 gallons/day per residence. Commercial: 1,600 gallons/day for every 1 acre.

not identified by SacSewer in its System Capacity Plan as a relief- area problem that requires an improvement under future projected conditions that consider planned development in the region (SacSewer 2020).

The EchoWater Resource Recovery Facility operated by SacSewer is permitted to discharge 181 mgd, which is more than the current demand. Furthermore, the EchoWater Facility can produce 135 mgd of tertiary-treated water, which will contribute to increased recycled water use (thereby reducing water demand) throughout the region. SacSewer estimates that the EchoWater Facility will have capacity for at least the next 40 years.

Therefore, SacSewer would have capacity to serve the proposed project's wastewater conveyance and treatment needs, in addition to the demands of existing and other projected future development. Furthermore, the project applicant is required to pay SacSewer connection fees as mandated by SacSewer Sewer Ordinance SDI-0079 (SacSewer 2022), which are used to help fund construction of wastewater conveyance improvements throughout the SacSewer service area. The project applicant is also required to pay SacSewer developer impact fees as mandated by the former Regional San (now SacSewer) Consolidated Ordinance SRSD-0124 (SacSewer 2023b), which are used to help fund maintenance of larger regional conveyance lines and wastewater treatment at the EchoWater Facility. This impact would be **less than significant**.

B) D) GENERATE SOLID WASTE IN EXCESS OF STATE OR LOCAL STANDARDS, OR IN EXCESS OF THE CAPACITY OF LOCAL INFRASTRUCTURE, OR OTHERWISE IMPAIR THE ATTAINMENT OF SOLID WASTE REDUCTION GOALS?

Construction of the proposed project would result in site clearing and generation of various construction-related waste, cardboard, wood pallets, scrap metal, and common trash. The construction contractor would be required to comply with the California Green Building Code (CALGreen) Code. The updated standards included in the CALGreen (Title 24, Part 11 of the California Code of Regulations) became effective on January 1, 2023. The CALGreen Code requires that at least 65 percent of construction and demolition waste be diverted from landfills. A Waste Management Plan must be approved that identifies a waste hauler and a construction and demolition sorting facility and waste log must document the 65 percent diversion requirement. Construction and demolition debris would be recycled at local facilities identified by Sacramento County DWMR as certified construction and demolition debris sorting facilities, which may include the Florin Perkins Public Disposal Center or the L&D Landfill, or other permitted facilities at the discretion of the contractor(s).

Operation of the six proposed new commercial businesses and 79 single-family residences would result in the generation of additional solid waste. Assuming 17 employees at each of the five potential on-site restaurants, plus 8 employees at the proposed convenience store associated with the gasoline station, results in a project total of 93 employees (IBISWorld 2023a, 2023b). The CalRecycle estimated that unincorporated Sacramento County had a 2021 solid-waste disposal generation rate of 15.7 pounds per employee per day, and an adult population generation rate of 4.9 pounds per person per day (CalRecycle 2021). Therefore, operation of the proposed commercial portion of the project could generate a total of 1,460 pounds of solid waste per day, and

the proposed single-family residences could generate a total of 784 pounds of solid waste per day (assuming two adults per residence). This estimate is conservative (high) because required recycling and waste diversion would reduce this amount and is likely to increasingly reduce the waste stream that is sent to landfills in the future as more restrictive regulations require diversion of larger fractions of the waste stream.

Sacramento County DWMR provides weekly residential garbage and bi-weekly residential recycling collection services, which would be available for the proposed new residents (DWMR 2023b, 2023c). Commercial waste, recycling, and organics collection services are provided by Sacramento County DWMR's local franchised waste haulers (DWMR 2023d). All businesses are required to have their garbage collected at least once every 7 days pursuant to Sacramento County Code Title 6, Chapter 6.20, Section 6.20.115. The North Area Recovery Station in North Highlands (approximately 3 miles west of the project site) is the closest facility that accepts standard business and household wastes. Waste from the North Area Recovery Station is transferred to Kiefer Landfill.

Because the regional solid waste facilities have capacity to receive project waste (CalRecycle 2019a, 2019b, 2019c, and 2019d) during the construction and operational phases, and because Sacramento County DWMR's recycling program would be available to the new businesses and residents at the project site, the proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, is impact is considered **less than significant**.

E) COMPLY WITH FEDERAL, STATE, AND LOCAL MANAGEMENT AND REDUCTION STATUTES AND REGULATIONS RELATED TO SOLID WASTE?

As discussed above under threshold d), the proposed project would comply with all applicable solid waste statutes and regulations, including CALGreen. Thus, there would be **no impact**.

WILDFIRE

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

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. Expose people or structures to significant risks, including downslope or

downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Environmental Setting

The project site is in the urbanized community of Carmichael in unincorporated Sacramento County. The project site is bounded by Manzanita Avenue to the west, Winding Way to the north, and residential units to the east and south. The project site is primarily vegetated with ruderal herbaceous grasses and mixed oak woodland. It is not situated within or near a State Responsibility Area or a very high fire hazard severity zone. The project site and the surrounding area are within a Local Responsibility Area, and are not designated as very high or moderate fire hazard severity zones. There are no very high or moderate fire hazard severity zones delineated within the urbanized area of Sacramento, including the project site (CAL FIRE 2022).

Carmichael is not an incorporated city, and therefore any necessary emergency evacuations would be coordinated by Sacramento County officials through the County OES. Sacramento County OES has prepared and maintains the Sacramento County Emergency Operations Plan (Sacramento County OES 2022). As discussed in the Evacuation Plan, the primary mode of transportation that would ’e used during an evacuation would be the evacuees’ private transportation resources. Law enforcement would be the primary agency for managing the movement of people during an evacuation. Primary evacuation routes in Sacramento County consist of the major interstates, highways, and prime arterial roadways. Traffic conditions are monitored along evacuation routes, and operational adjustments would be made by County officials as necessary during an evacuation to maximize throughput.

Fire protection services in the project area are provided by the Metro Fire. Metro Fire serves over 745,000 citizens within a 357-square-mile area. The nearest fire station is No. 109, 5634 Robertson Avenue, approximately 2 miles southwest of the project site. State No. 109 include two fire engines and a water truck.

Discussion

A) Substantially impair an adopted emergency response plan or emergency evacuation plan?

All construction materials and equipment would be stored on the project site. Short-term and temporary lane closures on Winding Way and Manzanita Avenue during the construction phase may be required during installation of the project site access roads. However, the project site is an urbanized areas that is surrounded by a grid of north–south and east–west roadways that would provide alternate routes for use by emergency providers such as fire and police, if necessary.

Any necessary emergency evacuations would be coordinated by Sacramento County officials through the County OES. Sacramento County OES has prepared and maintains the Sacramento County Evacuation Plan (Sacramento County OES 2018). As discussed in the Evacuation Plan, the primary mode of transportation that would be used during an evacuation would be the evacuees’ private transportation resources. During an

evacuation, County DOT traffic engineers, along with Caltrans, would be able to quickly calculate traffic flow capacity and decide which of the available traffic routes should be used to move people in the correct directions and to adjust evacuation routes based on real-time conditions. The project site is situated within Evacuation District 2, Zone 23. An evacuation in the project area would be coordinated by the Sacramento County Sheriff's Office North District. Winding Way and Manzanita Avenue would serve as the closest evacuation routes from the project site. Both of these roadways are four- lane divided highways that provide north–south and east–west access onto a grid of many other north–south and east–west roadways. Traffic from any necessary evacuation would be dispersed throughout this grid network as shown in the Evacuation Plan (Sacramento County OES 2018). Furthermore, the project site was formerly developed with a gasoline station and a commercial center, which included businesses that would have required evacuation in the event of an emergency, similar to the needs of the commercial development associated with the proposed project. The commercial development at the project site would be accessed from Manzanita Avenue and the proposed residential units would be accessed from Winding Way. A network of streets is planned and would provide direct access to the residential areas within the project site (see Plate IS-3 in Project Description). Thus, the proposed design for development at the project site includes an appropriate roadway circulation network that meets Sacramento County standards for emergency access and evacuation.

Therefore, redevelopment of the project site would not substantially impair emergency access or implementation of an emergency evacuation plan, and this impact would be **less than significant**.

C) REQUIRE THE INSTALLATION OR MAINTENANCE OF ASSOCIATED INFRASTRUCTURE (SUCH AS ROADS, FUEL BREAKS, EMERGENCY WATER SOURCES, POWER LINES OR OTHER UTILITIES) THAT MAY EXACERBATE FIRE RISK OR THAT MAY RESULT IN TEMPORARY OR ONGOING IMPACTS TO THE ENVIRONMENT?

The project includes the construction of 6 commercial buildings and 79 lots for single-family residential development. The project would include the development of streets, which would act as fuel breaks in the event of a fire. The project would be required to comply with the Uniform Building Code and the Uniform Fire Code. The Fire Code regulates fire protection systems, fire fighter access to the site and buildings, water supply, means of egress, hazardous materials storage and use, and temporary heating equipment and other ignition sources for all structures and occupancies during construction and demolition.

Additionally, the Sacramento Metropolitan Fire District requirements are determined for specific development projects at the design stage and are based on the Uniform Building Code. In addition to meeting minimum fire flow requirements, all development projects within the unincorporated area are required to meet other various fire protection requirements identified in the plan check and review process. The Fire District specifications require that fire sprinklers be installed in all new residential construction. For structures not exceeding 3,600 square feet, the district requires a fire flow of 1,000 gallons per minute at 20 pounds per square inch residual pressure. For structures over 3,600 square feet, a Fire District Certificate of release is required.

The proposed development includes the installation of a fire service water line that runs parallel to Manzanita Avenue and distributes water to fire suppression sprinklers within the commercial and residential buildings. Numerous fire hydrants are also planned throughout the proposed development. In compliance with the Sacramento Metropolitan Fire District Requirements, the Uniform Building Code, and the Uniform Fire Code, the proposed development is designed to minimize fire risk. This project would not require any off-site improvements that may exacerbate fire risk or result in impacts the environment. There would be **no impact**.

D) EXPOSE PEOPLE OR STRUCTURES TO SIGNIFICANT RISKS, INCLUDING DOWNSLOPE OR DOWNSTREAM FLOODING OR LANDSLIDES, AS A RESULT OF RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGES?

The project site is located in an urbanized area of Sacramento County (Carmichael), and is not situated within or near a State Responsibility Area or a very high fire hazard severity zone. The project site consists of vacant land covered with grasses, forbs, and a few trees situated in a line in a north–south direction in the middle of the project site. The site is surrounded by existing urban development on all sides. Land immediately south of the proposed development and within the southern portion of the project site consists of a vacant, 6.2-acre area (comprised of grasses and forbs) that is planned for future multi-family residential (not part of the proposed project), but does include project-related drainage improvements; immediately south of this parcel, single-family residential uses and a corner of Jan Park are present.

The project site is currently served by the Sacramento Metropolitan Fire District, and those services would continue in the future. The project site was formerly developed with a gasoline station and a commercial building; redevelopment of the project site with the proposed land uses would not exacerbate wildland fire risks. Thus, there would be **no impact**.

INITIAL STUDY[20]

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

[20] Authority: Public Resources Code Sections 21083, 21083.5. Reference: Government Code Sections 65088.4.Public Resources Code Sections 21080, 21083.5, 21095; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion

A) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. As described in in Biological Resources, implementation of Mitigation Measures BIO-1 through BIO-6 would reduce to a **less-than-significant** level impacts on special-status plans, special-status raptors and nesting birds, burrowing owl, special-status bats, native trees, and waters of the United States. As discussed in Cultural Resources, implementation of Mitigation Measures CUL-1 through CUL-3 would reduce potentially significant impacts resulting from inadvertent damage or destruction of significant cultural resources and accidental discovery of human remains to a **less-than-significant level**. Therefore, with implementation of outlined mitigation measures, the proposed project would result in **less-than-significant** impacts involving the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause 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 period of California history or prehistory.

B) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less-than-Significant Impact. The geographic context for cumulative impacts is generally limited to the immediate vicinity of the project site with the exception of air quality and greenhouse gas impacts, which are more regional. Past, present, and foreseeable future projects in the vicinity of the project site include the following:

- Crestview Shopping Center - 4750 Manzanita Avenue. Located directly north of the project site, this shopping center includes several projects that have been approved by the County but have not yet constructed:

- PLNP2023-00192 – 810 Billiards and Bowling ABC License – Minor Use Permit. This permit was approved by the County for the ABC Liquor License on November 28, 2023. The bowling alley is a use allowed outright in the Shopping Center (SC) zone and is scheduled to open in the Shopping Center at a later date.
- PLNP2022-00164 – Crestview Village Tentative Parcel Map – Approved by the Subdivision Review Committee (SRC) on March 27, 2023, this is a Tentative Parcel Map and Design Review to divide a commercial property into four (4) parcels.
- DRCP2022-00074 – Manzanita Avenue Panda Express and Drive-Through. The new Panda Express Building will be 2,623 square feet. Approved by the County on February 15, 2023, the project has not been built to date.

Air quality and greenhouse gas impacts are inherently cumulative by nature, and the impact discussions in Air Quality and Greenhouse Gas Emissions already consider potential cumulative impacts, which were found to be **less than significant** or **less than significant with mitigation incorporated**.

Because the majority of project impacts would be short-term, localized impacts that would only occur during the approximately 24-month construction period of project implementation, and because none of the past or future projects would overlap with that implementation period, there would be no potential for short-term impacts such as disturbance of wildlife species, construction noise, water quality, or traffic safety to combine with the impacts of other projects to cause a significant cumulative impact.

C) DOES THE PROJECT HAVE ENVIRONMENTAL EFFECTS THAT WILL CAUSE SUBSTANTIAL ADVERSE EFFECTS ON HUMAN BEINGS, EITHER DIRECTLY OR INDIRECTLY?

No impact. The proposed project would not result in any environmental effects that would cause substantial direct or indirect adverse effects to human beings, beyond those topics discussed in this Initial Study.

ENVIRONMENTAL MITIGATION MEASURES

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

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

Applicant:_____ Date: _____

Mitigation Measure AE-1: Prepare an Exterior Lighting Plan for Commercial Development Including an Off-Site Photometric Analysis

The project applicant or contractor(s) shall prepare and submit for review and approval, an Exterior Lighting Plan(s) for the proposed commercial development, which shall present the size, orientation, location, height, and appearance of proposed fixtures. The lighting plan(s) shall include an off-site photometric analysis of the proposed commercial development. Before issuing any occupancy permit for the proposed commercial development, the applicant shall demonstrate to the satisfaction of the County compliance with the following standards:

- Shield or screen all exterior lighting fixtures to direct the light downward and prevent light spill on adjacent properties.
- Place and shield or screen flood and area lighting needed for security so as not to disturb adjacent properties or passing motorists.
- Light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash, shall not be used. Light-emitting diode (LED) lighting shall be used where feasible.
- Motion-controlled exterior nighttime lighting, rather than lighting that is always on, shall be used where feasible.
- Street lights shall be shielded and designed to direct light downward, according to the requirements contained in the Sacramento County Improvement Standards.
- The photometric analysis shall demonstrate that the proposed commercial lighting fixtures will avoid light spillover onto any property other than the boundaries for which lighting is intended.

Mitigation Measure AQ-A: Basic Construction Emissions Control Practices

The following Basic Construction Emissions Control Practices are considered feasible for controlling fugitive dust from a construction site. Control of fugitive dust is required by SMAQMD Rule 403 and enforced by SMAQMD staff. Prior to issuing grading or construction permits, the County shall verify the following measures are specified on construction contracts and/or construction documentation.

- 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 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.

- Minimize idling time by either shutting equipment off when not in use or reducing time of idling to 5 minutes. Provide clear signage that posts this requirement for workers at the entrances to the site; and

- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Mitigation Measure AQ-B: Commercial Vehicle Idling

Prior to issuing occupancy permits for any of the project's commercial buildings, the County shall verify that commercial vehicle idling signs are installed at all project driveways where commercial vehicles may enter the project site. The signs shall be easily readable by a driver from the cab of a truck entering the site. The signs shall include the following information:

- Diesel-powered commercial motor vehicles with more than 10,000 gross vehicular weight rating shall not idle on the project site for more than 5 minutes per Title 13, CCR, section 2485; and

- Report an idling violation to the California Air Resources Board by calling 1-800-END-SMOG (1-800-363-7664); and

- Report an idling violation to the project retail development property management (provide phone number).

Mitigation Measure BIO-1: Avoid and Minimize Impacts to Special- Status Plants

Prior to the initiation of construction, a qualified botanist shall conduct one botanical survey in May within the project site that would overlap with the typical identification period of Sanford's arrowhead, Ahart's dwarf rush, and stinkbells. It should be noted that weather conditions during any given survey year may require surveys to be conducted earlier or later in the typical blooming period in order to conduct the survey during the appropriate weather conditions. This timing may result in the need to conduct more than one round of plant surveys to adequately survey for all potentially occurring special-status plant species. The results of these surveys shall be documented in a letter report to Sacramento County. If no special status plants are observed during the botanical survey, no additional measures for special-status plants are required.

If any of the special-status plants are identified within areas of potential construction disturbance, the plants and/or the seedbank should be transplanted to suitable habitat within the project site outside of the project footprint or offsite if suitable habitat is not available within the project site. A qualified biologist should prepare an avoidance and mitigation plan detailing protection and avoidance measures, transplanting procedures, success criteria, and long-term monitoring protocols. In addition, a pre-construction worker awareness training shall be conducted alerting workers to the presence of and protections for special-status plants in the vicinity of the work area.

Mitigation Measure BIO-2: Avoid and Minimize Impacts to Special- Status Raptors and Nesting Birds Protected by the MBTA

If construction activities within the project site occur during the nesting season (February 1 to August 31), a qualified biologist shall conduct a pre-construction survey of the project footprint for active nests. Additionally, the surrounding 500 feet shall be surveyed for active raptor nests. The pre-construction survey shall be conducted within 14 days prior to commencement of ground disturbing activities. If the pre-construction survey shows that there is no evidence of active nests, a letter report shall be prepared to document the survey, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional survey is required prior to starting work.

If nests are found and considered to be active, the project biologist shall establish buffer zones to prohibit construction activities and minimize nest disturbance until the young have successfully fledged or the biologist determines that the nest is no longer active. The designated buffer size shall depend on the species in question, surrounding existing disturbances, and specific site characteristics, but may range from 50 feet for some songbirds to 250 to 500 feet for most raptors. If active nests are found within any trees slated for removal, then an appropriate buffer should be established around the trees and the trees should not be removed until a biologist determines that the nestlings have successfully fledged or the nest is confirmed to be no longer be active. In addition, the pre-construction worker awareness training shall include information on the location of active nests and protections in place for the active avian nests.

Mitigation Measure BIO-3: Avoid and Minimize Impacts to

Burrowing Owl

A take avoidance survey for burrowing owls shall be conducted no more than 14 days prior to the initiation of construction as prescribed by CDFW guidelines (CDFW 2012). The project site shall be surveyed by a qualified biologist to determine or rule out the presence of burrowing owl onsite. This survey may be conducted in conjunction with a nesting bird survey if construction were to be initiated within the nesting season.

If burrowing owls are observed on or within 500 feet of proposed development activities that would result in ground disturbance, then an impact assessment shall be prepared and submitted to the CDFW, in accordance with the 2012 Staff Report. If it is determined that project activities may result in impacts to occupied western burrowing owl habitat, then the

project proponent shall consult with CDFW and develop a detailed mitigation plan establishing avoidance and mitigation measures based on the requirements set forth in Appendix A of the 2012 Staff Report (CDFW 2012).

Mitigation Measure BIO-4: Avoid and Minimize Impacts to Special- Status Bats

A qualified biologist shall conduct a pre-construction survey of the project site for special-status bat species within 14 days prior to development or ground disturbing activities including grading, vegetation clearing, tree removal, or construction. If no bats are observed, a letter report shall be prepared to document the survey and provided to project proponent, and no additional measures are recommended. If development does not commence within 14 days of the pre-construction survey, or halts for more than seven days, an additional survey is required prior to resuming or starting work.

If special-status bats are present and roosting within the project site or in publicly accessible areas within 100 feet of the project site, the qualified biologist shall establish an appropriate no disturbance buffer around the roost site prior to the commencement of ground disturbing activities or development. No trees shall be removed until the biologist has determined that a roost site is no longer active, and no bats are present. If avoidance is not feasible, then the CDFW shall be consulted for additional avoidance measures and additional mitigation measures, such as installation of bat boxes or alternate roost structures.

A qualified biologist should conduct an environmental awareness training for all construction personnel prior to the initiation of work.

Mitigation Measure BIO-5A: Native Tree Removal

The removal of up to 898 inches dbh of native trees shall be compensated through payment into the County Tree Preservation Fund. Payment shall be made at a rate of $325.00 per dbh inch removed, or at the prevailing rate at the time payment into the fund is made.

Mitigation Measure BIO-5B: Native Tree Construction Protection

For the purpose of this mitigation measure, a native tree is defined as a blue oak or valley oak, and having a 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 BIO-5a, above, all native trees on the project site, all portions of adjacent off- site native trees which have driplines that extend onto the project site, and all off-site native trees which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a

critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.

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

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

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

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

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

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

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

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

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

11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within

the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation, approximately twice per summer, is recommended for the understory plants.

12. 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 BIO-5C: NON-NATIVE TREE CANOPY

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 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 (as determined by the 15-year shade cover calculations for the tree species to be planted through the funding, with the cost to be determined by the Sacramento County Tree Foundation).

MITIGATION MEASURE BIO-6: WATERS OF THE UNITED STATES

Prior to approval of grading permits or improvement plans, the applicant shall obtain all applicable permits from State and Federal regulatory agencies, including taking jurisdiction over resources in the project area, which may include:

- CWA Section 404 permit from USACE for impacts to WUS; and/or
- CWA Section 401 Clean Water Certification from the Regional Water Quality Control Board for impacts to WUS
- Waste Discharge Permit from Regional Water Quality Control board for impacts to water of the state

As part of the permit applications, the applicant shall develop a compensatory habitat mitigation plan that will include mitigation for the fill of impacted waters of the US/State on a no-net-loss basis. The plan may include on-site restoration, if feasible, off-site preservation, or purchasing mitigation credits from an agency-approved wetlands mitigation bank, paying an agency-approved in-lieu fee, and/or developing conservation lands to compensate for permanent loss of resources. Mitigation ratios shall be no less than 1:1 and shall be determined during the permitting process.

The applicant shall implement all conditions of the permits, including any performance monitoring, if required for on-site restoration and report on the results of the monitoring to the appropriate agencies at the frequency and duration included in the permits.

Mitigation Measure CUL-1: Worker Awareness Training

Before participating in construction activities, a qualified archaeologist shall provide a training to all construction personnel involved in ground disturbing activities, informing them in the recognition of possible cultural resources and protection of such resources. The training will inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials. Construction personnel shall be instructed that cultural resources must be avoided and that all travel and construction activity must be confined to designated roads and areas. The training shall include a review of the local, state, and federal laws and regulations related to cultural resources, as well as instructions on the procedures to be implemented should unanticipated resources be encountered during construction, including stopping work in the vicinity of the find and contacting the appropriate environmental compliance specialist.

Mitigation Measure CUL-2: Inadvertent Discovery of Cultural Resources

In accordance with Public Resources Code Section 21082 and Section 15064.5 of the CEQA Guidelines and [36 CFR 800] of Section 106 of the NHPA, if buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The archaeologist shall make recommendations to the lead agency concerning appropriate measures that will be implemented to protect the resources, including but not limited to excavation and evaluation of the finds, consistent with Section 15064.5 of the CEQA Guidelines and 36 CFR 800. Cultural resources could consist of but are not limited to stone, bone, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. In accordance with Public Resources Code Section 21082 and Section 15064.5 of the CEQA Guidelines, no further grading or construction activity shall occur within 50 feet of the discovery until the lead agency approves the measures to protect these resources.

In addition, reasonable efforts to avoid, minimize, or mitigate adverse effects to the property shall be taken and the SHPO and Indian tribes with concerns about the property, and the Advisory Council on Historic Preservation (Council) will be notified within 48 hours in compliance with 36 CFR 800.13 (b)(3).

Mitigation Measure CUL-3: Inadvertent Discovery of Human Remains

In the event of an accidental discovery or recognition of any human remains, Public Resources Code Section 5097.98 shall be followed. Once project-related earthmoving begins and if there is a discovery or recognition of human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the specific location or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the “most likely descendant” of the deceased Native American. The most likely

descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98, or

2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendent or on the project area in a location not subject to further subsurface disturbance:

    - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;
    - The descendent identified fails to make a recommendation; or
    - The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

Mitigation Measure GEO-1: Avoid Impacts to Unique Paleontological Resources

To minimize the potential for destruction of or damage to previously unknown unique, scientifically important paleontological resources during earthmoving activities in all areas of the project site except the proposed gasoline station site, the project applicant shall do the following:

- Prior to the start of earthmoving activities in all areas of the project site except the proposed gasoline station site, retain either a qualified archaeologist or paleontologist to inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered.

- If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify the project applicant and the County. The project applicant shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan. The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the project applicant and the County to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resource or resources were discovered.

Mitigation Measure GHG-A: SMAQMD Tier 1 Best Management Practices for GHG Emission Reductions

The project shall implement the SMAQMD Tier 1 GHG Reduction Best Management Practices or implement equivalent alternate mitigation approved by the County. Prior to issuing each project building permit, the County shall verify that project documentation includes the following BMPs, or alternate equivalent mitigation described below for natural gas used by cooking appliances, and all applicable offset evidence has been submitted and meets standards defined below:

- **SMAQMD Tier 1 BMP 1** – The project buildings shall be designed and constructed without natural gas infrastructure, with exceptions only for natural gas required for restaurant cooking equipment, as demonstrated through project design materials submitted with the building permit application. In the event that the project applicant has determined that use of natural gas is necessary for operation of any of the project's restaurant buildings (for cooking equipment only), the restaurant building(s) shall include the necessary electrical infrastructure to facilitate the replacement of natural gas appliances with electrical appliances in the future, as demonstrated through project design materials submitted with the building permit application, and the project applicant shall retire carbon offsets in a quantity sufficient to offset 100 percent of the project's GHG emissions resulting from the use of natural gas over the project building lifespan of 30 years. Building electrical infrastructure shall include sufficient power supply for the addition of electric commercial cooking appliances, sufficient panel space for electric cooking appliance circuits, and prewiring for electric cooking appliances from the panel to the kitchen area(s). The carbon offsets retired shall total a minimum of 0.15 MT CO_2e per square foot of restaurant space in any project building which would use natural gas for cooking appliances (based on project modeling disclosed within this analysis—2,268 MT CO_2e total over a 30-year period for all 5 restaurant buildings totaling 15,280 square feet).

Alternately, a lower amount of carbon offsets shall be retired based on calculations prepared by a qualified expert (and submitted to the County for verification) using natural gas consumption data for actual natural gas appliances to be installed (if any) in any project building restaurant space.

Payment of fees for the retirement of carbon offsets for each project building which would use natural gas shall be made in the full amount to offset 30 years of natural gas use (as described above) prior to the issuance of the building permit.

Carbon offset retirement shall be accomplished through an accredited carbon offset program approved by the County. Prior to the issuance of any building permit that includes a restaurant using natural gas cooking equipment, the project applicant shall provide evidence to County that carbon offsets in the amounts discussed above have been retired. Such evidence must comply with the requirements described under Reporting and Enforcement Standards below. The County may require the applicant to

deposit funds to be used by the County to commission a third-party expert to ensure the purchased offsets meet the standards of this mitigation measure, as presented below.

CARBON OFFSET STANDARDS – ELIGIBLE REGISTRIES, ACCEPTABLE PROTOCOLS AND *DEFINED TERMS*

"Carbon offset" shall mean an instrument, credit or other certification verifying the reduction of GHG emissions issued by the Climate Action Reserve, the American Carbon Registry, or Verra (previously, the Verified Carbon Standard). This shall include, but is not limited to, an instrument, credit or other certification issued by these registries for GHG reduction activities. The project shall neither purchase offsets from the Clean Development Mechanism (CDM) registry nor purchase offsets generated under CDM protocols. Further, no carbon offsets shall originate from international areas, as discussed under Locational Performance Standards, below. Qualifying carbon offsets presented for compliance with this mitigation measure may be used provided that the evidence required by the Reporting and Enforcement Standards below is submitted to the County demonstrating that each registry shall continue its existing practice of requiring the following for the development and approval of protocols or methodologies:

1) Adherence to established GHG accounting principles set forth in the International Organization for Standardization 14064, Part 2 or the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol for Project Accounting; and

2) Oversight of the implementation of protocols and methodologies that define the eligibility of carbon offset projects and set forth standards for the estimation, monitoring and verification of GHG reductions achieved from such projects. The protocols and methodologies shall:

    a. Be developed by the registries through a transparent public and expert stakeholder review process that affords an opportunity for comment and is informed by science;

    b. Incorporate standardized offset crediting parameters that define whether and how much emissions reduction credit a carbon offset project should receive, having identified conservative project baselines and the length of the crediting period and considered potential leakage and quantification uncertainties;

    c. Establish data collection and monitoring procedures, mechanisms to ensure permanency in reductions, and additionality and geographic boundary provisions; and

    d. Adhere to the principles set forth in the program manuals of each of the aforementioned registries; as such manuals are updated from time to time. The current registry documentation includes the Climate Action Reserve's Reserve Offset Program Manual (November 2019) and Climate Forward Program Manual (March 2020); the American Carbon Registry's

Requirements and Specifications for the Quantification, Monitoring, Reporting, Verification, and Registration of Project-Based GHG Emissions Reductions and Removals (July 2019); and Verra's Verified Carbon (Standard, Program Guide and Methodology Requirements (September 2019).

The registry-administered protocols and methodologies for the carbon offset project types cited above – including updates to those protocols and methodologies as may occur from time to time by the registries in accordance with the registry documentation listed in the prior paragraph to ensure the continuing efficacy of the reduction activities – are eligible for use under this mitigation measure, provided that any updated protocols shall be provided for County review as required by Reporting and Enforcement Standards below prior to the County's acceptance of offsets based on such updated protocols.

Further, any carbon offset used to reduce the project's GHG emissions shall be a carbon offset that represents the past or forecasted reduction or sequestration of one metric ton of carbon dioxide equivalent that is "not otherwise required" (CEQA Guidelines §15126.4[c][3]). Each carbon offset used to reduce GHG emissions shall achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions, which are defined for purposes of this mitigation measure as follows:

1) Additional means that the carbon offset is not otherwise required by law or regulation, and not any other GHG emissions reduction that otherwise would occur.

2) Real means that the GHG reduction underlying the carbon offset results from a demonstrable action or set of actions, and is quantified under the protocol or methodology using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources and sinks within the boundary of the applicable carbon offset project, uncertainty, and the potential for activity-shifting leakage and market-shifting leakage.

3) Verifiable means that the GHG reduction underlying the carbon offset is well documented, transparent, and set forth in a document prepared by an independent verification body that is accredited through the American National Standards Institute.

4) Permanent means that the GHG reduction underlying the carbon offset is not reversible; or, when GHG reduction may be reversible, that a mechanism is in place to replace any reversed GHG emission reduction.

5) Quantifiable means the ability to accurately measure and calculate the GHG reduction relative to a project baseline in a reliable and replicable manner for all GHG emission sources and sinks included within the boundary of the carbon offset project, while accounting for uncertainty and leakage.

6) Enforceable means that the implementation of the GHG reduction activity must represent the legally binding commitment of the offset project developer

to undertake and carry it out.

The protocols and methodologies cited previously establish and require carbon offset projects to comply with standards designed to achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions. Additionally, the Reporting and Enforcement Standards below ensure that the emissions reductions required by this mitigation measure are enforceable against the project applicant, as the County has authority to hold the project applicant accountable and to take appropriate corrective action if the County determines that any carbon offsets do not comply with the requirements set forth in this mitigation measure.

The above definitions are provided as criteria and performance standards associated with the use of carbon offsets. Such criteria and performance standards are intended only to further construe the standards under CEQA for mitigation related to GHG emissions (see, e.g., CEQA Guidelines §15126.4[a], [c]), and are not intended to apply or incorporate the requirements of any other statutory or regulatory scheme not applicable to the project (e.g., the Cap-and- Trade Program).

LOCATIONAL PERFORMANCE STANDARDS

All carbon offsets required to reduce the project's GHG emissions shall originate from the following geographic locations (in order of priority): (1) off-site, unincorporated areas of the County of Sacramento; (2) off-site, incorporated areas of the County of Sacramento; (3) off-site areas within the State of California; and (4) off-site areas within the United States. No carbon offsets shall originate from off-site, international areas. As listed, geographic priorities would focus first on local reduction options to ensure that reduction efforts achieved locally would provide cross-over, co-benefits to other environmental resource areas.

For purposes of implementing this mitigation measure, the County shall require the carbon offsets to adhere to the following locational performance standards in order to reduce the project's operational GHG emissions:

1) The project shall use all feasible available carbon offsets within the County of Sacramento (the first priority is within unincorporated areas of the County and the second priority is within incorporated areas of the County). "Available," for purposes of this subdivision, means that the project applicant provides objective, verifiable evidence to the County documenting that such carbon offsets are available for retirement from carbon offset projects within the subject geography no later than at the time of application for grading permit issuance. The objective, verifiable evidence to be provided includes a market survey report that shall comply with the following content requirements:

    a. Identification of the carbon registry listings reviewed for carbon offset availability, including the related date of inquiry; and

    b. Identification of the geographic attributes of carbon offsets that are offered for sale and available for retirement.

2) In the event that a sufficient quantity of carbon offsets is not "available" in the County of Sacramento, the project shall obtain the remaining carbon offsets needed from within the State of California (third priority). For the definition of "available," see subdivision 1) immediately above.
3) In the event that a sufficient quantity of carbon offsets is not "available" in the County of Sacramento or State of California, the project shall obtain the remaining carbon offsets needed from within the United States (fourth priority). For the definition of "available," see subdivision 1) immediately above.

REPORTING AND ENFORCEMENT STANDARDS

Over the course of build out of the project and prior to issuance of requested building permits, the project applicant shall submit reports to the County that identify the quantity of emission reductions required by this mitigation measure, as well as the carbon offsets to be retired to achieve compliance with this measure. For purposes of demonstrating that each offset is additional, real, permanent, quantifiable, verifiable and enforceable, the reports shall include: (i) the applicable protocol(s) and methodologies associated with the carbon offsets, (ii) the third-party verification report(s) and statement(s) affiliated with the carbon offset projects, (iii) the unique serial numbers assigned by the registry(ies) to the carbon offsets to be retired, which serves as evidence that the registry has determined the carbon offset project to have been implemented in accordance with the applicable protocol or methodology and ensures that the offsets cannot be further used in any manner, and (iv) the locational attributes of the carbon offsets. The reports also shall append the market survey report described in the Locational Performance Standards provision above.

If the County determines that the project's carbon offsets do meet the requirements of this mitigation measure, the offsets can be used to reduce project GHG emissions and project permits shall be issued. If the County determines that the project's carbon offsets do not meet the requirements of this mitigation measure, the offsets cannot be used to reduce project GHG emissions and project permits shall not be issued. Additionally, the County may issue a notice of non-consistency and cease permitting activities in the event that the County determines the carbon offsets provided to reduce project GHG emissions are not compliant with the aforementioned standards. In the event of such an occurrence, project permitting activities shall not resume until the project applicant has demonstrated that the previously provided carbon offsets are compliant with the standards herein or has provided substitute carbon offsets achieving the standards of this mitigation measure in the quantity needed to achieve the required emission reduction.

- **SMAQMD Tier 1 BMP 2** – The project shall meet the CALGreen Tier 2 standards in effect at the time of the building permit application and as clearly demonstrated through application design materials, except the minimum number of electric vehicle capable spaces shall instead be electric vehicle ready, as defined below:
    - Electric vehicle capable means that a 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) has been installed.

- Electric vehicle ready means that all electric vehicle capable features have been installed and dedicated branch circuit(s) (electrical pre-wiring), circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or junction box, needed to support future charging station(s) have been installed.

MITIGATION MEASURE NOI-1: CONSTRUCTION NOISE REDUCTION STRATEGIES

- Pursuant to Sacramento County Municipal Code Section 6.68.090(E), noise-generating on-site construction activities should not occur between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday and on each Sunday after the hour of 8:00 p.m.
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive uses.
- Work area speed limits shall be established and enforced during the construction period.
- Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.

MITIGATION MEASURE NOI-2: CAR WASH NOISE REDUCTION PRIOR TO OPERATION

Prior to commercial operation of the car wash, the system (including vacuum equipment and drying assembly area) shall be tested and noise output shall be measured at the nearest proposed single family residential lot (approximately 175 feet) to ensure that the increases in ambient noise levels from project car wash drying are below the applied significance threshold of 5 dB. If the increase is not below the threshold, the following noise reduction measures shall be employed:

- Housings or silencers shall be installed on the dryers/blower fans.
- Dryers/blowers shall be installed as far into the tunnel as feasible.

MITIGATION MEASURE TCR-1: INADVERTENT DISCOVERIES OF TRIBAL CULTURAL RESOURCES

If potential TCRs, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during construction activities, work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated

Native American Tribe is present. Sacramento County Planning and Environmental Review shall be immediately notified at (916) 874-6141. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment, as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts.

Before participating in construction activities, a qualified archaeologist shall provide a training to all construction personnel involved in ground disturbing activities, informing them in the recognition of possible cultural resources and protection of such resources. The training will inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials.

Construction personnel shall be instructed that cultural resources must be avoided and that all travel and construction activity must be confined to designated roads and areas. The training shall include a review of the local, state, and federal laws and regulations related to cultural resources, as well as instructions on the procedures to be implemented should unanticipated resources be encountered during construction, including stopping work in the vicinity of the find and contacting the appropriate environmental compliance specialist.

Mitigation Measure TRANS-1: Traffic Control Plan

Prior to the start of construction, a traffic control plan (TCP) will be prepared in accordance with Sacramento County standards. A TCP is required for all construction work within the road right of way which modifies vehicular, bicycle and/or pedestrian traffic patterns and are necessary to ensure the safe and efficient movement of traffic through construction work zones (Sacramento County n.d.). The TCP will be submitted to the Sacramento County Department of Transportation Right of Way Management Section for review and approval.

INITIAL STUDY CHECKLIST

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

1 Potentially Significant indicates there is substantial evidence that an effect MAY be significant. If there are one or more "Potentially Significant" entries an Environmental Impact Report (EIR) is required. Further research of a potentially significant impact may reveal that the impact is actually less than significant or less than significant with mitigation.
2 Less than Significant with Mitigation applies where an impact could be significant but specific mitigation has been identified that reduces the impact to a less than significant level.
3 Less than Significant or No Impact indicates that either a project will have an impact but the impact is considered minor or that a project does not impact the particular resource.

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
1. **AESTHETICS** – Would the project:					
a. Have a substantial adverse effect on a scenic vista?				X	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				X	
c. In nonurbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X		
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in this area?	X				

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
2. **AGRICULTURAL AND FORESTRY RESOURCES** – Would the project:					
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance or areas containing prime soils to uses not conducive to agricultural production? Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				X	The project site does not contain prime farmland, unique farmland, farmland of statewide importance, or areas containing prime soils. Therefore, site development would not convert important farmland to non-agricultural uses.
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X	The project site is not zoned for agricultural uses and is not under a Williamson Act contract.
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X	The project site is not zoned as forest land or timberland.
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X	The predominant land cover on the project site is grassland, with only a few scattered trees. Because the site does not contain forest land, its development would not convert forest land to a non-forest use.
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of–forest land to non-forest use?				X	As the project site contains no farmland or forest land, there would be no other changes in the existing environment that could result in conversion.
3. **AIR QUALITY** – Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?		X			
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		X			
c. Expose sensitive receptors to substantial			X		

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
pollutant concentrations?					
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X		
4. **BIOLOGICAL RESOURCES** – Would the project:					
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	X		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	X				
c. Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	X				
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X				
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local,		X			

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
regional, or state habitat conservation plan?					
5. **CULTURAL RESOURCES**- Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource					
b. Have a substantial adverse effect on an archaeological resource		X			
c. Disturb any human remains, including those interred outside of formal cemeteries		X			
6. **ENERGY**- Would the project:					
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X		
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X		
7. **GEOLOGY AND SOILS** – Would the project:					
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				X	
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)				X	
ii. Strong seismic ground shaking?			X		
iii. Seismic-related ground failure, including liquefaction?				X	
iv. Landslides?				X	
b. Result in substantial soil erosion or the loss of topsoil?			X		

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X		
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X		
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X	
f. Directly or indirectly destroy a unique paleontological resource or site or unique– geologic feature?				X	
8. **GREENHOUSE GAS EMISSIONS** – Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?		X			Less than cumulatively considerable with mitigation implemented
9. **HAZARDS AND HAZARDOUS MATERIALS** – Would the project:					
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X		
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?			X		
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or			X		

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
waste within one-quarter mile of an existing or proposed school?					
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X		
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X		The project site is not situated within 2 miles of a public or public-use airport. The site is approximately 3.6 miles east of Sacramento McClellan Airport and is not within the boundaries of the airport influence area or the airport noise contours (Sacramento Airport Land Use Commission 1992). The proposed project would not include the construction of tall buildings or other safety hazards such as nighttime flashing lights that could be mistaken for airport lighting. The proposed project does not include components that would create new wildlife strike hazards because the proposed onsite stormwater basin would be small in size (i.e., 1 acre) and would be designed for short- term and temporary detention, not long-term retention. Therefore, the proposed project would not result in a safety hazard for aircraft or for people residing or working in the project area, and there would be no impact.
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X		
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X	
10. **HYDROLOGY AND WATER QUALITY** – Would the project:					
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X		
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable			X		

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
groundwater management of the basin?					
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:					
i. Result in a substantial erosion or siltation on- or off-site;			X		
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff; or			X		
iii. Impede or redirect flood flows?			X		
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X		
11. **LAND USE AND PLANNING**- Would the project:					
a. Physically divide an established community?				X	
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?					
12. **MINERAL RESOURCES-** Would the project:					
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X	Because the project site and vicinity do not contain known mineral resources, project development would not result in loss of availability of mineral resources. Therefore, there would be no impact.
b. Result in the loss of availability of a locally important mineral resource recovery site				X	As noted above, the Sacramento County General Plan does not delineate mineral resources on the project site or in the

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
delineated on a local general plan, specific plan, or other land use plan?					vicinity of the project site. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, there would be no impact.
13. **NOISE**- Would the project:					
a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X			
b. Generate excessive groundborne vibration or groundborne noise levels?			X		
c. For a project within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?				X	The project site is not situated within 2 miles of a public or public-use airport. The site is approximately 3.6 miles east of Sacramento McClellan Airport and is not within the boundaries of the airport influence area or the airport noise contours (Sacramento Airport Land Use Commission 1992). The proposed project would not include the construction of tall buildings or other safety hazards such as nighttime flashing lights that could be mistaken for airport lighting. The proposed project does not include components that would create new wildlife strike hazards because the proposed on-site stormwater basin would be small in size (i.e., 1 acre) and would be designed for short- term and temporary detention, not long-term retention. Therefore, the proposed project would not result in a safety hazard for aircraft or for people residing or working in the project area, and there would be no impact.
14. **POPULATION AND HOUSING-** Would the project:					
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X		
b. Displace substantial numbers of existing people or				X	The proposed project would be built on vacant land. Because there are no residences within the project site, the

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
housing, necessitating the construction of replacement housing elsewhere?					project would not displace people or housing necessitating the construction of replacement housing elsewhere.
15. **PUBLIC SERVICES-** Would the project:					
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:					
Fire protection?			X		
Police protection?			X		
Schools?			X		
Parks?			X		
Other public facilities?				X	
16. **RECREATION-** Would the project:					
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X		
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X	
17. **TRANSPORTATION** – Would the project:					
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X		
b. Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X		

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X		
d. Result in inadequate emergency access?		X			
18. **TRIBAL CULTURAL RESOURCES**- Would the project:					
a. 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:	X				
b. 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	X				
c. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. The Cultural Resources section above contains a more detailed description of the environmental setting for the project site, relating to cultural and TCRs.	X				
19. **UTILITIES AND SERVICE SYSTEMS-** Would the project:					
a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment facilities or storm water drainage, electric power,			X		

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?					
b. Have sufficient water supplies available to serve the project and reasonably foresee future development during normal, dry and multiple dry years?			X		
c. Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X		
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X		
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?				X	
20. **WILDFIRE**- Would the project:					
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?			X		
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X	The project is located in the urbanized community of Carmichael. The terrain is generally flat and surrounded by residential and commercial development. The area sounding the project site is highly developed and the area is not prone to wildfires. No impact would occur.
c. Expose Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X	
d. Expose people or structures to significant risks,				X	

	Potentially Significant	Less Than Significant with Mitigation	Less– Than Significant	No Impact	Comments
including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?					

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APPENDICES

Due to length, Appendix A through H are available to view at the Sacramento County Planning and Environmental Review, 827 7th Street, Sacramento, CA 95814, Room 225 during normal business hours, or online at: http://planningdocuments.saccounty.net

The direct link is:

https://planningdocuments.saccounty.net/ViewProjectDetails.aspx?ControlNum=

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