INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

FOR THE

RAINFLOW CARWASH PROJECT

AUGUST 2019

Prepared for:

City of Brentwood
Community Development Department
150 City Park Way
Brentwood, CA 94513
(925) 516-5405

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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Proposed Mitigated Negative Declaration for the Rainflow Carwash Project

Lead Agency: City of Brentwood
150 City Park Way
Brentwood, CA 94513

Project Title: Rainflow Carwash Project

Project Location: The project site consists of approximately 3.3-acres located at the southwest corner of Sand Creek Road and O'Hara Avenue in the City of Brentwood, California. The project site can be identified by its Contra Costa County Assessor's Parcel Number (APN) 016-080-028.

Project Description: Rainflow Development, LLC, proposes to develop the Rainflow Express Carwash (project, proposed project, or Rainflow Carwash) on a 3.3-acre site at the southwest corner of Sand Creek Road and O'Hara Avenue in the City of Brentwood, California (APN: 016-080-028). The project site is planned to be developed as a self-service automated car wash, that will consist of an approximately 150-foot car wash tunnel, 27 vacuum stations distributed among three areas, and associated parking and landscape areas. The car wash tunnel would be approximately 20' tall, with a 24'6" tower at the entrance, and a 30' tower at the exit. The vacuum stations would be covered by canvas canopies. Development would only occur on 1.67 acres of the project site located adjacent to Sand Creek Road. Access to the site would be through a driveway access point off of Sand Creek Road in the Northwest corner of the project site.

Findings:

In accordance with the California Environmental Quality Act, the City of Brentwood has prepared an Initial Study to determine whether the Rainflow Carwash Project may have a significant adverse effect on the environment. The Initial Study and Proposed Mitigated Negative Declaration reflect the independent judgment of City of Brentwood staff. On the basis of the Initial Study, the City of Brentwood hereby finds:

> *Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the project has incorporated specific provisions to reduce impacts to a less than significant level and/or the mitigation measures described herein have been added to the project. A Mitigated Negative Declaration has thus been prepared.*

The Initial Study, which provides the basis and reasons for this determination, is attached and/or referenced herein and is hereby made a part of this document.

_____ _____

Date

Proposed Mitigation Measures:

The following Mitigation Measures are extracted from the Initial Study. These measures are designed to avoid or minimize potentially significant impacts, and thereby reduce them to an insignificant level. A Mitigation Monitoring and Reporting Program (MMRP) is an integral part of project implementation to ensure that mitigation is properly implemented by the City of Brentwood and the implementing agencies. The MMRP will describe actions required to implement the appropriate mitigation for each CEQA category including identifying the responsible agency, program timing, and program monitoring requirements. Based on the analysis and conclusions of the Initial Study, the impacts of proposed project would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented below.

Mitigation Measure AES-1*: In conjunction with development of the proposed project, the developer shall shield all onsite lighting so that nighttime lighting is directed within the project site and does not illuminate adjacent properties. A detailed photometric plan shall be submitted for the review and approval by the Community Development Department and the Public Works Department in conjunction with the project improvement plans. The photometric plan shall indicate the locations and design of the shielded light fixtures.*

Mitigation Measure AG-1*: The project applicant must preserve agricultural lands by paying an in-lieu fee established by City Council resolution. The fee may be adjusted annually but may not be increased by more than ten percent during any twelve-month period.*

Mitigation Measure BIO-1*: East Contra Costa County Habitat Conservation Plan (ECCCHCP). Prior to the issuance of grading or construction permits for the project site, the developer shall submit an application and obtain coverage under the ECCCHCP. This will include payment of the applicable ECCCHCP per- acre fee in effect for Zone I in compliance with Section 16.168.070 of the Brentwood Municipal Code. The developer shall receive a Certificate of Coverage from the City of Brentwood and submit a construction monitoring report to the ECCC Habitat Conservancy for review and approval. The Certificate of Coverage will confirm the fee has been received, that other ECCC HCP/NCCP requirements have been met or will be performed, and will authorize take of covered species.*

Mitigation Measure BIO-2A*: Prior to any ground disturbance related to activities covered under the ECCCHCP, a preconstruction survey of the project site shall be completed. The surveys shall establish the presence or absence of western burrowing owl and/or habitat features, and evaluate use by owls in accordance with CDFW survey guidelines. On the parcel where the activity is proposed, the USFWS/CDFW-approved biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership need not be surveyed. The survey shall take place near the sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. Survey shall take place no more than 30 days prior to construction. During the breeding season (February 1-August 31), surveys shall document whether burrowing owls are nesting on or directly adjacent to disturbance areas. During the non-breeding season (September 1-January 31), surveys shall document whether burrowing owls are using habitat on or directly adjacent to any disturbance area. Survey results would be valid only for the season during which the survey is conducted. The survey results shall be submitted to CDFW and the City of Brentwood Community Development Department.*

If burrowing owls and/or burrows are identified in the survey area, Mitigation Measure BIO-2B shall be implemented. If burrowing owls and/or suitable burrows are not discovered, then further mitigation is not necessary.

Mitigation Measure BIO-2B*: If burrowing owls are found during the breeding season (February 1-August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season, or while the nest is occupied by adults or young. Avoidance shall include establishment of a 250-foot non-disturbance buffer zone. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg- laying and incubation, or that the juveniles from the occupied burrows have fledged. During the non-breeding season (September 1-January 31), the project proponent shall avoid the owls and*

the burrows they are using, if possible. Avoidance shall include the establishment of a 160-foot non- disturbance buffer zone.

If occupied burrows for burrowing owls are not avoided, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent re-occupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

***Mitigation Measure BIO-3**: San Joaquin Kit Fox. Prior to any ground disturbance, a qualified biologist shall conduct a preconstruction survey for San Joaquin kit fox. Preconstruction surveys will be conducted within 30 days of ground disturbance. Preconstruction survey requirements include but are not limited to mapping of all dens within the project site footprint and within a 250-foot radius of the project site, and the provision of written survey results to the USFWS within five working days after surveying. If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the applicant shall consult with the USFWS and CDFW.*

***Mitigation Measure BIO-4:** Swainson's Hawk. Prior to any ground disturbance during the nesting season (March 15-September 15), a qualified biologist shall conduct a preconstruction survey for Swainson's Hawk. The preconstruction survey shall occur no more than 30 days prior to construction to establish whether occupied Swainson's hawk nests are located within 1,000 feet of the project site. If potentially occupied nests are identified within 1,000 feet of the project site, then their occupancy will be determined by observation from public roads or by observations of Swainson's hawk activity (e.g. foraging) near the project site. A written summary of the survey results shall be submitted to the City of Brentwood Community Development Department. If occupied nests occur on- site or within 1,000 feet of the project site, the applicant shall consult with the USFWS and CDFW.*

***Mitigation Measure CR-1:** Prior to grading permit issuance, the Applicant/developer of the project site shall submit plans to the Brentwood Planning Department for review and approval which indicate (via notation on the improvement plans) that if historic and/or cultural resources are encountered during site grading or other site work, including during operation of the proposed project, all such work shall be halted immediately within the area of discovery and the Applicant/developer shall immediately notify the City of the discovery. In such case, the Applicant/developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.*

***Mitigation Measure CR-2:** Pursuant to State Health and Safety Code §7050.5 (c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-interment of the human remains and any associated artifacts. Additional work is not to take place within the immediate vicinity of the find until the identified appropriate actions have been implemented.*

***Mitigation Measure GEO-1**: All project buildings shall be designed in conformance with the current edition of the California Building Code (CBC).*

***Mitigation Measure GEO-2:** Prior to grading permit issuance, the applicant shall submit a final geotechnical evaluation of the project site that analyzes soil stability including soil expansion, and the potential for lateral spreading, subsidence, liquefaction or collapse. The report shall identify any onsite soil and seismic hazards and provide design recommendations for onsite soil and seismic conditions. The geotechnical evaluation shall be reviewed and approved by*

the City Engineer, Chief Building Official, and a qualified Geotechnical Engineer to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design.

***Mitigation Measure GEO-3**: All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the City Engineer, Chief Building Official, and a qualified Geotechnical Engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design.*

***Mitigation Measure GEO-4:** Prior to grading permit issuance, the applicant shall submit a final grading plan to the City Engineer for review and approval. If the grading plan differs significantly from the proposed grading illustrated on the approved project plans, plans that are consistent with the new revised grading plan shall be provided for review and approval by the City Engineer.*

***Mitigation Measure GEO-5:** Any applicant for a grading permit shall submit an erosion control plan to the City Engineer for review and approval. The plan shall identify protective measures to be taken during construction, supplemental measures to be taken during the rainy season, the sequenced timing of grading and construction, and subsequent revegetation and landscaping work to ensure water quality in creeks and tributaries in the General Plan Area is not degraded from its present level. All protective measures shall be shown on the grading plans and specify the entity responsible for completing and/or monitoring the measure and include the circumstances and/or timing for implementation.*

***Mitigation Measure GEO-6**: Grading, soil disturbance, or compaction shall not occur during periods of rain or on ground that contains freestanding water. Soil that has been soaked and wetted by rain or any other cause shall not be compacted until completely drained and until the moisture content is within the limit approved by a Soils Engineer. Approval by a Soils Engineer shall be obtained prior to the continuance of grading operations. Confirmation of this approval shall be provided to the Engineering Division prior to commencement of grading.*

***Mitigation Measure HAZ-1:** Prior to initiation of any ground disturbance activities, evenly distributed soil samples shall be conducted throughout the proposed project property for analysis of pesticides and heavy metals. The samples shall be submitted for laboratory analysis of pesticides and heavy metals per DTSC and EPA protocols. The results of the soil sampling shall be submitted for the review of the Community Development Director. If elevated levels of pesticides or heavy metals are detected during the laboratory analysis of the soils, a soil cleanup and remediation plan shall be prepared and implemented prior to the commencement of grading activities.*

***Mitigation Measure HYD-1:** Prior to issuance of grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The Developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. The SWPPP shall be submitted to the City Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.*

***Mitigation Measure HYD-2:** Prior to the completion of construction the applicant shall prepare and submit, for the City's review, an acceptable Stormwater Control Operation and Maintenance Plan. In addition, prior to the sale or transfer of the site, the applicant shall be responsible for paying for the long-term maintenance of treatment facilities, and executing a Stormwater Management Facilities Operation and Maintenance Agreement and Right of Entry in the form provided by the City of Brentwood. The applicant shall accept the responsibility for maintenance of stormwater management facilities until such responsibility is transferred to another entity.*

The applicant shall submit, with the application of building permits, a draft Stormwater Facilities and Maintenance Plan, including detailed maintenance requirements and a maintenance schedule for the review and approval by the City Engineer. Typical routine maintenance consists of the following:

- *Limit the use of fertilizers and/or pesticides. Mosquito larvicides shall be applied only when absolutely necessary.*
- *Replace and amend plants and soils as necessary to insure the planters are effective and attractive. Plants must remain healthy and trimmed if overgrown. Soils must be maintained to efficiently filter the storm water.*
- *Visually inspect for ponding water to ensure that filtration is occurring.*
- *After all major storm events, inspect bubble-up risers for obstructions and remove if necessary.*
- *Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect wash water containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.*
- *Dry sweep the fueling area routinely.*
- *Continue general landscape maintenance, including pruning and cleanup throughout the year.*
- *Irrigate throughout the dry season. Irrigation shall be provided with sufficient quantity and frequency to allow plants to thrive.*
- *Excavate, clean and or replace filter media (sand, gravel, topsoil) to insure adequate infiltration rate (annually or as needed).*

Mitigation Measure HYD-3: *Design of the onsite drainage facilities shall meet with the approval of both the City Engineer and the Contra Costa County Flood Control and Water Conservation District prior to the issuance of grading permits.*

Mitigation Measure HYD-4: *Contra Costa County Flood Control and Water Conservation District drainage fees for the Drainage Area shall be paid prior to issuance of grading permits to the satisfaction of the City Engineer.*

Mitigation Measure HYD-5: *The Applicant/Developer shall ensure that the project site shall drain into a street, public drain, or approved private drain, in such a manner that un-drained depressions shall not occur. Satisfaction of this measure shall be subject to the approval of the City Engineer.*

Mitigation Measure NOI-1*: Prior to approval of improvement plans, the improvement plans shall indicate that the car wash operations will comply with the following requirements:*

- *The car wash dryer used for the project shall not exceed 74 dBA Leq at 40 feet outside the car wash tunnel entrance or exit. This shall be confirmed using an additional acoustical analysis which includes noise measurements at the vacuum producers. The additional analysis and measurements shall be submitted to the City Engineer.*
- *The vacuum producer(s) shall be enclosed and shall not exceed a noise level of 69 dBA Leq at 10 feet outside of the enclosure(s). This shall be confirmed using an additional acoustical analysis which includes noise measurements at the vacuum producers. The additional analysis and measurements shall be submitted to the City Engineer.*
- *The car wash shall operate only during daytime (7:00 am to 10:00 pm) hours. Should the operator desire to allow use of the carwash outside of these hours, a request shall be submitted for the review and approval of the Community Development Director. The request shall include additional acoustical analysis, including a proposal*

for additional mitigation measures, to maintain conformance with all Brentwood noise regulations in effect at the time of the request.

- *The improvement plans shall be submitted for review and approval by the City Engineer.*

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INITIAL STUDY CHECKLIST

PROJECT TITLE

Rainflow Express Carwash

LEAD AGENCY NAME AND ADDRESS

City of Brentwood
Community Development Department
150 City Park Way
Brentwood, CA 94513

CONTACT PERSON AND PHONE NUMBER

Crystal De Castro, Associate Planner
City of Brentwood Community Development Department
(925) 516-5400
cdecastro@brentwoodca.gov

PROJECT SPONSOR'S NAME AND ADDRESS

Rainflow Development LLC
1950 Cabral Place
Manteca, CA 95337
Attn: Gary Grewal

PURPOSE OF THE INITIAL STUDY

An Initial Study (IS) is a preliminary analysis which is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project will have a significant adverse effect on the environment, thereby triggering the need to prepare an Environmental Impact Report (EIR). It also functions as an evidentiary document containing information which supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a "Less Than Significant" or "No Impact" level. If there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the lead agency shall prepare a Negative Declaration (ND). If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) shall be prepared.

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the proposed Rainflow Express Carwash Project (project) may have a significant effect upon the environment. Based upon the findings and mitigation measures contained within this report, an MND will be prepared.

PROJECT LOCATION AND SETTING

PROJECT LOCATION

The project site consists of approximately 3.3-acres located at the southwest corner of Sand Creek Road and O'Hara Avenue in the City of Brentwood, California. The project site can be identified by its Contra Costa County Assessor's Parcel Number (APN) 016-080-028. The project's regional location is shown in Figure 1 and the project area and site boundary are shown in Figure 2.

EXISTING SITE USES

The project site is currently vacant and undeveloped. The project site has been graded in the past, and has undergone periodic weed abatement. The site is bordered by a 4' barbed-wire fence, and approximately three non-native trees are located along the site perimeter. An aerial view of the project site is shown in Figure 3.

SURROUNDING LAND USES

The project site is bounded by Sand Creek Road to the north, with existing residential uses located north of Sand Creek Road. An existing UPRR railroad track runs along the western edge of the site, and Marsh Creek runs along the eastern border of the site. Lands to the south of the project site, south of Marsh Creek, are currently vacant.

The two primary land uses immediately surrounding the project site are residential uses and undeveloped land. To the north and west of the project site, there are large single-family estates and pockets of single-family residential neighborhoods. Immediately to the east and south of the site, there are multiple parcels of undeveloped land.

GENERAL PLAN AND ZONING DESIGNATIONS

The project site is currently zoned C-2 (General Commercial) and has a General Plan Land Use Designation of General Commercial (GC). The General Plan GC designation allows for a variety of mixed commercial uses and service type businesses to serve specific areas of the city and neighborhoods that are related to State Route 4 and some arterial intersections, on parcels generally ranging from one to 20 acres. Within the General Plan it identifies that such uses allowed within the General Commercial designation may not be appropriate for regional commercial centers, but are encouraged in "orderly clusters in suitable locations proximate to State Route 4 and adjacent to major arterials."

The project site is currently zoned C-2 General Commercial. As stated in Section 17.260.002 of the City's Municipal Code, permitted uses in the C-2 area shall be as follows:

(a) General retail sales excluding uses with outdoor storage or display, professional office uses; veterinarian or pet store, excluding kennels;

(b) Service uses including, but not limited to, addressing and mailing service; appliance, television and radio repair; barber or beauty shop; butcher, meat market, including frozen food locker; shoe repair, laundromat, dry cleaners and similar uses;
(c) Similar uses subject to the approval of the zoning administrator;
(d) Financial institutions. (Ord. 728, 2002; Ord. 468 § 9, 1990; Ord. 408, 1987)

For intended uses not aligning with the permitted uses as outlined above, the following uses are permitted only on the granting of a conditional use permit pursuant to Chapter 17.830 of the City of Brentwood Municipal Code:

(a) Auto service station, tire shop, repair shop, machine shop, auto seat and upholstery shop; billiard hall; bowling alleys; cardroom gaming; dancehall; laboratory—medical, dental, optical; meeting room—lodge, fraternal hall, community facility; medical or dental office; hospital; restaurant or café, on or off-sale liquor establishments; recreation services such as bowling alley, skating rink and similar uses;
(b) All drive-in, drive-thru establishments, building materials, garden supply, outdoor sales or display.
(c) Other uses that the zoning administrator determines, because of type of operation, material stored or sold, or other special circumstances that require special consideration and regulations through the conditional use permit procedure. (Ord. 728, 2002; Ord. 468 § 10, 1990; Ord. 408, 1987)

The proposed carwash use for the site is considered a conditionally permitted use, and is subject to a Conditional Use Permit. The existing General Plan Land Use Designation and Zoning Designation for the site, and the surrounding area, are shown on Figure 4.

PROJECT DESCRIPTION

Rainflow Development, LLC, proposes to develop the Rainflow Express Carwash (project, proposed project, or Rainflow Carwash) on a 3.3-acre site at the southwest corner of Sand Creek Road and O'Hara Avenue in the City of Brentwood, California (APN: 016-080-028). The project site is planned to be developed as a self-service automated car wash, that will consist of an approximately 150-foot car wash tunnel, 27 vacuum stations distributed among three areas, and associated parking and landscape areas. The car wash tunnel would be approximately 20' tall, with a 24'6" tower at the entrance, and a 30' tower at the exit. The vacuum stations would be covered by canvas canopies. Development would only occur on 1.67 acres of the project site located adjacent to Sand Creek Road. Access to the site would be through a driveway access point off of Sand Creek Road in the Northwest corner of the project site.

Proposed site plans are shown on Figure 5.

The project would create 57,560 square feet of new impervious surface on a site that previously contained zero square feet of impervious surface area. The project would be served by existing City water, sewer, and storm drainage infrastructure. Utility extensions would be installed to provide services to the project. Utility lines within the project site and adjacent roadways would be extended

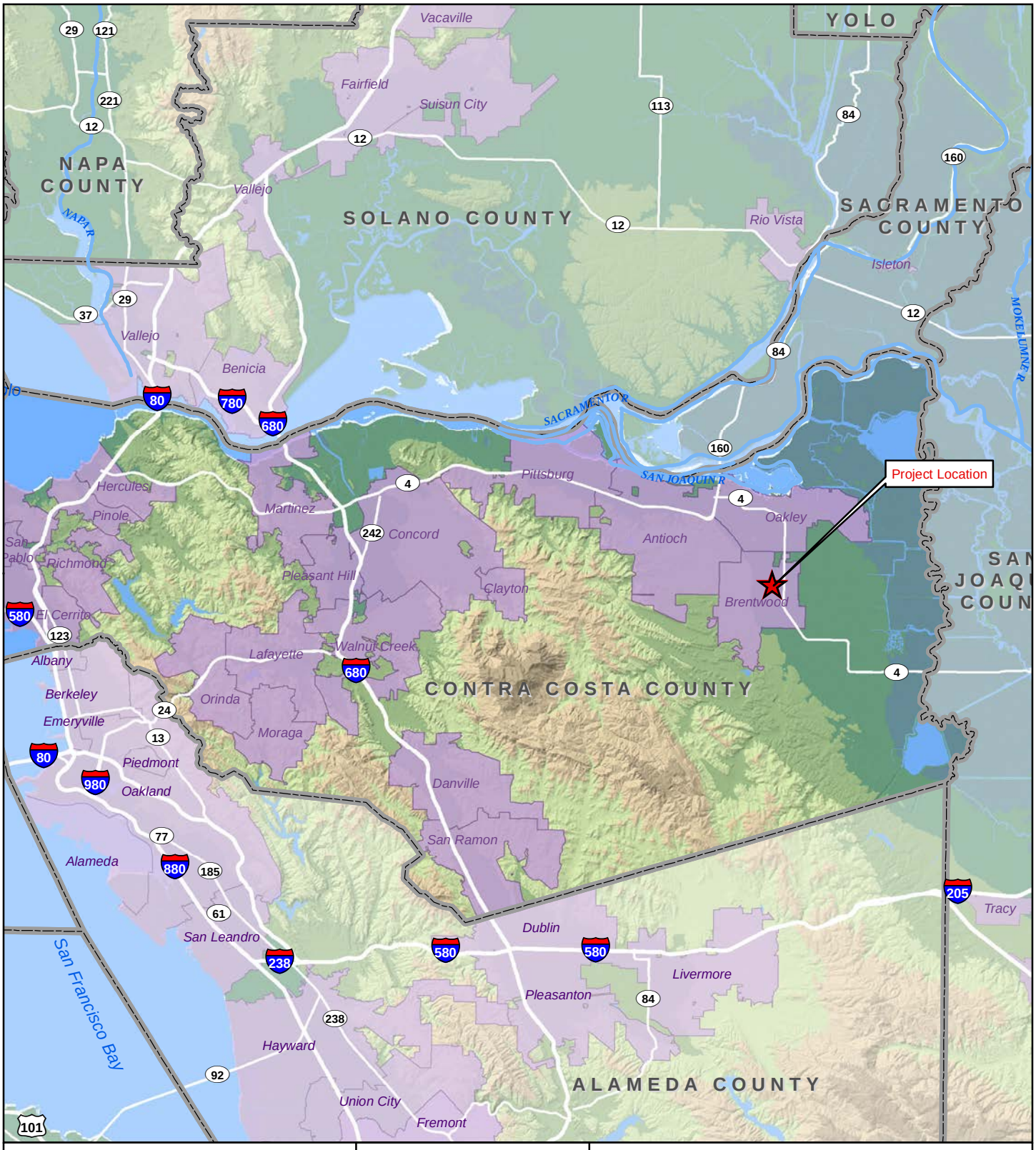
throughout the project site. Wastewater, water, and storm drainage lines would be connected via existing lines along the Sand Creek Road right-of-way. The project includes plans for an onsite stormwater treatment area and two drainage management areas to manage water runoff. Stormwater treatment and drainage management would include a bioretention area and grading infrastructure strategies (a valley gutter, a concrete level spreader, and a dirt berm) that will ensure adequate drainage. All grading would occur over existing utilities. In addition, car wash clarifier tanks would be included to collect all utilized water in a bioretention area, to be filtered before entering the public sewer system. Trash compactors and enclosure areas would be located throughout the site and along the project site perimeter.

Non-potable water is not currently available at the project site. The City is currently in the process of developing and expanding infrastructure for non-potable water. This infrastructure is not yet complete. Therefore, the applicant will be required to construct onsite potable water infrastructure that stubs out on Sand Creek Road. This non-potable water system will be used to supply carwash water when the City extends the non-potable infrastructure to the area of Sand Creek Road adjacent to the project site. The project will require connection to the City's potable water distribution system, and potable water will be used for onsite restroom uses, other potable water needs, and will be used for carwash operations until such time as the connection to the non-potable water system becomes available.

The City of Brentwood is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050.

This document will be used by the City of Brentwood to take the following actions:

- Adoption of the MND;
- Adoption of the Mitigation Monitoring and Reporting Program (MMRP);
- Approval of the requested Conditional Use Permit for the proposed uses;
- Design Review of the proposed project.


Project Location
NAPA COUNTY
SOLANO COUNTY
YOLO
SACRAMENTO COUNTY
CONTRA COSTA COUNTY
ALAMEDA COUNTY
Vacaville
Fairfield
Suisun City
Vallejo
Benicia
Rio Vista
Isleton
Hercules
Pinole
Martinez
Pittsburg
Antioch
Oakley
Concord
Pleasant Hill
Clayton
Brentwood
Richmond
El Cerrito
Albany
Berkeley
Emeryville
Lafayette
Walnut Creek
Orinda
Moraga
Piedmont
Oakland
Alameda
Danville
San Ramon
San Leandro
Dublin
Livermore
Pleasanton
Hayward
Union City
Fremont
Tracy
San Francisco Bay
SACRAMENTO R
SAN JOAQUIN R
MOKELUMNE R
NAPA R
Legend
City Area
County Boundary
0 2½ 5
Miles
Sources: CalAtlas; Contra Costa County, Solano County, Alamaeda County, San Joaquin County, Sacramento County. Map date: May 6, 2019.
RAINFLOW CAR WASH
Figure 1. Regional Location Map
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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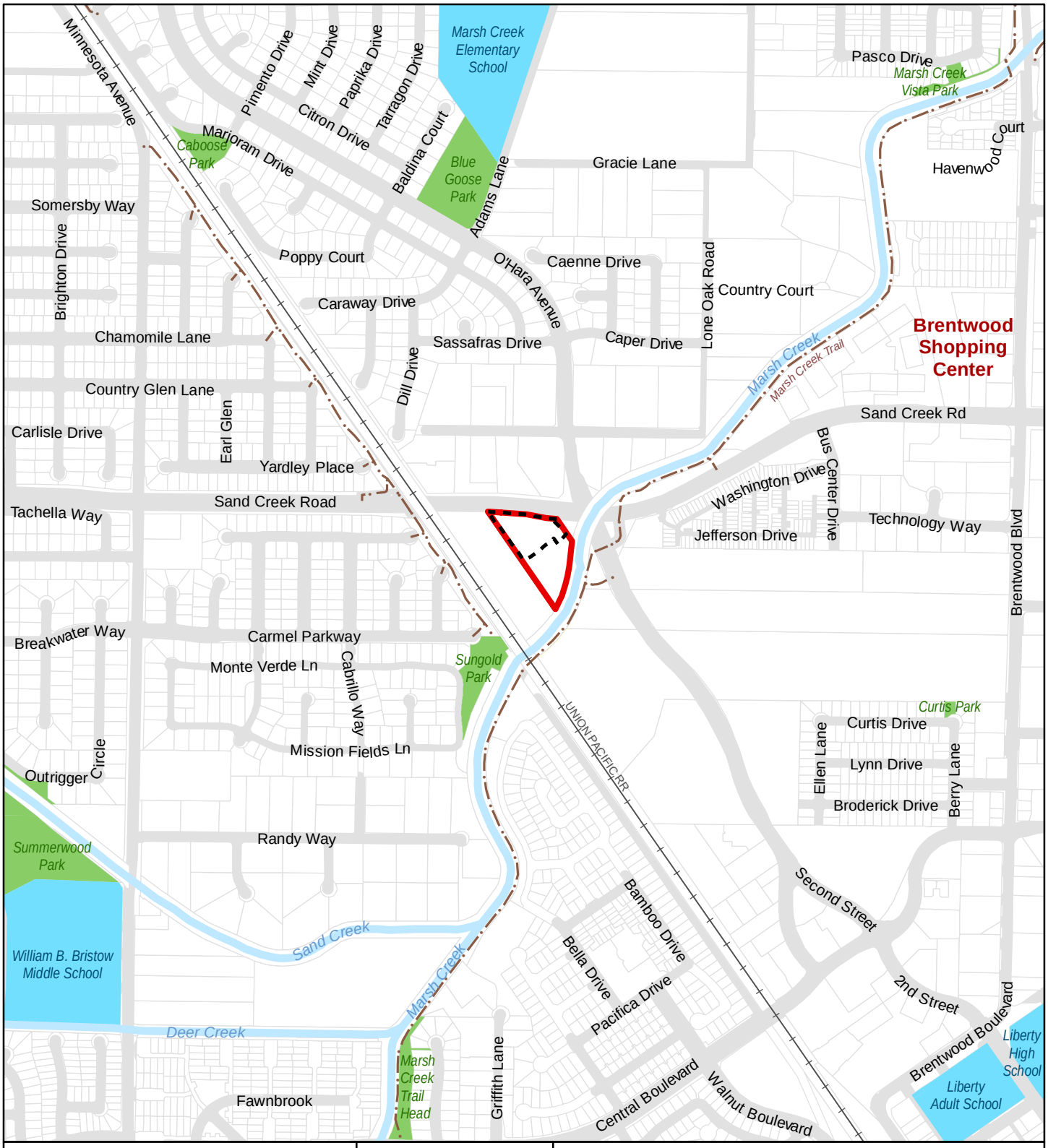
Minnesota Avenue
Pimento Drive
Mint Drive
Paprika Drive
Tarragon Drive
Citron Drive
Baldina Court
Marjoram Drive
Caboose Park
Marsh Creek Elementary School
Blue Goose Park
Adams Lane
Gracie Lane
Pasco Drive
Marsh Creek Vista Park
Havenwood Court
Somersby Way
Brighton Drive
Poppy Court
O'Hara Avenue
Caenne Drive
Lone Oak Road
Country Court
Caraway Drive
Chamomile Lane
Sassafras Drive
Caper Drive
Dill Drive
Marsh Creek
Marsh Creek Trail
Brentwood Shopping Center
Country Glen Lane
Earl Glen
Carlisle Drive
Yardley Place
Sand Creek Rd
Bus Center Drive
Washington Drive
Technology Way
Jefferson Drive
Brentwood Blvd
Tachella Way
Sand Creek Road
Breakwater Way
Carmel Parkway
Monte Verde Ln
Cabrillo Way
Sungold Park
Curtis Park
Curtis Drive
Ellen Lane
Lynn Drive
Berry Lane
Broderick Drive
Outrigger
Circle
Mission Fields Ln
UNION PACIFIC RR
Summerwood Park
Randy Way
Second Street
Bamboo Drive
Bella Drive
Pacifica Drive
2nd Street
Brentwood Boulevard
Liberty High School
Liberty Adult School
William B. Bristow Middle School
Sand Creek
Marsh Creek
Deer Creek
Marsh Creek Trail Head
Griffith Lane
Fawnbrook
Central Boulevard
Walnut Boulevard
Legend
Limit of Work
Project Parcel
School
Park
N
0
250
500
Feet
Source: Contra Costa County GIS; Open Street Map; ArcGIS Online World Imagery Map Service. Map date: May 6, 2019.
RAINFLOW CAR WASH
Figure 2. Project Area and Site Boundary
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Legend

Project Parcel

Limit of Work

N

0 75 150

Feet

Source: Contra Costa County GIS; Open Street Map; ArcGIS Online World Imagery Map Service. Map date: May 6, 2019.

RAINFLOW CAR WASH

Figure 3. Aerial View of Project Site

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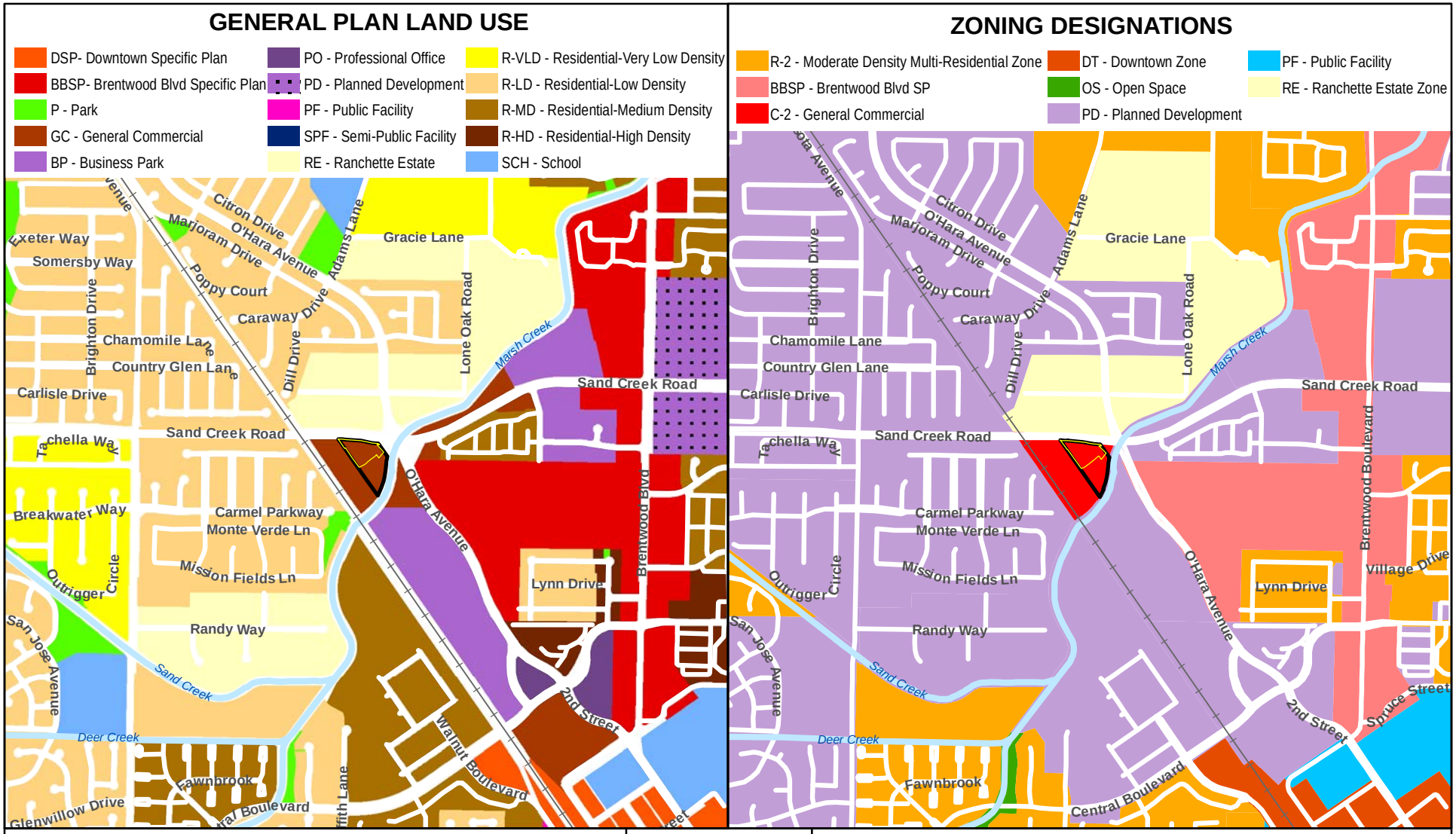

Source: Contra Costa County GIS; Open Street Map; City of Brentwood. Map date: May 6, 2019.

RAINFLOW CAR WASH

Figure 4. Existing General Plan and Zoning Designations

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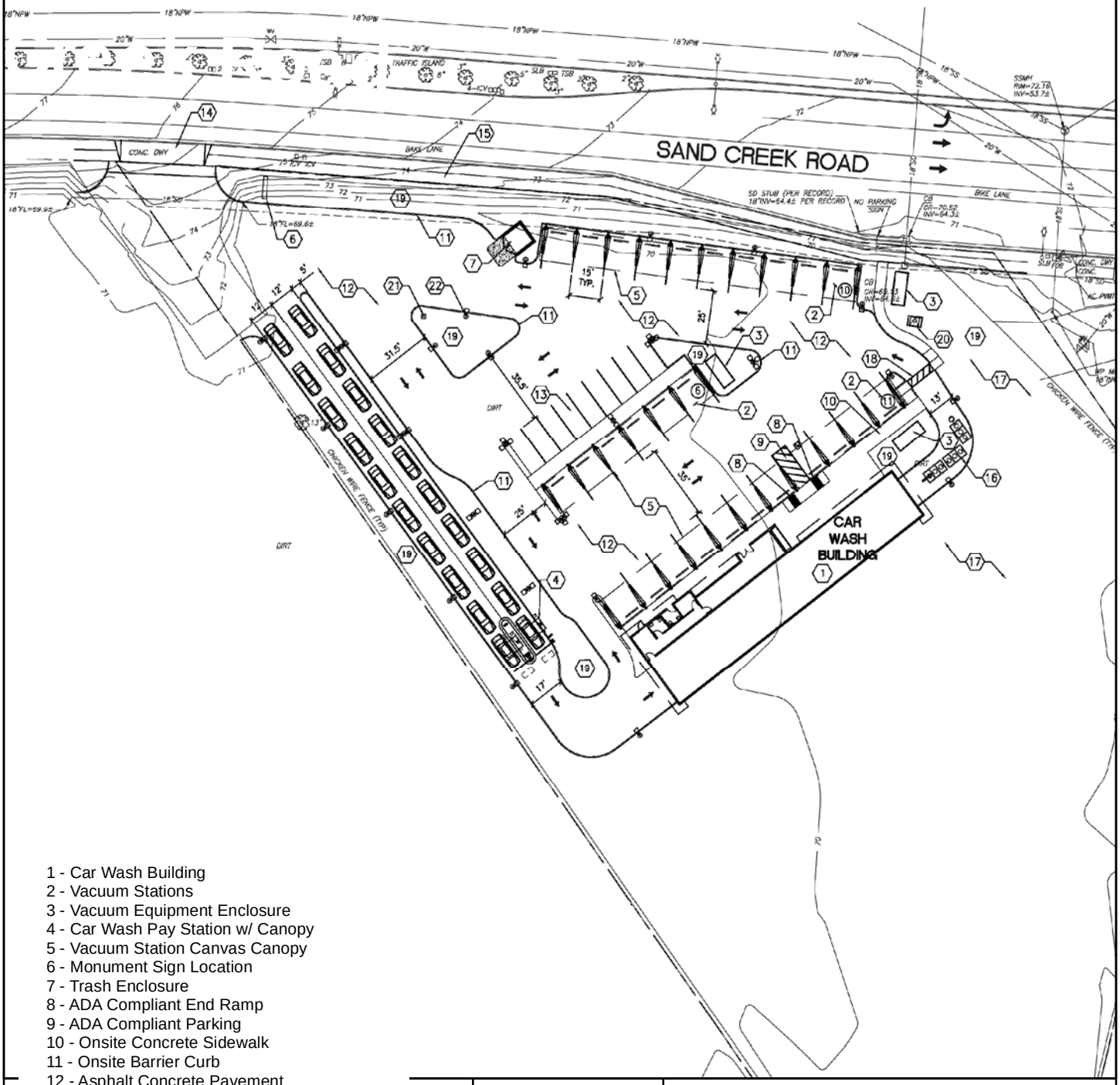

1 - Car Wash Building
2 - Vacuum Stations
3 - Vacuum Equipment Enclosure
4 - Car Wash Pay Station w/ Canopy
5 - Vacuum Station Canvas Canopy
6 - Monument Sign Location
7 - Trash Enclosure
8 - ADA Compliant End Ramp
9 - ADA Compliant Parking
10 - Onsite Concrete Sidewalk
11 - Onsite Barrier Curb
12 - Asphalt Concrete Pavement
13 - 9' x 20' Parking Stalls
14 - Existing Commercial Driveway
15 - New Sidewalk
16 - Car Wash Clarifier Tanks
17 - Bio-Retention Area
18 - ADA Accessible Route
19 - Proposed Landscape Area
20 - Proposed PG&E Transformer
21 - Flagpole
22 - LED Area Lights

Source: Ramos and Associates. Map date: May 6, 2019.

N

0 25 50

Feet

RAINFLOW CAR WASH

Figure 5. Site Plan

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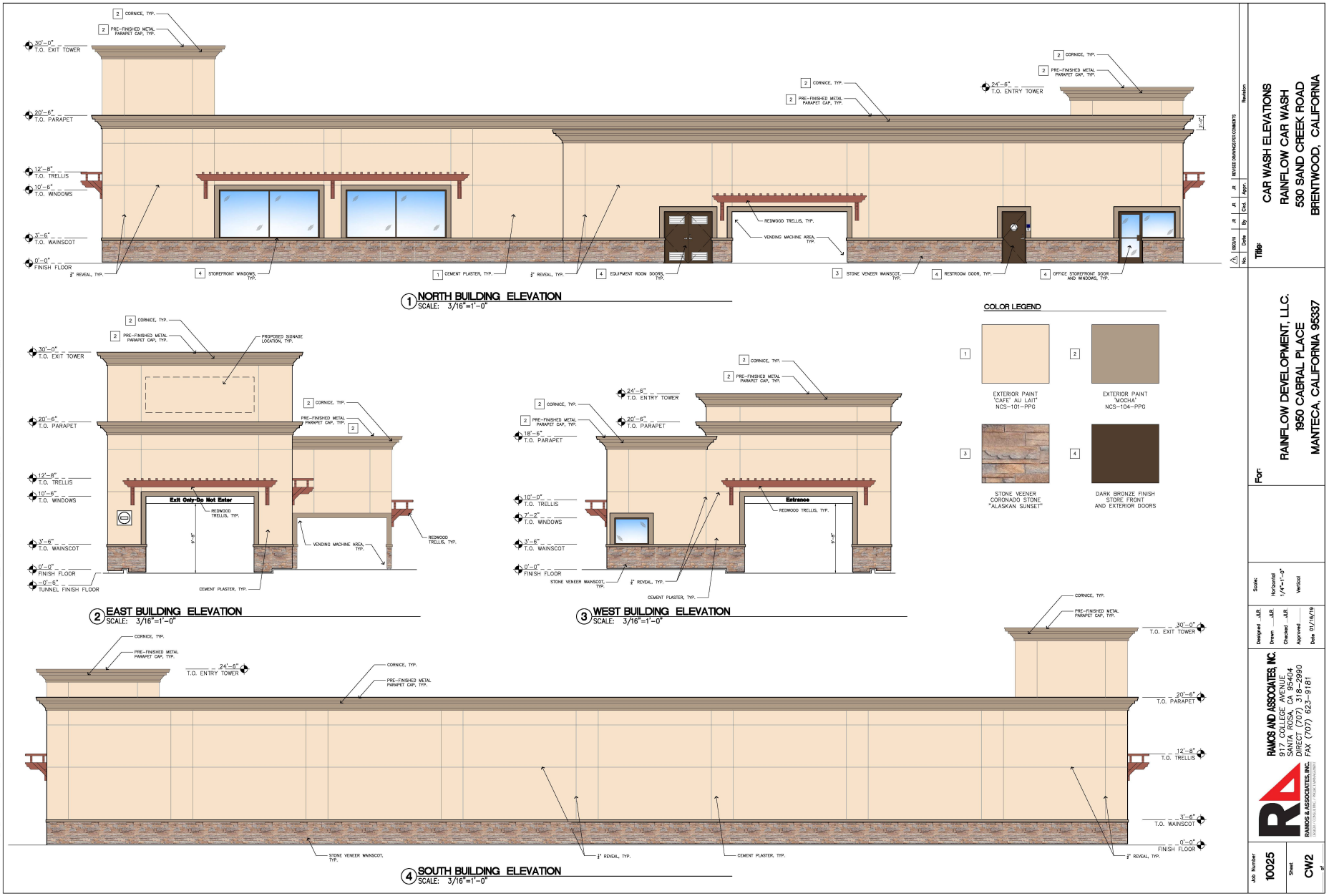

RAINFLOW CAR WASH

Figure 6. Building Elevation

Source: Ramos and Associates, 06/2019
Map date: August 23, 2019

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Energy
	Geology and Soils		Greenhouse Gasses		Hazards and Hazardous Materials
	Hydrology and Water Quality		Land Use and Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation		Transportation		Tribal Cultural Resources
	Utilities and Service Systems		Wildfire		Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
x	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date

EVALUATION OF ENVIRONMENTAL IMPACTS

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 21 environmental topic areas.

I. AESTHETICS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
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 non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). 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 the area?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. A scenic vista is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. Federal and State agencies have not designated any such locations within the City of Brentwood for viewing and sightseeing.

There are no locally identified scenic resources adjacent to the project site nor is the project site within a special planning area protected for its scenic beauty. The City of Brentwood General Plan does outline a policy to preserve and protect scenic vistas (Policy COS-7-3) that specifically identifies Mount Diablo and local hills and ridgelines as potential scenic resources. With implementation of the propose Project, the Project site would be converted from vacant undeveloped land to a car wash facility with building heights at a maximum of 30 feet. Mount Diablo and prominent local hillsides are located at a fair distance to the west of the project and there is extensive multi-story development immediately west of the project that already exists. Any segment of the mountain scape that may currently be viewable would not be disturbed by Project development.

According to the 2014 Brentwood General Plan Update EIR and the California Scenic Highway Mapping System, administered by Caltrans, the City of Brentwood does not contain officially designated State Scenic Highways.[1] However, it should be noted that the segment of State Route 4 (SR 4) located approximately 1.9 miles to the west of the project site is listed as an Eligible State Scenic Highway, but has not yet been officially designated. The project would not damage any scenic resources, such as trees, rock outcroppings, or historic buildings, within a State Scenic Highway, and is not a highly visible feature from the SR 4 corridor, given the intervening development that exists between the project site and SR 4. Additionally, the project site is not designated as a scenic vista. The 2014 Brentwood General Plan Update EIR identifies SR 4 as a local scenic route due to the distant panoramic vistas of the Diablo Range and Mount Diablo in particular. Mount Diablo is located to the west of SR 4 and the proposed project is located to the east of SR 4. As a result, the project structures would not impede views of Mount Diablo currently afforded to travelers along SR 4, or impede views of Mount Diablo from residents residing in the City of Brentwood.

The proposed project would not remove trees, rock outcroppings, and historic buildings within a state scenic highway, and is not designated as a scenic vista. Therefore, this is considered a **less than significant** impact.

Response c): Less than Significant. A project is generally considered to have a significant impact on visual character if it substantially changes the character of the Project site such that it becomes visually incompatible or visually unexpected when viewed in the context of its surroundings. The development of the site would change the existing visual setting from an undeveloped piece of land to an urban area consisting of a car wash and associated site improvements.

Project implementation would result in the development of a commercial project on a site that is currently undeveloped with a self-service automated car wash, that will consist of an approximately 150-foot car wash tunnel, 27 vacuum stations distributed among three areas, and associated parking and landscape areas. The car wash tunnel would be approximately 20' tall, with a 24'6" tower at the entrance, and a 30' tower at the exit. This would alter the existing visual character of the project, but in a manner consistent with City design requirements and community character.

The surrounding land uses include extensive residential developments, additional vacant land, and major city corridors. The proposed project would be consistent with all building design guidelines for the design review process. The proposed structures and building architectural theme (elevations, materials, building form, and color) would be related to adjacent development and Brentwood's community character. As shown in Figure 6, the building facades would utilize a variety of architectural features and materials to provide visual interest, avoid monotonous building lines, and include a variety of colors and materials to enhance the visual appearance of the structures.

[1] City of Brentwood. *2014 Brentwood General Plan Update EIR* [pg. 3.1-5]. July 22, 2014.

In addition, the proposed project is consistent with the General Commercial (C-2) zoning designation identified in the City's Zoning Code (17.260.004). The relevant zoning designation requires that buildings on properties designated for General Commercial development meet the following criteria:

(a) Minimum lot area: seven thousand five hundred square feet;
(b) Minimum lot width: fifty feet;
(c) Minimum street frontage yard: none except where there is a residentially zoned parcel within the same block, the minimum shall be seventy-five percent of the minimum front yard setback for the residential zone, but not less than five feet;
(d) Minimum nonstreet frontage: none except where residentially zoned property is abutting the C-2 zone, the minimum rear yard setback shall be twenty feet. If a public alleyway is separating the two zones, the width of the alleyway may be included as part of the minimum rear yard setback, however, in no case shall the rear yard be less than ten feet;
(e) Maximum Building Height.
    1. The maximum height of a structure in the C-2 zone shall be two stories not to exceed thirty feet,
    2. Structures greater than two stories or thirty feet may be permitted subject to conditional use permit approval. (Ord. 408, 1987)

While development of the proposed project would change and alter the existing visual character of the project site, these changes would not degrade the visual quality of the site or the surrounding areas. The proposed building incorporates a mix of materials, architectural features, varied roof lines, building recesses and articulation which provide visual interest and maintain the City's character.

Various temporary visual impacts could occur as a result of construction activities as the project develops, including grading, equipment and material storage, and staging. Though temporary, some of these impacts could last for several weeks or months during any single construction phase. The loss of existing landscaping and trees would also be a temporary impact until new landscaping matures. Because impacts would be temporary and viewer sensitivity in the majority of cases would be slight to moderate, significant impacts are not anticipated.

The final project design would be approved by the City through its design review process. Through this process the Planning Commission would ensure the design meets the criteria set forth in Municipal Code Section. As a result, development of the project site would result in a **less than significant impact** with respect to substantially degrading the existing visual character or quality of the site and its surroundings.

Response d): Less than Significant with Mitigation. The project site is currently undeveloped and upon project development would consist of a car wash, multiple outdoor vacuum stalls, and related facilities. The change from a vacant property to a commercial development, including a car wash and associated street lighting, would generate new permanent sources of light and glare. The project site is adjacent to existing residential developments.

The residential structures located in the immediate vicinity of the site would be considered sensitive receptors, which could be adversely affected by additional sources of light and glare. The proposed project will create new sources of light and glare, Examples of lighting would include construction lighting, exterior building lighting, interior building lighting, and automobile lighting. Examples of glare would include reflective building materials and automobiles. Development of the project site would be subject to all applicable local regulations and standards related to lighting. No lighting regulations are outlined within the City Zoning Code or General Plan related to General Commercial uses.

The project includes design and landscaping features in order to reduce the potential light impacts resulting from the customers' vehicle headlights. For example, various trees and shrubs would be planted throughout the site, including along the northern, western, and potentially the eastern site boundaries. The landscaping plan indicates that the shrubs would be full and bushy, thereby shielding some lighting from headlights. Therefore, vehicle headlight glare would be partially remediated by landscaping that would restrict project vehicle light sources. However, building lighting, street and safety lighting located along project roadways and parking areas may be visible from surrounding locations. Therefore, the increase in light produced by the proposed project would be considered potentially significant.

Implementation of the following mitigation measure would reduce the potential impacts related to light and glare to less than significant.

Mitigation Measures(s)

Mitigation Measure AES-1*: In conjunction with development of the proposed project, the developer shall shield all onsite lighting so that nighttime lighting is directed within the project site and does not illuminate adjacent properties. A detailed photometric plan shall be submitted for the review and approval by the Community Development Department and the Public Works Department in conjunction with the project improvement plans. The photometric plan shall indicate the locations and design of the shielded light fixtures.*

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		X		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant with Mitigation. According to the California Department of Conservation Farmland Mapping and Monitoring Program the project site is designated as Farmland of Local Importance.[2] Figure 7 identifies Important Farmlands, as mapped by the USDA, on and near the project site. The project site has been previously used for agricultural production. Historical aerial photographs show what appears to be agricultural uses on the project site in 1993. However, the site is not currently used for agricultural purposes.

The project site is currently vacant and disturbed land that is located in an urban area of the City. The site has a General Plan Land Use Designation of General Commercial (GC). The General Plan GC designation allows for a variety of mixed commercial uses and service type businesses to serve specific areas of the city and neighborhoods that are related to State Route 4 and some arterial intersections, on parcels generally ranging from one to 20 acres.

[2] https://maps.conservation.ca.gov/dlrp/ciff/

Development of the site for urban uses and the subsequent removal of Farmland of Local Importance was taken into consideration in the City of Brentwood General Plan and General Plan EIR. Buildout of the General Plan would result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to urban uses. The General Plan Draft EIR found this to be a significant and unavoidable impact. In June 2014, the Brentwood City Council adopted a Statement of Overriding Considerations for the loss of prime agricultural land resulting from adoption of the Plan and EIR, and provided mitigation measures for the agricultural land lost to development in the City of Brentwood's urbanized areas.

Additionally, Section 17.730.020 of the City of Brentwood's Agricultural Preservation Program states that, "agricultural land" requiring mitigation, includes: "*those land areas of Contra Costa County specifically designated as agricultural core (AC) or agricultural lands (AL) as defined in the Contra Costa County general plan; those land areas near the city designated as agricultural conservation (AC) as defined in the Brentwood general plan; and/or other lands upon which agricultural activities, uses, operations or facilities exist or could exist that contain Class I, II, III or IV soils as defined by the United States Department of Agriculture Natural Resource Conservation Service*."

The proposed project is identified for urban land uses in the Brentwood General Plan. The proposed project is consistent with the overriding considerations that were adopted for the General Plan. As such, implementation of the proposed project would not create new impacts over and above those identified in the General Plan Final EIR, nor significantly change previously identified impacts; therefore, in this regard, there is no impact. However, the site currently consists of land previously used for agricultural purposes, and contains Farmland of Statewide Importance soil and Prime Farmland soil, when irrigated. The proposed project is therefore subject to compliance with Chapter 17.730, Agricultural Preservation Program, of the Brentwood Municipal Code. Implementation of the following mitigation measure would bring the proposed project into compliance with Chapter 17.730 of the Brentwood Municipal Code. Thus, through implementation of Mitigation Measure AG-1, impacts related to this environmental topic are considered **less than significant**.

Mitigation Measure(s)

Mitigation Measure AG-1*: The project applicant must preserve agricultural lands by paying an in-lieu fee established by City Council resolution. The fee may be adjusted annually but may not be increased by more than ten percent during any twelve-month period.*

Response b): No Impact. The project site is not zoned for agricultural use nor is it under a Williamson Act contract. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response c): No Impact. The project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response d): No Impact. The project site is not forest land. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response e): Less than Significant. The project site is located within an urbanized area of the City of Brentwood, and is largely surrounded by existing and planned urban development. Development of the proposed project would not extend infrastructure into an agricultural area not currently served by public utilities, nor would it lead to the indirect conversion of offsite agricultural lands. The cumulative loss and conversion of agricultural lands associated with buildout of the Brentwood General Plan was thoroughly discussed in the General Plan EIR. This is a ***less than significant*** impact.

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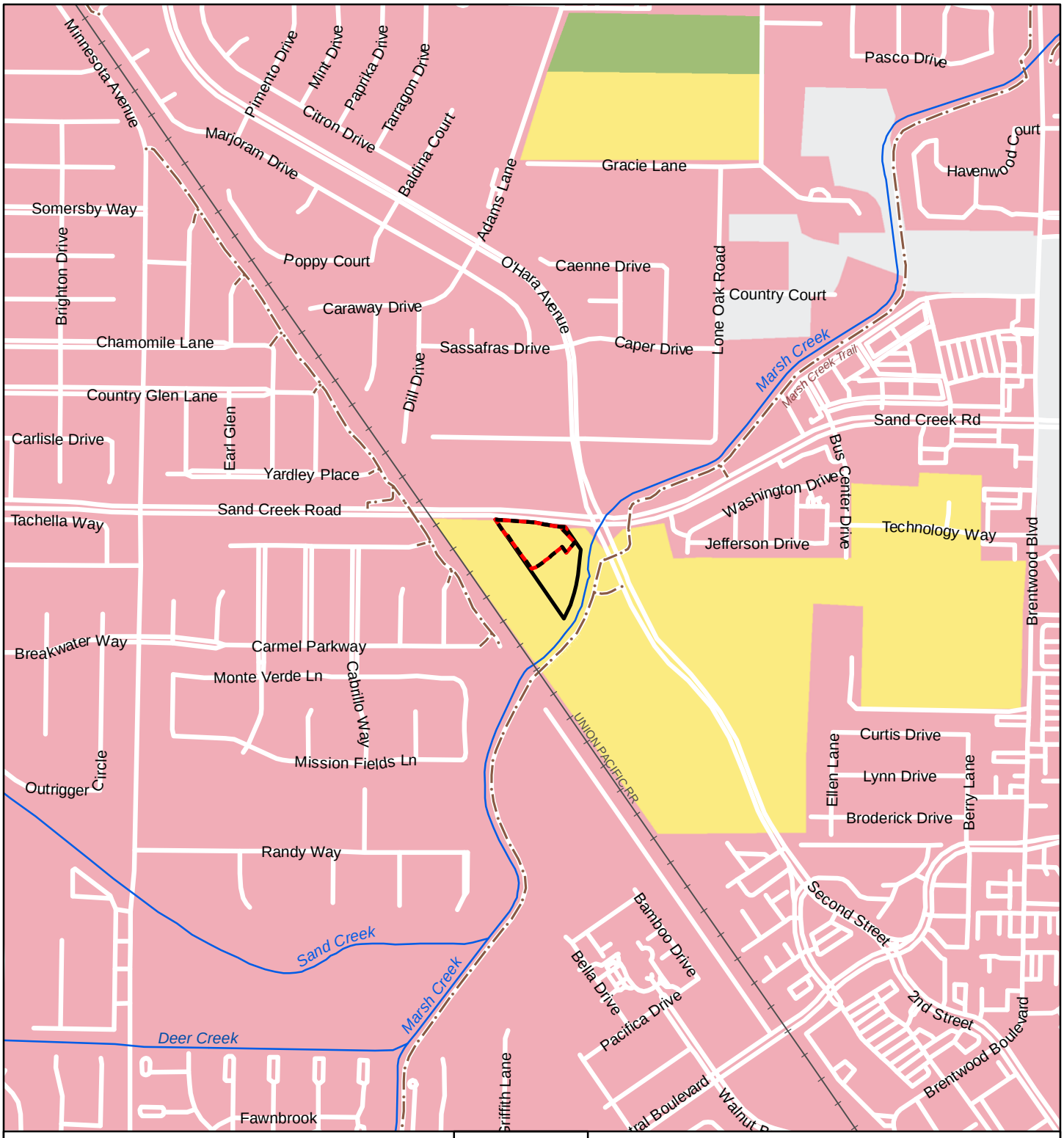

Legend

- Limit of Work
- Project Parcel

Farmland Classification

- Prime Farmland
- Farmland of Local Importance
- Other Land
- Urban and Built-Up Land

Source: Contra Costa County GIS; Open Street Map; California Department of Conservation, Farmland Mapping and Monitoring Program. Map date: May 9, 2019.

N

0 250 500

Feet

RAINFLOW CAR WASH

Figure 7. Important Farmlands Map

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III. AIR QUALITY

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
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 pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

EXISTING SETTING

The project site is located within the boundaries of the Bay Area Air Quality Management District (BAAQMD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Francisco Bay Area Air Basin (SFBAAB) and has jurisdiction over most air quality matters within its borders.

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less Than Significant. The SFBAAB is currently designated as a nonattainment area for State and federal ozone, State and federal particulate matter 2.5 microns in diameter ($PM_{2.5}$), and State particulate matter 10 microns in diameter (PM_{10}) standards. The BAAQMD, in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG), prepared the 2005 Ozone Strategy, which is a roadmap depicting how the Bay Area will achieve compliance with the State one-hour air quality standard for ozone as expeditiously as practicable and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. Although the California Clean Air Act does not require the region to submit a plan for achieving the State PM_{10} standard, the 2005 Ozone Strategy is expected to also reduce PM_{10} emissions. In addition, to fulfill federal air quality planning requirements, the BAAQMD adopted a $PM_{2.5}$ emissions inventory for year 2010, which was submitted to the U.S. Environmental Protection Agency (USEPA) on January 14, 2013 for inclusion in the State Implementation Plan (SIP).

The current plan in place to achieve progress toward attainment of the federal ozone standards is the Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard. The USEPA recently revoked the 1-hour federal ozone standard; however, the region is designated nonattainment for the new 8-hour standard that replaced the older one-hour standard. Until the region

either adopts an approved attainment plan or attains the standard and adopts a maintenance plan, the Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard remains the currently applicable federally-approved plan.

The aforementioned applicable air quality plans contain mobile source controls, stationary source controls, and transportation control measures (TCMs) to be implemented in the region to attain the State and federal ozone standards within the SFBAAB. The plans are based on population and employment projections provided by local governments, usually developed as part of the General Plan update process. The proposed project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the Ozone Attainment Plan's growth assumptions, in terms of population, employment, or regional growth in Vehicle Miles Traveled (VMT). The growth assumptions are based on ABAG projections that are, in turn, based on the City's General Plan. The proposed project site was designated for General Commercial (GC) uses in the Brentwood General Plan in effect at the time ABAG projections were forecast. The proposed project is consistent with the General Plan land use designation; therefore, the project would be considered consistent with the growth assumptions of the applicable air quality plans. As a result, the proposed project would not conflict with or obstruct implementation of the applicable air quality plans. This is a **less than significant** impact.

Response b): Less than Significant. Air pollutant emissions related to the proposed project would include both construction phase emissions and, upon project buildout, operational emissions (such as from vehicle trips generated by the proposed project). Construction phase emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from clearing and grading activities, wind-borne dust generated from exposed soils, and off-gassing from asphalt paving and painting. Construction-related emissions can vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content. Operational air pollutant emissions of the proposed project would be generated by electricity use for the night lighting at the project site, and visitor vehicle exhaust. Both construction and operation of the proposed project would result in the generation of emissions of carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NOx), and particulate matter (PM_{10}). Emissions of ROG and NOx are referred to as "precursors" to ozone formation. These two pollutants, when released into the atmosphere, undergo photochemical reactions in the presence of sunlight to form ozone. These ozone-forming photochemical reactions do not occur as readily in the cooler months of the year, and therefore, emissions of ROG and NOx are of greatest concern during the warmer months of summer.

According to the CEQA Guidelines, an air quality impact may be considered significant if the proposed project's implementation would result in, or potentially result in, conditions, which violate any existing local, State or federal air quality regulations. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants designated as nonattainment in the area, the BAAQMD has established significance thresholds associated with development projects for emissions of reactive organic gases (ROG), nitrogen oxide (NOx), PM_{10}, and $PM_{2.5}$. The BAAQMD's significance thresholds, expressed in pounds per day (lbs/day) for project-level and tons per year (tons/yr) for

cumulative, listed in Table AIR-1, are recommended for use in the evaluation of air quality impacts associated with proposed development projects.

TABLE AIR-1: BAAQMD THRESHOLDS OF SIGNIFICANCE

POLLUTANT	*CONSTRUCTION (LBS/DAY)*	*OPERATIONAL (LBS/DAY)*	*CUMULATIVE (TONS/YEAR)*
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82	82	15
$PM_{2.5}$	54	54	10

SOURCE: BAAQMD CEQA GUIDELINES (MAY, 2011)

It should be noted that the BAAQMD was challenged in Superior Court, on the basis that the BAAQMD failed to comply with CEQA when it adopted its CEQA guidelines, including thresholds of significance. The BAAQMD was ordered to set aside the thresholds and conduct CEQA review of the proposed thresholds. On August 13, 2013, the First District Court of Appeal reversed the trial court's decision striking down BAAQMD's CEQA thresholds of significance for GHG emissions. The Court of Appeal held that CEQA does not require BAAQMD to prepare an EIR before adopting thresholds of significance to assist in the determination of whether air emissions of proposed projects might be deemed "significant."

The Court of Appeal's decision provides the means by which BAAQMD may ultimately reinstate the GHG emissions thresholds, though the court's decision does not become immediately effective. It should be further noted that a petition for review has been filed; however, the court has limited its review to the following issue: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project?

Ultimately, the thresholds of significance used to evaluate proposed developments are determined by the CEQA lead agency. Per CEQA Guidelines Section 15064.7, the City has elected to use the BAAQMD's thresholds and methodology for this project, as they are based on substantial evidence and remain the most up-to-date, scientifically-based method available to evaluate air quality impacts. Thus, the BAAQMD's thresholds of significance presented in Table AIR-1, are utilized for this analysis.

Implementation of the proposed project would contribute local emissions in the area during both the construction and operation of the proposed project.

The project includes development of an approximately 150-foot car wash tunnel, 27 vacuum stations distributed among three areas, and associated parking and landscape areas. The car wash tunnel would be approximately 20' tall, with a 24'6" tower at the entrance, and a 30' tower at the exit. The vacuum stations would be covered by canvas canopies. De Novo Planning Group calculated the construction and operational air emissions resulting from the project to conclusively determine whether thresholds could be exceeded.

Construction-Related Emissions

The following section outlines the construction schedule, modeling assumptions, and results of the modeling. CalEEMod™ (v.2016.3.2) was used to estimate construction emissions for the proposed project.

Construction Activities Schedule:

Construction activities will consist of multiple phases over approximately one year. These construction activities can be described as site improvements (site preparation, grading, and topside improvements) and vertical construction (building construction and architectural coatings). For purposes of this analysis, it is assumed that the entire project is built-out from early January 2020 to late October 2020. The assumptions made for the air quality and greenhouse gas emissions analysis are included as follows:

Site Preparation: For purposes of this analysis it is assumed that site improvements are installed in one phase. This approach will present a more conservative and worst-case scenario. The site preparation step will include the use of dozers, backhoes, and graders to strip all organic materials and the upper half-inch to inch of soil from the project site. This task will generally take approximately 2 days to complete and will include vehicle trips from construction workers.

Grading: After the site is stripped of organic materials, grading will begin. This activity will involve the use of graders, dozers, loaders, and backhoes to move soil around the project site to create specific engineered grade elevations and soil compaction levels. Grading for the project site would take approximately 4 days. and will include vehicle trips from construction workers.

Paving: The last task is to install the topside improvements, which includes pouring concrete curbs, gutters, sidewalks, and access aprons and then paving of parking lots. This task will involve the use of cement and mortar mixers, pavers, paving equipment, rollers, and loaders, and will take approximately 10 days and will include vehicle trips from construction workers. *(Note: It would be possible to install the topside improvements under a more compacted schedule with extra equipment operating or under a longer timeframe with less equipment).*

Building Construction/Architectural Coatings: Building construction involves the vertical construction of structures and landscaping around the structures. This task will involve the use of cranes, forklifts, generator sets, small tractors/loaders/backhoes, and welders. The exact construction schedule of the entire project is largely dependent on market demands. For purposes of this analysis it is assumed that the entire project is constructed in approximately 200 days. The actual building construction phase may vary based on market conditions. Architectural coatings involve the interior and exterior painting associated with the structures. This task will generally begin one month after construction begins on the structure and will generally be completed with the completion of the individual buildings.

Table AIR-2 presents the estimated construction phase schedule, which shows the duration of each construction phase.

TABLE AIR- 2: CONSTRUCTION PHASE SCHEDULE

PHASE NUMBER	*PHASE NAME*	*PHASE TYPE*	*START DATE*	*END DATE*	*# DAYS WEEK*	*# DAYS*
1	Site Preparation	Site Preparation	1/1/2020	1/2/2020	5	2
2	Grading	Grading	1/3/2020	1/8/2010	5	4
3	Building Construction	Building Construction	1/9/2020	10/14/2020	5	200
4	Paving	Paving	10/15/2020	10/28/2020	5	10
5	Architectural Coating	Architectural Coating	10/29/2020	11/11/2020	5	10

Source: CalEEMod (V.2016.3.2)

Construction Emissions:

A quantification of the emissions of ROG, NOX, PM_{10}, and $PM_{2.5}$ that will be emitted by project construction has been performed. CalEEModTM (v.2016.3.2) was used to estimate construction emissions for the proposed project.

Air pollutant emissions related to the proposed project would include both construction phase emissions and, upon project buildout, operational emissions (such as from vehicle trips generated by the proposed project). Construction phase emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from clearing and grading activities, wind-borne dust generated from exposed soils, and off-gassing from asphalt paving and painting.

Construction-related emissions can vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content. Operational air pollutant emissions of the proposed project would be generated by electricity use for the night lighting at the project site, and visitor vehicle exhaust. Both construction and operation of the proposed project would result in the generation of emissions of carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NOx), and particulate matter (PM_{10}). Emissions of ROG and NOx are referred to as "precursors" to ozone formation. These two pollutants, when released into the atmosphere, undergo photochemical reactions in the presence of sunlight to form ozone. These ozone-forming photochemical reactions do not occur as readily in the cooler months of the year, and therefore, emissions of ROG and NOx are of greatest concern during the warmer months of summer.

The BAAQMD has established construction-related emissions thresholds of significance as follows: 54 pounds per day (lbs/day) of ROG, NOx, or $PM_{2.5}$, and 82 lbs/day for PM_{10}. If the proposed project's emissions will exceed the BAAQMD's threshold of significance for construction-generated emissions, the proposed project will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce emissions. Based on the CalEEMod results, the proposed project's estimated unmitigated maximum construction-related emissions are presented in **Table AIR-3** in comparison to the applicable thresholds of significance. As shown in the table below, the proposed project would not exceed any applicable thresholds of significance for air quality emissions during construction.

TABLE AIR- 3: CONSTRUCTION EMISSIONS (UNMITIGATED)

THRESHOLDS	ROG	NO_x	PM_{10}	$PM_{2.5}$
	≤ 54 LBS/DAY	≤ 54 LBS/DAY	≤ 82 LBS/DAY	≤ 54 LBS/DAY
2020	1.587	10.18	.7654	.5873
Maximum	1.587	10.18	.7654	.5873
Threshold Exceeded?	No	No	No	No

Source: CalEEMod (V.2016.3.2)

The proposed project's estimated unmitigated maximum construction-related emissions in comparison to the applicable thresholds of significance are shown above. As shown in Table AIR-3, annual construction emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ will not exceed the BAAQMD thresholds of significance in any given year. Therefore, the proposed project would not exceed the BAAQMD's threshold of significance for construction-generated emissions, the proposed project would have a less than significant impact related to construction emissions.

Operational Emissions

Operational emissions of ROG, NOX, PM_{10}, and $PM_{2.5}$ would be generated by the proposed project from both mobile and stationary sources. Day-to-day activities such as future customers' vehicle trips to and from the project site would make up the majority of the mobile emissions. Emissions would occur from area sources such as natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products. CalEEMod™ (v.2016.3.2) was used to estimate operational emissions for the proposed project. Table AIR-4 shows the emissions, which include mobile, area source, and energy emissions of criteria pollutants that would result from operations of the proposed project.

TABLE AIR- 4: OPERATIONAL BUILDOUT GENERATED EMISSIONS (UNMITIGATED)

	ROG	NOX	PM_{10}	$PM_{2.5}$
THRESHOLDS / **CATEGORY**	≤ 54 LBS/DAY	≤ 54 LBS/DAY	≤ 82 LBS/DAY	≤ 54 LBS/DAY
AREA	0.1581	0	0	0
ENERGY	0.004225	0.03827	.002897	.002897
MOBILE	0.1412	0.5445	.2451	.0676
TOTAL	.3036	0.5831	0	0
THRESHOLD EXCEEDED?	No	No	No	No

Source: CalEEMod (V.2016.3.2)

The long-term operational emissions estimate for buildout of the proposed project, incorporates the potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation. The modeling included mitigation inputs including the following:

Traffic Modeling Assumptions

- Low Density Suburban Project Setting
- Improve pedestrian network so that the project site connects to offsite pedestrian networks

Energy Modeling Assumptions

- Exceed Title 24 (15% improvement)
  - Note: The Project would meet or exceed this mitigation by conforming to the current version of the Title 24 Energy Efficiency Standards.
- Install High Efficiency Lighting (16% lighting energy reduction)
  - Note: According to CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*, a minimum of a 16% reduction in electricity usage is expected compared with low- efficiency lighting (i.e., metal halide post top lights as opposed to typical mercury cobrahead lights).

Area Modeling Assumptions

- No Hearths
- Use low VOC paint not to exceed 100 g/L

Water Modeling Assumptions

- Install low-flow kitchen faucets
- Install low-flow toilets
- Install low-flow showers
- Use water-efficient irrigation systems

As shown in Table Air-4, the proposed project's operational emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ would not exceed the applicable thresholds of significance. Therefore, the proposed project would not violate operational air quality standards or contribute to the area's nonattainment status of ozone and PM, and impacts associated with operational emissions would be considered less than significant.

Cumulative Emissions

The long-term emissions associated with operation of the proposed project in conjunction with other existing or planned development in the area would incrementally contribute to the region's air quality. In order to determine the proposed project's cumulative contribution to regional air quality, the City, as lead agency, has chosen to utilize the BAAQMD's cumulative thresholds as presented in Table AIR-5. The proposed project's contribution to cumulative emissions of criteria air pollutants was calculated using CalEEMod and is presented in Table AIR-5 below. As shown, the proposed project's unmitigated cumulative emissions would be below the applicable cumulative thresholds of significance. Therefore,

the proposed project's incremental contribution to cumulative air quality impacts would be considered less than significant.

TABLE AIR- 5: CUMULATIVE EMISSIONS (UNMITIGATED)

	ROG	*NOX*	*PM_{10}*	*$PM_{2.5}$*
THRESHOLDS CATEGORY	*10 TONS/YR*	*10 TONS/YR*	*10 TONS/YR*	*10 TONS/YR*
CONSTRUCTION				
2020	0.2630	1.6874	0.1268	0.0973
OPERATION				
AREA	0.0262	0.0000	0.0000	0.0000
ENERGY	7.0000e-004	6.3400e-003	4.8000e-004	4.8000e-004
MOBILE	0.0234	0.0902	0.0406	0.0112
SUBTOTAL	0.0503	0.0966	0.0411	0.0117
CONSTRUCTION + OPERATION				
TOTAL	0.3133	1.784	0.1679	0.109
THRESHOLD EXCEEDED?	No	No	No	No

Source: CalEEMod (V.2016.3.2)

Conclusion

As presented and discussed above, the proposed project would result in operational and cumulative emissions below the applicable BAAQMD thresholds of significance. Accordingly, the project would not violate air quality standards or contribute to the region's nonattainment status of ozone. Therefore, impacts would be **less than significant.**

Response c): Less than Significant. Land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics due to the expected presence of individuals that are especially vulnerable to the effects of air pollution (i.e., children, pregnant women, the elderly, and those with existing health problems). Potential sensitive receptors in the vicinity of the proposed project include residents surrounding the project site, predominantly surrounding the northern and western portions of the site.

Health risks from toxic air contaminants (TACs) are typically associated with long-term exposure to high concentrations. Accordingly, methodologies for conducting health risk assessments are associated with long-term exposure periods (e.g., 24 hours per day over a 70-year lifetime).

The proposed project is a carwash, which would not generate onsite toxic air contaminants (TACs) as a direct result of operations or materials stored and used at the site. State Route 4, the nearest high traffic freeway, is located approximately 1.9 miles west of the project site. This distance ensures that future employees working at the carwash would not be exposed to TAC emissions from a major roadway source. The major pollutants of concern to nearby existing sensitive receptors are localized CO emissions and TAC emissions from mobile sources (vehicles), which are addressed in further detail below.

Localized CO Emissions

As the City has elected to use the BAAQMD's thresholds and methodology for this project, the BAAQMD's screening criteria for localized CO emissions presented above are utilized for this analysis.

A General Plan Amendment is not required for the proposed project. However, because the proposed car wash portion of the project is not a permitted use, a Conditional Use Permit would be required. The proposed uses are generally consistent with the General Plan and zoning designations for the site. As such, the project would be considered consistent with the growth assumptions of the General Plan. Subsequently, the project would result in similar mobile source emissions as currently anticipated for the site. In addition, none of the affected intersections currently involve traffic volumes of 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited), and would not increase traffic volumes greater than 44,000 vehicles per hour as a result of the proposed project. Therefore, according to the BAAQMD screening criteria above, the proposed project would not be expected to result in substantial increase in levels of CO at surrounding intersections, and the project would not generate or be subjected to localized concentrations of CO in excess of applicable standards.

TACs

Construction-related activities, including grading, have the potential to generate concentrations of toxic air contaminants (TACs), specifically diesel particulate matter (DPM), from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Additionally, given the size of the proposed project, the number of construction vehicles would be highly limited at any one time. Therefore, construction-related emissions would not expose sensitive receptors to substantial pollutant concentrations.

Conclusion

Given that the proposed project would not generate sufficient TACs to expose sensitive receptors to substantial pollutant concentrations, or generate a localized CO hotspot, the impact would be less than significant.

Response d): Less than Significant. According to the CARB's Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The proposed project site is located in a non-industrial area, and is surrounded by existing residential land

uses to east, west, and south. Accordingly, the proposed project is not located in the vicinity of any substantial objectionable odor sources such as those mentioned above.

The proposed project is not anticipated to produce any objectionable odors (or other emissions) at buildout that would affect a substantial number of people. Carwash operations may result in mild odors consisting of soaps and other cleaning products used during the wash operations. These types of odors are not generally considered to be objectionable, and are not likely to be noticeable from the surrounding land uses.

Construction activities associated with the proposed project, such as paving and painting are likely to temporarily generate objectionable odors. Since odor-generating construction activities would be temporary, and are only likely to be detected by residents closest to the project site, impacts from temporary project-related odors are expected to be **less than significant** and no mitigation is required

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US 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?			X	
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, regional, or state habitat conservation plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. The project site consists of annual grassland. A field survey to assess potentially suitable habitat for special-status species was undertaken on May 9, 2019. The conditions at the site during the spring survey was an annual grassland that was composed of a monotonous canopy of mostly mustard (*Brassica* spp.). The mustard averaged approximately 6' in height. During the survey, a small tractor was mowing the field, and the height of the mustard exceeded the height of the tractor. The perimeter of the site was walked and inspected; however, the tall canopy of mustard was not conducive to a transect survey. Given the height and monotony of the mustard canopy

there was no potential for special status plants to be found in the understory. No special status species were observed during the field survey.

The project site is within the range of western burrowing owl (*Athene cunnicularia)* and the CNDDB identifies six occurrences of western burrowing owl within one mile of the project site, however, no burrows were found on the property. Furthermore, given the height of the vegetation located on-site, burrowing owl habitat did not exist on-site at the time of the survey. The perimeter of the site was inspected for burrowing owls and ground squirrel burrows with evidence of burrowing owl occupancy (i.e., white wash, pellets, feathers). No burrowing owls were observed during the field survey. It is noted that in a "mowed" condition, the potential for burrowing owls is increased. Mitigation Measure BIO-2A and Mitigation Measure BIO-2B would ensure that any potential impact to western burrowing owls is reduced to a **less than significant** level.

There are two covered wildlife species that have the potential to occur on the project site at times. Each of these species is discussed below.

San Joaquin kit fox: The project site consists of annual grassland that is just within the northern tip of the historical range of San Joaquin kit fox (*Vulpes macrotis mutica*). There was no burrows or dens with evidence of kit fox occupancy (i.e. scat, tracks) or burrows or dens that meet the dimensional criteria for kit fox. The CNDDB does not identify any occurrences of the San Joaquin kit fox within one mile of the project site. Comprehensive inspection of potential den habitat was accomplished by walking meandering transects throughout the property. San Joaquin kit fox was not observed and they are presumed to be absent. Mitigation Measure BIO-3 will ensure that any potential impact is reduced to a **less than significant** level.

Swainson's Hawk: The project site includes annual grassland along the extreme western edge of the range of Swainson's hawks (*Buteo swainsoni*). There are no potential Swainson's hawks (*Buteo swainsoni*) nest trees within the project site. However, there are potential nest trees near and visible from the site or immediately adjacent to the site. The CNDDB contains one occurrence of Swainson's hawk within one mile of the project site. At the time of the survey, the high growth of mustard (*Brassica* spp.), which was approximately 6 feet in height, was not conducive to this species. However, the site is regularly mowed, and once mowed it becomes potential foraging habitat for this species. Mitigation Measures BIO-4 would ensure that any potential impact is reduced to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure BIO-1*: East Contra Costa County Habitat Conservation Plan (ECCCHCP). Prior to the issuance of grading or construction permits for the project site, the developer shall submit an application and obtain coverage under the ECCCHCP. This will include payment of the applicable ECCCHCP per- acre fee in effect for Zone I in compliance with Section 16.168.070 of the Brentwood Municipal Code. The developer shall receive a Certificate of Coverage from the City of Brentwood and submit a construction monitoring report to the ECCC Habitat Conservancy for review and approval. The Certificate of Coverage will confirm*

the fee has been received, that other ECCC HCP/NCCP requirements have been met or will be performed, and will authorize take of covered species.

***Mitigation Measure BIO-2A**: Prior to any ground disturbance related to activities covered under the ECCCHCP, a preconstruction survey of the project site shall be completed. The surveys shall establish the presence or absence of western burrowing owl and/or habitat features, and evaluate use by owls in accordance with CDFW survey guidelines.[3] On the parcel where the activity is proposed, the USFWS/CDFW-approved biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership need not be surveyed. The survey shall take place near the sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. Survey shall take place no more than 30 days prior to construction. During the breeding season (February 1-August 31), surveys shall document whether burrowing owls are nesting on or directly adjacent to disturbance areas. During the non-breeding season (September 1-January 31), surveys shall document whether burrowing owls are using habitat on or directly adjacent to any disturbance area. Survey results would be valid only for the season during which the survey is conducted. The survey results shall be submitted to CDFW and the City of Brentwood Community Development Department.*

If burrowing owls and/or burrows are identified in the survey area, Mitigation Measure BIO-2B shall be implemented. If burrowing owls and/or suitable burrows are not discovered, then further mitigation is not necessary.

***Mitigation Measure BIO-2B**: If burrowing owls are found during the breeding season (February 1-August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season, or while the nest is occupied by adults or young. Avoidance shall include establishment of a 250-foot non-disturbance buffer zone. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged. During the non-breeding season (September 1-January 31), the project proponent shall avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a 160-foot non- disturbance buffer zone.*

If occupied burrows for burrowing owls are not avoided, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent re-occupation.[4] Plastic tubing

[3] California Burrowing Owl Consortium. Burrowing Owl Survey Protocol and Mitigation Guidelines. April 1993.

[4] California Department of Fish and Game. Staff Report on Burrowing Owl Mitigation. March 7, 2012. It should be noted that the California Department of Fish and Game is now the California Department of Fish and Wildlife.

or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

Mitigation Measure BIO-3*: San Joaquin Kit Fox. Prior to any ground disturbance, a qualified biologist shall conduct a preconstruction survey for San Joaquin kit fox. Preconstruction surveys will be conducted within 30 days of ground disturbance. Preconstruction survey requirements include but are not limited to mapping of all dens within the project site footprint and within a 250-foot radius of the project site, and the provision of written survey results to the USFWS within five working days after surveying. If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the applicant shall consult with the USFWS and CDFW.*

Mitigation Measure BIO-4: *Swainson's Hawk. Prior to any ground disturbance during the nesting season (March 15- September 15), a qualified biologist shall conduct a preconstruction survey for Swainson's Hawk. The preconstruction survey shall occur no more than 30 days prior to construction to establish whether occupied Swainson's hawk nests are located within 1,000 feet of the project site. If potentially occupied nests are identified within 1,000 feet of the project site, then their occupancy will be determined by observation from public roads or by observations of Swainson's hawk activity (e.g. foraging) near the project site. A written summary of the survey results shall be submitted to the City of Brentwood Community Development Department. If occupied nests occur on- site or within 1,000 feet of the project site, the applicant shall consult with the USFWS and CDFW.*

Responses b), c): Less than Significant. Riparian habitats are described as the land and vegetation that is situated along the bank of a stream or river. Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded). Vernal pools are seasonal depressional wetlands that are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. Vernal pools range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland.

Marsh Creek is located southeast of the project site. There is a large bio-retention area that would remain undeveloped between Marsh Creek and the portion of the project site to be developed, providing a substantial buffer area between Marsh Creek and the proposed project. This would provide sufficient setback of the project site from Marsh Creek, consistent with ECCCHCP requirements, and greater than the setback distance required by Contra Costa County. Riparian habitat does not exist at the project site. There are no other additional kinds of aquatic habitat or riparian at the site. The project site does not contain and would not affect a protected wetland. Therefore, implementation of the proposed project would have a **less than significant** impact relative to this topic.

Responses d): Less than Significant. The bio-retention area located in the southern portion of the project parcel would maintain opportunities for native, resident, or migratory wildlife to use as a movement corridor. The project site would not substantially interfere with Marsh Creek, which runs to the east of the project site. Therefore, the proposed project would not cut off or substantially interfere with 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. Implementation of the proposed project would have a **less than significant** impact relative to this topic.

Responses e), f): Less than Significant. The project site is within the boundaries of the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP.) In July 2007, the ECCCHCP/NCCP was adopted by Contra Costa County, the City of Brentwood, other member cities, the USFWS and the CDFW. The ECCCHCP/NCCP provides guidance for the mitigation of impacts to covered species. Mitigation of impacts is accomplished through the payment of a Development Fee. The Development Fee requires payment based on a cost per acre for all acres converted to non-habitat with the cost per acre based on the quality of the habitat converted. The fees are used to acquire higher value habitats in preserved areas and to fund their restoration and management. Because the City of Brentwood is a signatory to the ECCC HCP/NCCP, anticipated project impacts could be mitigated through the payment of Development Impact fees to the ECCCHCP/NCCP Conservancy, and the use of those fees by the agency for the acquisition, restoration, and management of habitat for special status species. The proposed project would comply with the ECCCHCP/NCCP requirements regarding special-status species, and the applicant would be required to pay the associated Development Fee, to the Conservancy, per *Mitigation Measure BIO-1*. The proposed project would not conflict with the provisions of the adopted the ECCCHCP/NCCP. Additionally, the proposed project would not conflict with any other local, regional, or state habitat conservation plan. Implementation of the proposed project would have a **less than significant** impact relative to this topic.

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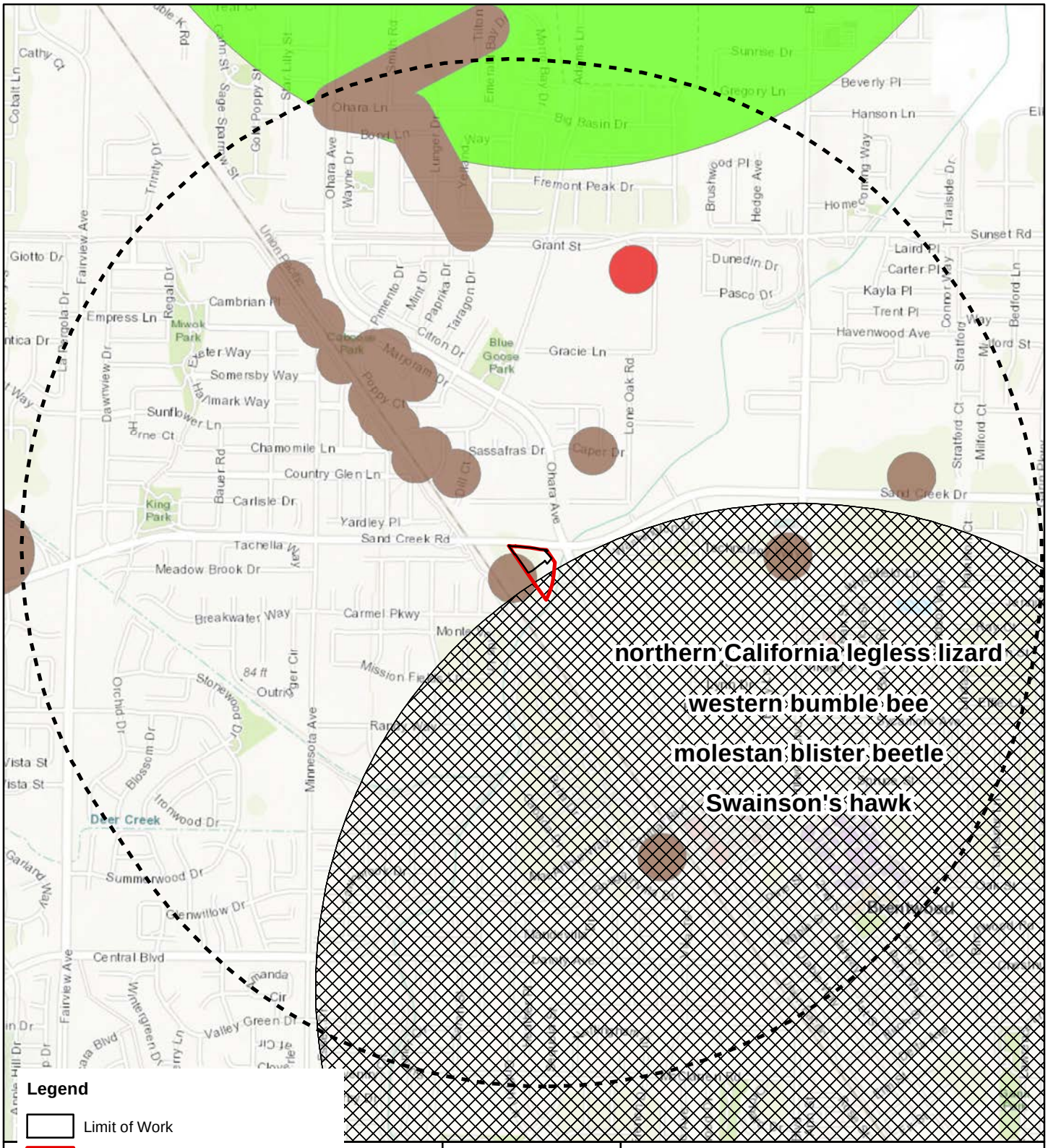

Legend

- Limit of Work
- Project Parcel

Common Name

- Antioch Dunes evening-primrose
- Swainson's hawk
- burrowing owl
- Area of Multiple Species Occurrence

CNDDB MAY 2019 - Map date: May 9, 2019

N

0 500 1,000

Feet

RAINFLOW CAR WASH

CNDDB 1-Mile Radius

Figure 8

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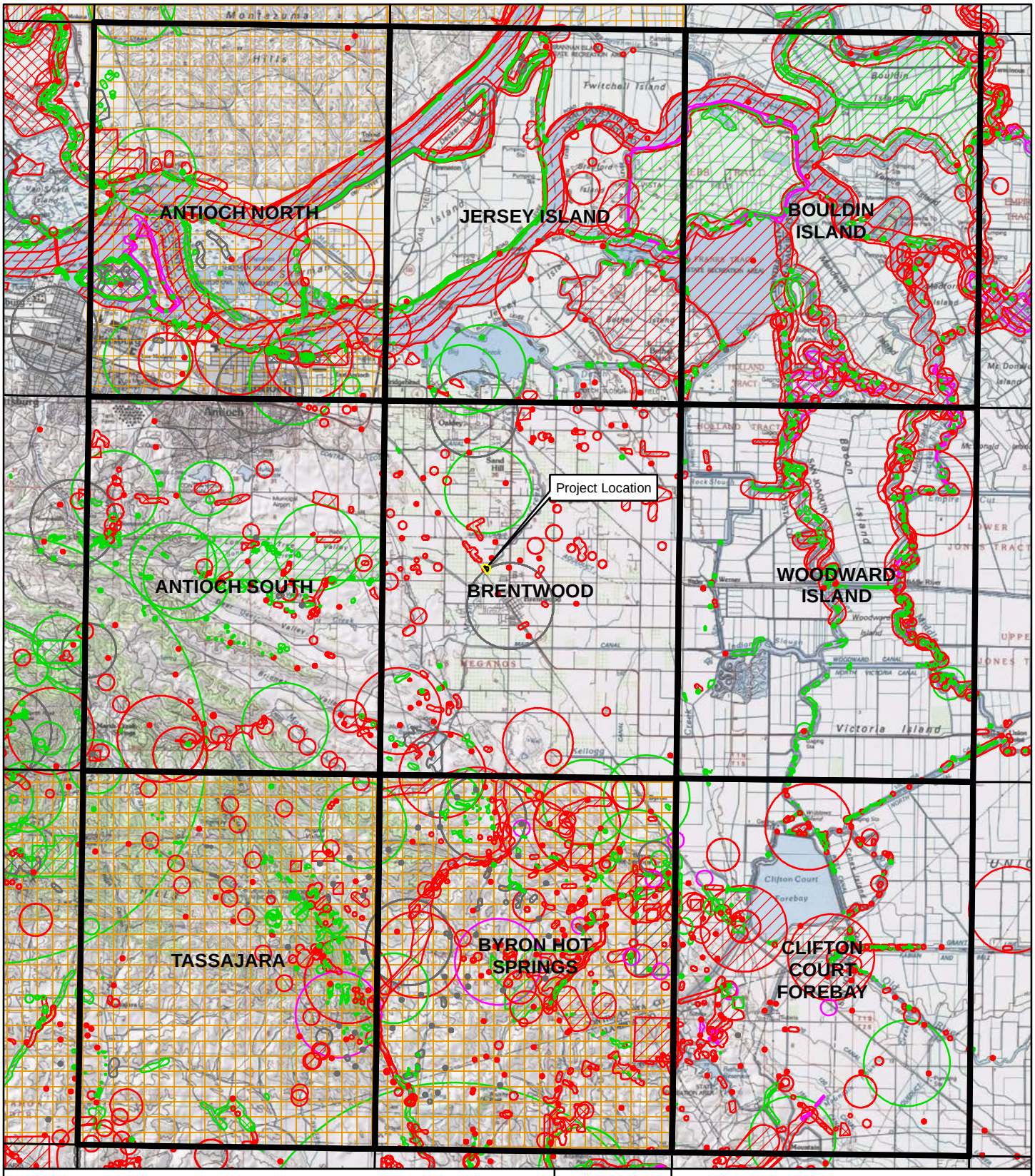

Special Status Species Occurrences

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's

CNDDB version 05/2019. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: May 9, 2019.

N

0 1 2

Miles

RAINFLOW CAR WASH

Figure 9. California Natural Diversity Database

9-Quad Search

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V. CULTURAL RESOURCES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Existing Setting

A record search was conducted through the North Central Information Center of the California Historical Resources Information Center in June of 2019 to identify previously recorded sites and previous cultural resources studies in and near the project site.

Responses to Checklist Questions

Responses a), b), c): Less than Significant with Mitigation. There are no known archaeological resources or human remains located on the project site. Review of the information provided by the North Central Information Center (NWIC) indicates that there have been no previously cultural resource studies that cover the Brentwood Rainflow Carwash project area. The proposed project area contains no previously recorded archaeological resources. The State Office of Historic Preservation Historic Property Directory (OHP HPD) (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places) lists no previously recorded buildings or structures within or adjacent to the proposed project area. In addition to these inventories, the NWIC base maps show no previously recorded buildings or structures within the proposed project area.

However, based on an evaluation of the environmental setting and features associated with known sites by the North Central Information Center of the California Historical Resource Information Center, there is a moderate potential for unrecorded Native American resources in the proposed project area based solely on the location of the project. There always exists the potential for buried prehistoric archaeological sites. As such, there remains a possibility that unrecorded cultural resources are present beneath the ground surface and that such resources could be exposed during project construction. Both CEQA and Section 106 of the National Historic Preservation Act of 1966 (NHPA) require the Lead Agency to address any unanticipated cultural resource discoveries during project construction.

In addition, the record search concluded that there is a moderate potential for unrecorded historic-period archaeological resources in the proposed project area. Therefore, a mitigation measure is required to

address the potential for historical resources, archeological resources, or human remains found during project construction.

Implementation of Mitigation Measure CR- 1 would ensure that there is a less than significant adverse impact to cultural and historical resources.

Mitigation Measure(s):

Mitigation Measure CR-1: *Prior to grading permit issuance, the Applicant/developer of the project site shall submit plans to the Brentwood Planning Department for review and approval which indicate (via notation on the improvement plans) that if historic and/or cultural resources are encountered during site grading or other site work, including during operation of the proposed project, all such work shall be halted immediately within the area of discovery and the Applicant/developer shall immediately notify the City of the discovery. In such case, the Applicant/developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.*

Mitigation Measure CR-2: *Pursuant to State Health and Safety Code §7050.5 (c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-interment of the human remains and any associated artifacts. Additional work is not to take place within the immediate vicinity of the find until the identified appropriate actions have been implemented.*

VI. ENERGY

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Result in potentially significant environmental impacts 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	

Responses to Checklist Questions

Response a), b): Less than Significant. The proposed project would develop a carwash with self-service vacuum stations. Energy would be used during both the construction phase and, upon project buildout, during the operational phase of the proposed project. Energy usage during the construction phase would originate from mobile and stationary construction equipment, and from construction worker vehicle exhaust. Construction-related energy usage can vary substantially depending on the level of activity, length of the construction period, specific construction operations, and types of equipment. Operational energy usage would be generated by electricity use for the onsite facilities, including the carwash, vacuum stations, night lighting at the project site, and visitor vehicles.

Energy usage during both the construction and operational phases of the proposed project would be typical for a project of this kind, and therefore would not represent a wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, the proposed project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Therefore, impacts to this topic would be **less than significant**.

VII. GEOLOGY AND SOILS

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
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.		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		
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	

Responses to Checklist Questions

Responses a.i), a.ii): Less than Significant With Mitigation. As shown in Figure 10 Earthquake Fault Map, the site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and

known surface expression of active faults does not exist within the site. However, the site is located within a seismically active region. According to the USGS Interactive Fault Map, two of the nearest active faults include the Greenville Fault and the Antioch Fault, located approximately 12 miles southwest and 4.0 miles west, respectively. The Greenville Fault is considered to be capable of a moment magnitude earthquake of 6.8 to 7.0.

Geologic Hazards:

Potential seismic hazards resulting from a nearby moderate to major earthquake could generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching.

Ground Rupture:

Because the property does not have known active faults crossing the site, and the site is not located within an Earthquake Fault Special Study Zone, ground rupture is unlikely at the subject property.

Ground Shaking:

An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the site, similar to that which has occurred in the past. The project would be built using standard engineering and seismic safety design techniques. Building design at the project site would be completed in conformance with the recommendations of the geotechnical investigation required by Mitigation Measure GEO-2 below, as reviewed and approved by the City of Brentwood Building Division. The structures would meet the requirements of applicable Building and Fire Codes, including the most current version of the California Building Code (CBC), as adopted or updated by the City of Brentwood. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures would be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Ground Lurching:

Ground lurching is a result of the rolling motion imparted to the ground surface during energy released by an earthquake. Such rolling motion could cause ground cracks to form in weaker soils. The potential for the formation of these cracks is considered greater at contacts between deep alluvium and bedrock. Such an occurrence is possible at the site as in other locations in the Bay Area, but based on the site location, the offset is expected to be very minor.

Conclusion

The project site is not within an Aquist-Priolo Special Studies Zone; however, the Brentwood area is located in a seismically active zone. Active faults are located within an approximate 50- mile radius of the

project site. The nearest State of California zoned, active faults are the Greenville and Antioch faults, located approximately 12 miles southwest and 4.0 miles west, respectively. Development of the proposed project in this seismically active zone could expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault and/or strong seismic ground shaking. Therefore, a potentially significant impact could result. The City of Brentwood General Plan Action SA 1a requires the submission of geologic and soils reports for all new developments. The geologic risk areas that are determined from these studies shall have standards established and recommendations shall be incorporated into development. Implementation of the following mitigation measures would ensure the potential impacts are **less than significant.**

Mitigation Measure(s):

Mitigation Measure GEO-1*: All project buildings shall be designed in conformance with the current edition of the California Building Code (CBC).*

Mitigation Measure GEO-2: *Prior to grading permit issuance, the applicant shall submit a final geotechnical evaluation of the project site that analyzes soil stability including soil expansion, and the potential for lateral spreading, subsidence, liquefaction or collapse. The report shall identify any onsite soil and seismic hazards and provide design recommendations for onsite soil and seismic conditions. The geotechnical evaluation shall be reviewed and approved by the City Engineer, Chief Building Official, and a qualified Geotechnical Engineer to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design.*

Mitigation Measure GEO-3*: All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the City Engineer, Chief Building Official, and a qualified Geotechnical Engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design.*

Responses a.iii), c): Less than Significant with Mitigation. Soil liquefaction results from loss of strength during cyclic loading, such as that which is imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, and fine-grained sands. The soil liquefaction potential of the soils on the project site is shown in Figure 11. As shown in the figure, the risk of liquefaction is considered Medium to High at the project site.

Additionally, according to the City of Brentwood General Plan Draft EIR Figure 3.6-2, the risk of liquefaction in the project vicinity is considered High. As discussed previously, the City of Brentwood General Plan Action SA 1a requires the submission of geologic and soils reports for all new developments. The geologic risk areas that are determined from these studies shall have standards established and recommendations shall be incorporated into development. Considering the high risk of liquefaction at the proposed project site, potentially significant impacts relating to soil stability are present. As stated previously, Mitigation Measure GEO-2 requires the preparation of a geotechnical evaluation of the project

site. Implementation of Mitigation Measure GEO-3 would reduce impacts to **less than significant** levels related to soil stability, and the potential result in, lateral spreading, subsidence, liquefaction or collapse.

Response a.iv): Less than Significant. The proposed project site is not susceptible to landslides because the area is essentially flat. Additionally, according to the California Geological Survey (CGS) Landslide Mapping System this area of Brentwood has no existing landslide reports or landslide maps that would indicate a potential landslide hazard zone. This is a **less than significant** impact.

Response b): Less than Significant with Mitigation. The project site currently consists vacant land. According to the project site plans prepared for the proposed project, development of the proposed project would result in the creation of 57,560 square feet of new impervious surface areas throughout the project site. The development of the project site would also cause ground disturbance of top soil. The ground disturbance would be limited to the areas proposed for grading, including the proposed driveway areas, building pads, and drainage, sewer, and water infrastructure improvements. After grading, and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities. Without implementation of appropriate Best Management Practices (BMPs) related to prevention of soil erosion during construction, development of the project would result in a potentially significant impact with respect to soil erosion.

Implementation of the following mitigation measures would ensure the impact is **less than** significant.

Mitigation Measure(s):

Mitigation Measure GEO-4: *Prior to grading permit issuance, the applicant shall submit a final grading plan to the City Engineer for review and approval. If the grading plan differs significantly from the proposed grading illustrated on the approved project plans, plans that are consistent with the new revised grading plan shall be provided for review and approval by the City Engineer.*

Mitigation Measure GEO-5: *Any applicant for a grading permit shall submit an erosion control plan to the City Engineer for review and approval. The plan shall identify protective measures to be taken during construction, supplemental measures to be taken during the rainy season, the sequenced timing of grading and construction, and subsequent revegetation and landscaping work to ensure water quality in creeks and tributaries in the General Plan Area is not degraded from its present level. All protective measures shall be shown on the grading plans and specify the entity responsible for completing and/or monitoring the measure and include the circumstances and/or timing for implementation.*

Mitigation Measure GEO-6*: Grading, soil disturbance, or compaction shall not occur during periods of rain or on ground that contains freestanding water. Soil that has been soaked and wetted by rain or any other cause shall not be compacted until completely drained and until the moisture content is within the limit approved by a Soils Engineer. Approval by a Soils Engineer shall be obtained prior to the continuance of grading operations. Confirmation of this approval shall be provided to the Engineering Division prior to commencement of grading.*

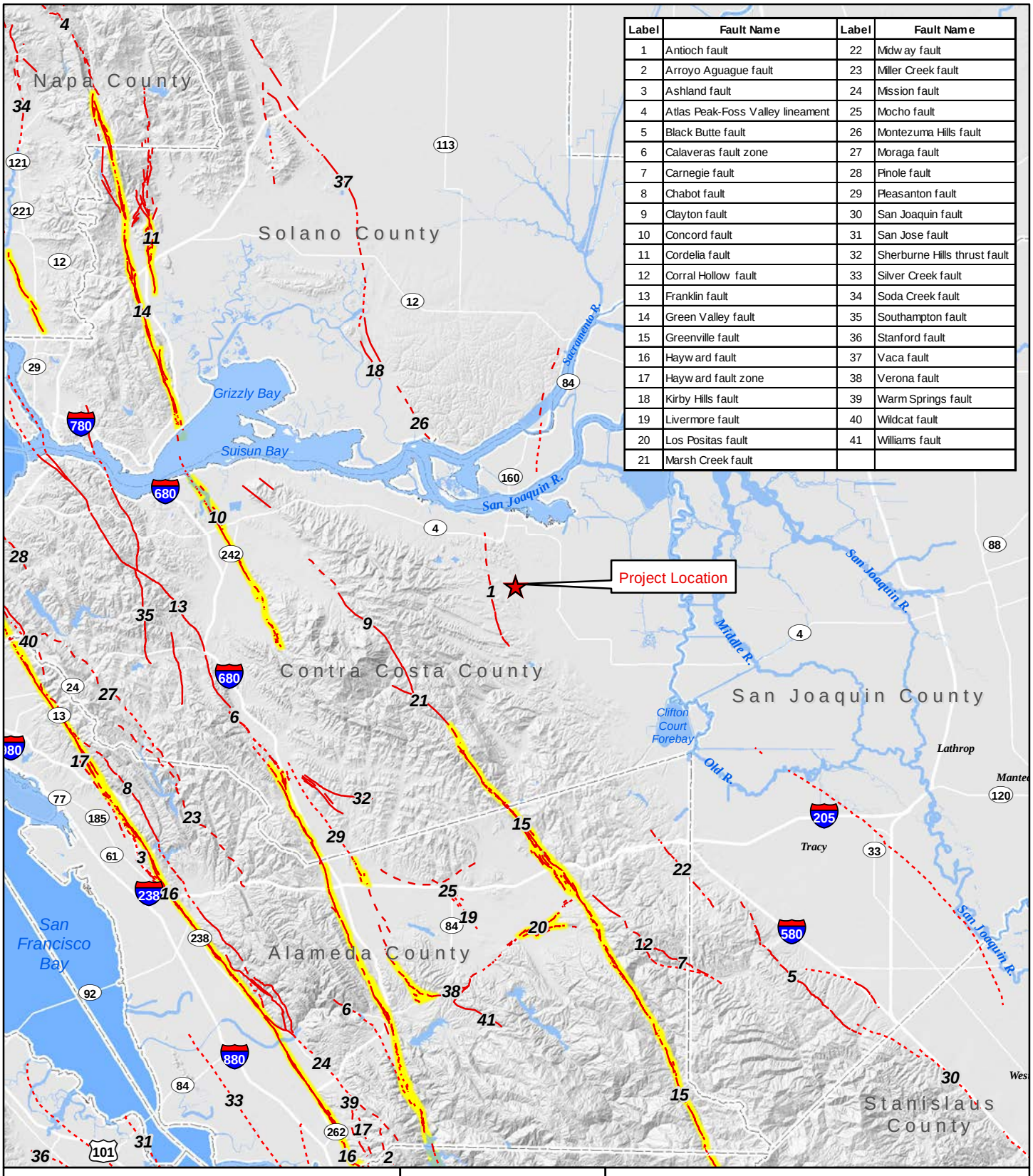
Response d): Less than Significant with Mitigation. Expansive soils shrink/swell when subjected to moisture fluctuations, which could cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Building damage due to moisture changes in expansive soils could be reduced by appropriate grading practices and using posttensioned slab foundations or similarly stiffened foundation systems which are designed to resist the deflections associated with soil expansion. As shown in Figure 12, the majority of project site has a very high (9-30) Linear Extensibility percentage (which directly relates to the soils shrink-swell potential). Therefore, because of the potential presence of expansive soils on the site, a **potentially significant** impact could occur. However, as mentioned previously, Mitigation Measure GEO-2 requires a final geotechnical evaluation of the project site that analyzes soil stability including soil expansion. Implementation of Mitigation Measure GEO-3 ensures project soils are analyzed and design recommendations are provided by a qualified geotechnical engineer to ensure the safety and welfare of future project residence. Therefore, this impact is considered **less than significant**.

Mitigation Measure(s)

Implement Mitigation Measures GEO-2 and GEO-3.

Response e): No Impact. The project has been designed to connect to the existing City sewer system and no additional septic system will be added. Therefore, **no impact** would occur related to soils incapable of adequately supporting the use of septic tanks.

Response f): Less than Significant. There are no known paleontological resources or unique geologic features located on the project site. Therefore, impacts to this topic would be **less than significant.**



Label	Fault Name	Label	Fault Name
1	Antioch fault	22	Midway fault
2	Arroyo Aguague fault	23	Miller Creek fault
3	Ashland fault	24	Mission fault
4	Atlas Peak-Foss Valley lineament	25	Mocho fault
5	Black Butte fault	26	Montezuma Hills fault
6	Calaveras fault zone	27	Moraga fault
7	Carnegie fault	28	Pinole fault
8	Chabot fault	29	Pleasanton fault
9	Clayton fault	30	San Joaquin fault
10	Concord fault	31	San Jose fault
11	Cordelia fault	32	Sherburne Hills thrust fault
12	Corral Hollow fault	33	Silver Creek fault
13	Franklin fault	34	Soda Creek fault
14	Green Valley fault	35	Southampton fault
15	Greenville fault	36	Stanford fault
16	Hayward fault	37	Vaca fault
17	Hayward fault zone	38	Verona fault
18	Kirby Hills fault	39	Warm Springs fault
19	Livermore fault	40	Wildcat fault
20	Los Positas fault	41	Williams fault
21	Marsh Creek fault		

Legend

Quaternary Faults

- Well-constrained
- Moderately-constrained
- Inferred
- Alquist-Priolo Fault Zones

Data sources: US Geologic Survey; CalAtlas; Open Streets. Map date: May 9, 2019.

N

0 2½ 5

Miles

RAINFLOW CAR WASH

Figure 10. Earthquake Fault Map

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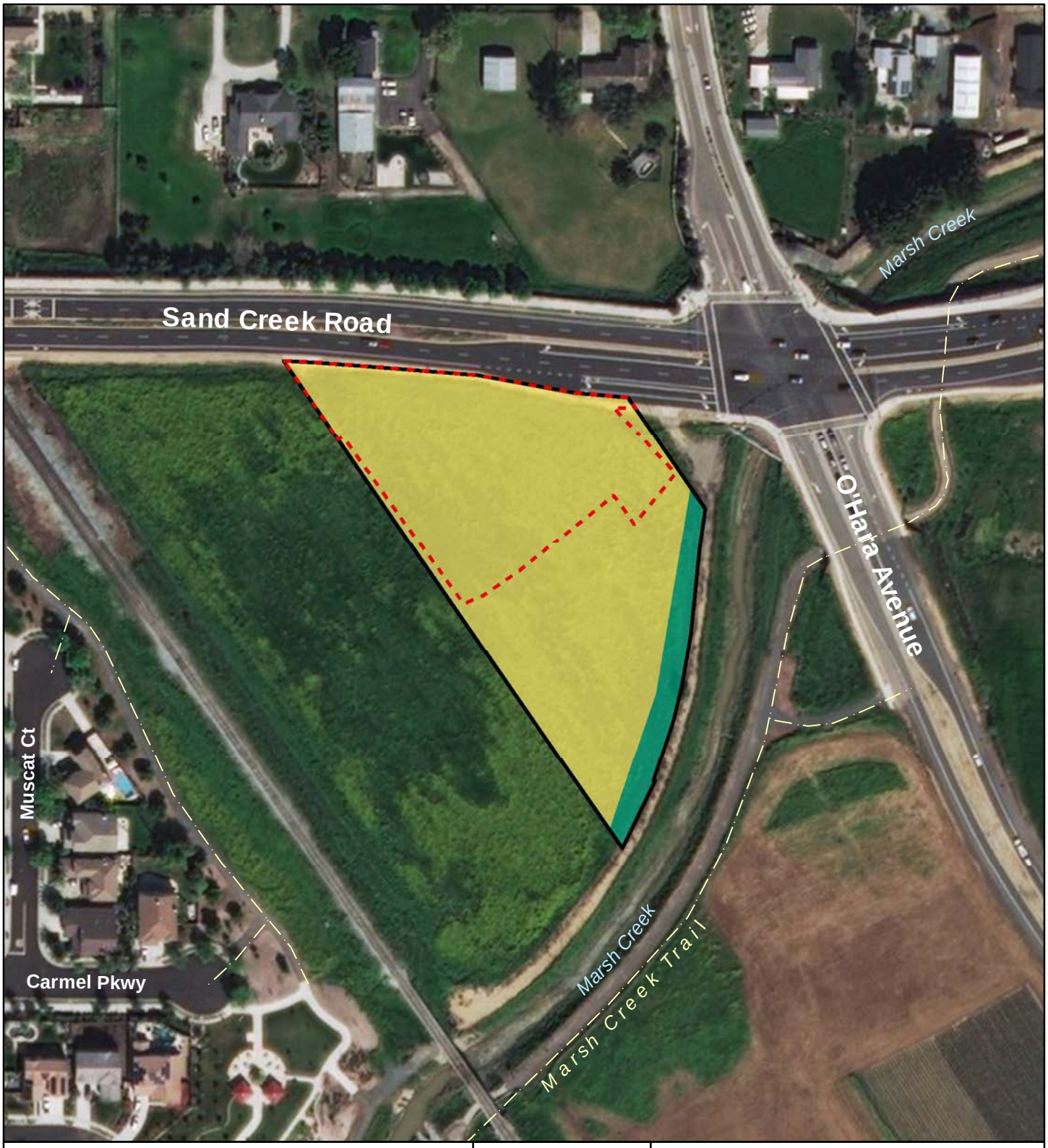

Legend

Limit of Work

Project Parcel

NRCS Soil Description

CaA - Capay clay, 0-3% slopes (3.07 ac)

Sm - Sorrento silty clay loam (0.27 ac)

Source: Contra Costa County GIS; Open Street Map; ArcGIS Online World Imagery Map Service; NRCS Web Soil Survey, CA013 Contra Costa County, 9/14/2008 . Map date: May 9, 2019.

N

0 75 150

Feet

RAINFLOW CAR WASH

Figure 11. Project Site Soils

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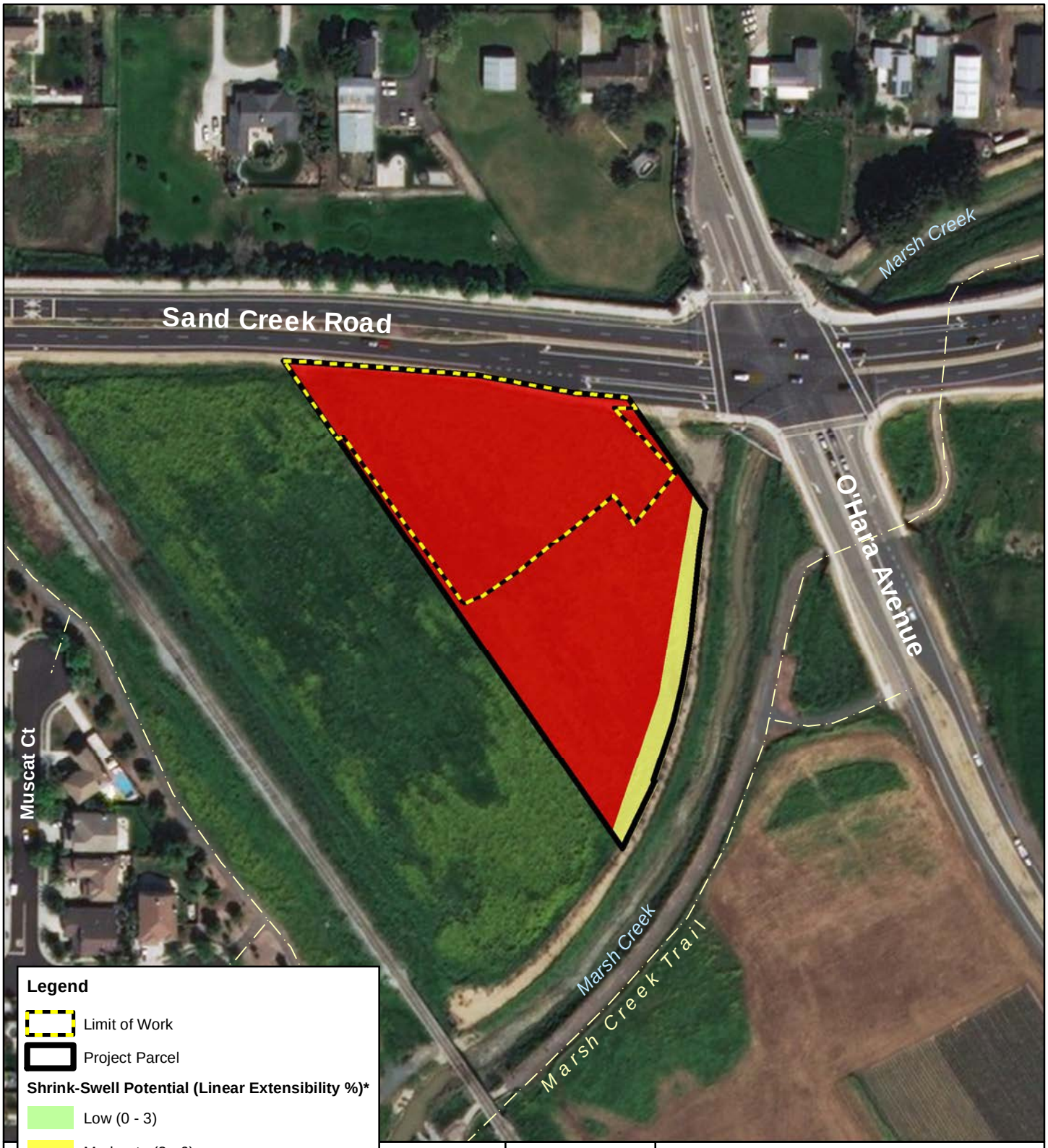

Shrink-Swell Potential is determined by linear extensibility. Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Soils are considered to have low potential when the linear extensibility is less than 3%, moderate if 3-6%, high if 6-9%, and very high if greater than 9%.

Source: Contra Costa County GIS; Open Street Map; ArcGIS Online World Imagery Map Service; NRCS Web Soil Survey, CA013 Contra Costa County, 9/14/2008 . Map date: May 9, 2019.

RAINFLOW CAR WASH

Figure 12. Expansive Soils Map

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VIII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
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 gasses?			X	

Background

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring GHGs include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct GHGs, including CO_2, CH_4, and N_2O, occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three GHGs have increased globally by 40, 150, and 20 percent, respectively (IPCC, 2013).

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial sector (California Energy Commission, 2016).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 441 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2014 (California Energy Commission, 2016). By 2020, estimated business-as-usual greenhouse gas emissions in California are projected to be 509 $MMTCO_2e$ per year (California Air Resources Board, 2015). Given

that the U.S. EPA estimates that worldwide emissions from human activities totaled nearly 46 billion gross metric tons of carbon dioxide equivalents (BMTCO$_2$e) in 2010, California's incremental contribution to global GHGs is approximately 2% (U.S. EPA, 2014).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2014, accounting for 37% of total GHG emissions in the state. This category was followed by the industrial sector (24%), the electricity generation sector (including both in-state and out of-state sources) (20%) and the agriculture sector (8%) (California Energy Commission, 2016).

The analysis of GHGs and climate change presented in this section is presented in terms of the proposed project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

Significance Thresholds

Governor's Office of Planning and Research's (OPR's) Guidance does not include a quantitative threshold of significance to use for assessing a project's GHG emissions under CEQA. Moreover, the California Air Resources Board (CARB) has not established such a threshold or recommended a method for setting a threshold for project-level analysis. In the absence of a consistent statewide threshold, a threshold of significance for analyzing the project's GHG emissions was developed. The issue of setting a GHG threshold is complex and dynamic, especially in light of the California Supreme Court decision in *Center for Biological Diversity v. California Department of Fish and Wildlife* (referred to as the Newhall Ranch

decision hereafter). The California Supreme Court ruling also highlighted the need for the threshold to be tailored to the specific project type, its location, and the surrounding setting. Therefore, the threshold used to analyze the project is specific to the analysis herein and the City retains the ability to develop and/or use different thresholds of significance for other projects in its capacity as lead agency and recognizing the need for the individual threshold to be tailored and specific to individual projects. The City of Brentwood has determined that the BAAQMD thresholds of significance are the best available option for evaluation of GHG impacts for this project and, thus, are used in this analysis. The BAAQMD threshold of significance for project-level operational GHG emissions is 1,100 $MTCO_2e$/yr or 4.6 $MTCO_2e$ per service population (employees + residents), per year ($MTCO_2e$/SP/yr). Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. As such, BAAQMD has not established a threshold of significance for construction-related GHG emissions and the District does not require their quantification. Nevertheless, this analysis has amortized construction emissions over the anticipated lifetime of the project.

Responses to Checklist Questions

Responses a), b): Less than Significant. The proposed project's short-term construction-related and long-term operational GHG emissions for buildout of the proposed project, were estimated using CalEEModTM (v.2016.3.2). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO2 equivalent units of measure (i.e., MTCO2e), based on the global warming potential of the individual pollutants. Short-Term Construction GHG Emissions Estimated increases in GHG emissions associated with construction of the proposed project (all phases collectively) are summarized in Table GHG-1 below.

TABLE GHG-1: UNMITIGATED PROJECT CONSTRUCTION GREENHOUSE GAS EMISSIONS (MT/YEAR)

	BIO-CO2	*NBIO-CO2*	*TOTAL CO2*	*CH4*	*N2O*	*CO2E*
2020	0.0000	233.6611	233.6611	0.0385	0.0000	234.6245
MAXIMUM	0.0000	233.6611	233.6611	0.0385	0.0000	234.6245

Source: CALEEMOD Version 2016.3.1.

As shown above in Table GHG-1, construction activities would result in maximum annual emissions of 234.6245 $MTCO_2e$/year and would not exceed the recommended mass emission threshold for project-level operational GHG emissions of 1,100 $MTCO_2e$/year. These construction GHG emissions are a one-time release and are comparatively much lower than overall emissions associated with operational phases of a project. Construction GHG emissions from the proposed project do not impede local GHG reduction efforts, or violate GHG reduction goals set by AB 32, as required by the Public Resources Code,

Section 21082.2. Therefore, cumulatively these construction emissions would not generate a significant contribution to global climate change.

Long-Term Operational GHG Emissions

The long-term operational GHG emissions estimate for buildout of the proposed project incorporates the potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation. Estimated GHG emissions associated with buildout of the proposed project are summarized in Table GHG-2.

As shown in in the Table, operation of the project would result in annual emissions of 82.3798MT CO_2e/year, which does exceed the recommended BAAQMD mass emission GHG threshold of 1,100 $MTCO_2e$/year.

TABLE GHG-2: UNMITIGATED PROJECT OPERATIONAL GREENHOUSE GAS EMISSIONS (MT/YEAR)

	BIO-CO_2	*NBIO-CO_2*	*TOTAL CO_2*	*CH_4*	*N_2O*	*CO_2E*
AREA	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.1000e-003
ENERGY	0.0000	24.0341	24.0341	9.1000e-004	2.9000e-004	24.1422
MOBILE	0.0000	47.1198	47.1198	2.3000 e-003	0.0000	47.1774
WASTE	3.8000	0.0000	3.8000	0.2246	0.0000	9.4143
WATER	0.1463	1.0134	1.1596	0.0151	3.6000 e-004	1.6448
TOTAL	3.9462	72.1682	76.1145	0.2429	6.5000 e-004	82.3798

Source: CALEEMOD Version 2016.3.1.

Combining the construction GHG emissions with the operational GHG emissions, construction and operation of the project would result in emissions 317.0043MT CO_2e/year, which does not exceed the recommended BAAQMD mass emission GHG threshold of 1,100 $MTCO_2e$/year. Because project-related construction emissions of GHGs would not be more than the BAAQMD mass emission threshold of 1,100 MT CO_2e/year, the project will not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment.

IX. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				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 or excessive noise for people residing or working in the project area?				X
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

Responses to checklist questions

Responses a), b): Less than Significant with Mitigation. The proposed project would place a car wash in an area of the City that currently contains residential uses and vacant land. These two significance thresholds focus on the exposure of people to hazards either existing or created by the project; therefore, they are discussed together. Construction of the project would involve the routine transport, storage, usage, and disposal of hazardous materials.

Unknown and Undocumented Contamination

The project site has been previously used for agricultural production. Historical aerial photographs show agricultural uses on the project site in 2002. Due to the potential for previous site contamination, there would be a possibility of encountering unknown and undocumented hazardous materials in the soils. The potential effects of excavating contaminated soils, if encountered, would be minimized in part by legally required safety and hazardous waste handling, storage, and transportation precautions. Given the site's history, the potential to encounter unknown contamination would be potentially significant. Therefore, if unknown contaminated soils were encountered, the application of regulatory cleanup standards and implementation of Mitigation Measure HAZ-1 would be required. These standards and mitigation measures would protect human health and the environment during site excavation/remediation, thus minimizing excavation/remediation impacts to less than significant.

Work Near Marsh Creek

Marsh Creek is located adjacent to the southeastern edge of the project site. Project construction would entail grading and construction of the proposed buildings. To prevent excessive fugitive dust and decrease amounts of sedimentation entering Marsh Creek, the project would be required to prepare a SWPPP (as required by Mitigation Measure HYD-1) and comply with state and local regulations, which would implement BMPs that would prevent sediment from entering Marsh Creek. Therefore, this impact would less than significant.

Project Construction

Project construction would not require any demolition as there are no existing structures. Therefore, there is no possibility that potentially hazardous building materials including, but not limited to, asbestos-containing materials, lead-based paint, polychlorinated biphenyl (PCBs), or mercury may be encountered during demolition. However, during project construction, small quantities of hazardous materials such as construction equipment fuels, lubricants, and hydraulic fluid would be used for construction vehicles. The storage and handling of these materials would be managed in accordance with applicable laws and regulations, which include developing project-specific hazardous materials management and spill control plans, storing incompatible hazardous materials separately, using secondary containment for hazardous materials storage, requiring the contractor to use trained personnel for hazardous materials handling, keeping spill clean-up kits available on-site, and designating appropriate sites within the construction area as refueling stations for construction vehicles. Routine transport, storage, use, or disposal of hazardous materials during construction would not create substantial hazards to the public or the environment, and impacts would be less than significant.

Project Operation

Project operation would not involve the routine transport, use, or disposal of hazardous materials. Therefore, long-term impacts associated with handling, storing, and dispensing of hazardous materials would be less than significant.

Conclusion

Through compliance with existing federal, state, and local regulations, operation of the project would not result in creation of a significant hazard. However, due to the agricultural history of the project site,

construction of the project may involve the disturbance of contaminated soils. Therefore, with implementation of the following mitigation measures, the proposed project would have a **less than significant** impact relative to this issue.

Mitigation Measure(s):
Implement Mitigation Measure HYD-1 (SWPPP).

Mitigation Measure HAZ-1: *Prior to initiation of any ground disturbance activities, evenly distributed soil samples shall be conducted throughout the proposed project property for analysis of pesticides and heavy metals. The samples shall be submitted for laboratory analysis of pesticides and heavy metals per DTSC and EPA protocols. The results of the soil sampling shall be submitted for the review of the Community Development Director. If elevated levels of pesticides or heavy metals are detected during the laboratory analysis of the soils, a soil cleanup and remediation plan shall be prepared and implemented prior to the commencement of grading activities.*

Response c): No Impact. The project site is not located within ¼ mile of an existing school. March Creek Elementary School is located approximately 0.51 miles northwest of the project site and Mary Casey Black Elementary School is approximately 0.9 miles east of the site. Therefore, **no impact** would occur as a result of the proposed project.

Response d): Less than Significant. According the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, or in the near vicinity of the project site. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. The nearest sites listed on the DTSC EnviroStor database include:

Skipolini Property (site # 60002296). The site is located at 7281 Lone Tree Way in Brentwood. The site is approximately 1.72 acres in area and is identified by APN 018-080-022. The site currently consists of undeveloped fallow land. Review of historical records indicates that the site had been occupied by residential structures between 1949 and 2003. Review of historical records indicates that structures were demolished in 2003 and the site has been undeveloped since. Historical aerial photographs indicate a portion of the parcel consisted of orchards. The site is a voluntary cleanup site and is active as of May 22, 2019.

Proposed School Site (site # 60000916). The site is located at 2340 Smith Road in Brentwood. The site is approximately 18.93 acres in area and is identified by the following Assessor Parcel Numbers (APNs): 018-100-033-2, 018-100-040-7, 018-100-041-5, 018-100-040, 018-100-041, 018-100-043. The site is a proposed school site that was historically used for agriculture, and is now being treated for contaminants in the soil. The site is a voluntary cleanup site and is active as of May 22, 2019.

There are no other listed cleanup sites located within 1000 feet of the project site. As a result, the proposed project would have **no impact** and no mitigation is required.

Responses e): No Impact. The project site is not within an airport land use plan or within two miles of an airport. The nearest airport, Funny Farm Airport, is a private airfield located approximately 3.2 miles east of the project site. Therefore, implementation of the proposed project would result in **no impact** to this environmental topic.

Response f): Less than Significant. Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. The proposed project would also not interfere with any emergency response plan or emergency evaluation plan. The entrance to the project site from Sand Creek Road would be sufficiently wide to allow for emergency access in the event of emergency. This is a **less than significant** impact.

Response g): No Impact. The risk of wildland fire/wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point. The site is not located within an area where wildland fires occur. The site is predominately surrounded by existing development, which has a low potential for wildland fires. Therefore, **no impact** would occur

X. HYDROLOGY AND WATER QUALITY

	POTENTIALLY SIGNIFICANT IMPACT	*LESS THAN SIGNIFICANT WITH MITIGATION Incorporated*	*LESS THAN SIGNIFICANT IMPACT*	*NO IMPACT*
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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 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;			X	
iii) create or contribute runoff water which would exceed the capacity or existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv) 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	

Responses to Checklist Questions

Response a): Less than Significant with Mitigation.

Construction Water Quality

During the early stages of construction activities, topsoil would be exposed due to grading and partial leveling of the site. After grading and leveling and prior to overlaying the ground surface with impervious

surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff.

The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. Performance Standard NDCC-13 of the City's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires a SWPPP to be prepared for the site. A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project, including post-construction impacts. The City of Brentwood requires all development projects to use BMPs to treat runoff. In summary, disturbance of the onsite soils during construction activities could result in a potentially significant impact to water quality should adequate BMPs not be incorporated during construction in accordance with SWRCB regulations. Implementation of mitigation measure HYD-1 would reduce the above impact to a **less than significant** level.

Operational Water Quality

Water quality during operation of the project is a pertinent topic as the proposed project is a carwash facility that will generate a significant amount of waste water.

Waste Water Generation

Waste water generation can be measured by looking at the amount of water use per car. The total gallons of water used per vehicle for the project is expected to be 70.2 gallons. This estimate includes the use of reclaim, RO, RO reject and freshwater. Included in this 70.2 gallon estimate is 22.2 water gallons per vehicle (freshwater, RO & RO Reject) for chemical application and final rinse and 48 gallons for undercarriage and wash application (entirely reclaim water). Each wash will utilize 74.77% reclaimed water. In addition, 6 gpv of water will be lost to evaporation and carryout. Of the 70.2 gallons used for each car, only 16.2 gallons of reclaim water will go to the sewer. With an estimate of 500 cars per day, this will result in 8,100 gallons of reclaim water going to the sewer per day, or 8,100 gallons of wastewater. The estimate for the amount of freshwater utilized per day is approximately 11,100 gallons.

The 2014 Brentwood General Plan Update EIR uses a wastewater generation factor of 1,785 gallons per day per acre of commercial, office, business park, and industrial development. Utilizing this rate, the proposed car wash would generate approximately 5,890.5 gallons per day. However, the manufacturer of the onsite water reclaim system to be used in project operations states that each vehicle wash will generate 16.2 gallons of wastewater that would be sent to the municipal sewer system. Using a conservative assumption of 500 vehicle washes per day, this equates to 8,100 gpd for the proposed project. While the actual wastewater generation rates of the project would exceed the assumptions used in the General Plan EIR, the current capacity of the WWTP would be sufficient to handle the wastewater flow from the proposed project in addition to existing and projected future demands. In addition, the proposed project is required to pay sewer impact fees which would contribute towards the cost of future upgrades, when needed. As a result, the proposed project would not have adverse impacts to wastewater treatment capacity.

Water Reclaim System

The car wash project will utilize a water capture and reuse system to limit wastewater generation and conserve water usage. Vehicles that enter the car wash will likely contain contaminants ranging from soil, road film, pollen, insects to greases. These debris are a significant source of water contamination. To address contaminated water and total water usage, the project will utilize a water reclamation tanking system.

The PurWater Reclaim System is the water reclaim system that will be utilized for the proposed car wash facility. The PurWater System incorporates underground reclaim tanks and an aboveground PurWater unit. The System will work to decontaminate and conserve water by providing quality water to the wash so that the water can be re-used within the wash and still provide a clean car. This will minimize the amount of fresh water utilized by the car wash and simultaneously minimize the amount of water discharged from the car wash.

The reclaim system is designed to separate settleable solids (typically sand, grit) and free oils from the water going to the wash by allowing the large settleable solids to settle within the underground tanks and then directing the remaining water to the above ground PurWater unit. The PurWater unit can remove down to 5 micron settleable solids using high efficiency cyclones. The remaining solids-laden water from the PurWater unit is then re-introduced into the reclaim water to be retreated or go out with the effluence. The System also addresses free oils, as any free oils within the underground tanks float to the surface and are trapped within the tanks. The reclaimed water is continuously discharged from the system in order to satisfy the water balance for the wash and reduce the amount of fresh water used.

The water reclaim system will not will not affect all forms of water contamination. The system will affect the amount of free oil & grease (FOG), total suspended solids (TSS), the BOD/COD levels, bacterial count, and some dissolved oils and chemicals. The PurWater system has been shown to produce effluent qualities as follows:

- Total Suspended Solids (TSS): 15-1000 ppm
- Free Oil & Grease (FOG): 10-25 ppm
- BOD: 15-50 ppm

The reclaim system has no effect on total dissolved solids (TDS), pH, or temperature. There may also be little to no effect on certain chemicals dissolved in the water, emulsified or dissolved oils, and non-settleable solids.

A long-term maintenance plan is needed to ensure that all proposed stormwater treatment BMPs function properly. Should the proposed water quality treatment facilities not be maintained properly, a potentially significant impact could occur with respect to creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of polluted runoff. Implementation of the following mitigation measures would reduce the impact to a less than significant level.

In summary, operation of the proposed car wash facility may result in a potentially significant impact to water quality should adequate BMPs not be incorporated during operation in accordance with SWRCB regulations. Implementation of the following mitigation measure would reduce the above impact to a **less than significant** level.

Mitigation Measure(s):

Mitigation Measure HYD-1: *Prior to issuance of grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The Developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. The SWPPP shall be submitted to the City Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.*

Mitigation Measure HYD-2: *Prior to the completion of construction the applicant shall prepare and submit, for the City's review, an acceptable Stormwater Control Operation and Maintenance Plan. In addition, prior to the sale or transfer of the site, the applicant shall be responsible for paying for the long-term maintenance of treatment facilities, and executing a Stormwater Management Facilities Operation and Maintenance Agreement and Right of Entry in the form provided by the City of Brentwood. The applicant shall accept the responsibility for maintenance of stormwater management facilities until such responsibility is transferred to another entity.*

The applicant shall submit, with the application of building permits, a draft Stormwater Facilities and Maintenance Plan, including detailed maintenance requirements and a maintenance schedule for the review and approval by the City Engineer. Typical routine maintenance consists of the following:

- *Limit the use of fertilizers and/or pesticides. Mosquito larvicides shall be applied only when absolutely necessary.*
- *Replace and amend plants and soils as necessary to insure the planters are effective and attractive. Plants must remain healthy and trimmed if overgrown. Soils must be maintained to efficiently filter the storm water.*
- *Visually inspect for ponding water to ensure that filtration is occurring.*
- *After all major storm events, inspect bubble-up risers for obstructions and remove if necessary.*
- *Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect wash water containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.*
- *Dry sweep the fueling area routinely.*
- *Continue general landscape maintenance, including pruning and cleanup throughout the year.*

- *Irrigate throughout the dry season. Irrigation shall be provided with sufficient quantity and frequency to allow plants to thrive.*
- *Excavate, clean and or replace filter media (sand, gravel, topsoil) to insure adequate infiltration rate (annually or as needed).*

Mitigation Measure HYD-3: *Design of the onsite drainage facilities shall meet with the approval of both the City Engineer and the Contra Costa County Flood Control and Water Conservation District prior to the issuance of grading permits.*

Mitigation Measure HYD-4: *Contra Costa County Flood Control and Water Conservation District drainage fees for the Drainage Area shall be paid prior to issuance of grading permits to the satisfaction of the City Engineer.*

Mitigation Measure HYD-5: *The Applicant/Developer shall ensure that the project site shall drain into a street, public drain, or approved private drain, in such a manner that un-drained depressions shall not occur. Satisfaction of this measure shall be subject to the approval of the City Engineer.*

Response b): Less than Significant. The City provides domestic, potable water to its residents using both surface water and groundwater resources. The City has seven active groundwater wells, which provided approximately 30 percent of the potable water supplied during 2010. Brentwood is located within the Tracy Subbasin of the San Joaquin Valley Groundwater Basin. While the project would create new impervious surface areas on portions of the 3.253-acre project site, the Tracy Subbasin comprises 345,000 acres (539 square miles); therefore, recharge of the groundwater basin within which the project site is located comes from many sources over a broad geographic area. The new impervious surfaces associated with the project would not cause a substantial depletion of recharge within the Tracy Subbasin. Additionally, the proposed landscape areas would provide an area for on-site groundwater recharge.

Further, except for seasonal variations resulting from recharge and pumping, water levels in most of the wells of the Tracy Sub-basin have remained stable over at least the last 10 years (as of 2015)[5].

It should be noted that the City of Brentwood has adequate water supply to meet the demands of the proposed project as well as future anticipated development allowed under the Brentwood General Plan, as described in greater detail in Section XIX, Utilities and Service Systems. The project itself does not include installation of any wells, but would include eventual connections to existing City of Brentwood water infrastructure. Non-potable water infrastructure is not currently available at the project site. The City is currently in the process of developing and expanding infrastructure for non-potable water. This infrastructure is not yet complete, therefore, the applicant will be required to construct onsite non-potable water infrastructure that stubs out on Sand Creek Road. This non-potable water system will be used to supply carwash water when the City extends the non-potable infrastructure to the area of Sand Creek Road adjacent to the project site. The project will require connection to the City's potable water

[5] Erler & Kalinowski, Inc. City of Tracy 2015 Urban Water Management Plan. July 2016.

distribution system, and potable water will be used for onsite restroom uses, other potable water needs, and will be used for carwash operations until such time as the connection to the non-potable water system becomes available.

The proposed project is consistent with the General Plan land use designation for the site. The potential water demand of future site development was accounted for and considered in the General Plan EIR and the most recent Urban Water Management Plan. As demonstrated in these documents, the City has adequate supply availability to meet future buildout water demands. Therefore, the project would result in a **less than significant** impact with respect to substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Responses c.i), c.ii), c.iii, e): Less than Significant. When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed. Buildings, sidewalks, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff can result in flooding if adequate storm drainage facilities are not provided.

The project would create 57,560 square feet of new impervious surface on a site that previously contained zero square feet of impervious surface area. The project would be served by existing storm drainage infrastructure. Wastewater, water, and storm drainage lines would be connected via existing lines along the Sand Creek Road right-of-way. The project will include an onsite stormwater treatment area and two drainage management areas to manage water runoff. Stormwater treatment and drainage management would include a bioretention area and grading infrastructure strategies (a valley gutter, a concrete level spreader, and a dirt berm) that will ensure adequate drainage. Therefore, project development would not result in a substantial increase in the rate of amount of surface runoff in a manner which would result in flooding nor would it create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage system.

If left uncontrolled, the operation of the proposed project could result in the potential for pollutants to wash down and potentially drain into the nearby Marsh Creek. However, all municipalities within Contra Costa County (and the County itself) are required to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide NPDES permit. Known

as the "C.3 Standards," new development and redevelopment projects that create or replace 10,000 or more square feet of impervious surface area must contain and treat stormwater runoff from the site. The proposed project is a C.3 regulated project and is required to include appropriate site design measures, source controls, and hydraulically-sized stormwater treatment measures. These measures would include a biorention area to treat stormwater runoff before allowing it to proceed into the drainage management area.

The proposed project would not substantially alter the existing drainage pattern of the site or the area. Therefore, the proposed project would result in less than significant impacts related to the alteration of the existing drainage pattern of the site or area, 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. This is a **less than significant** impact and no mitigation is required.

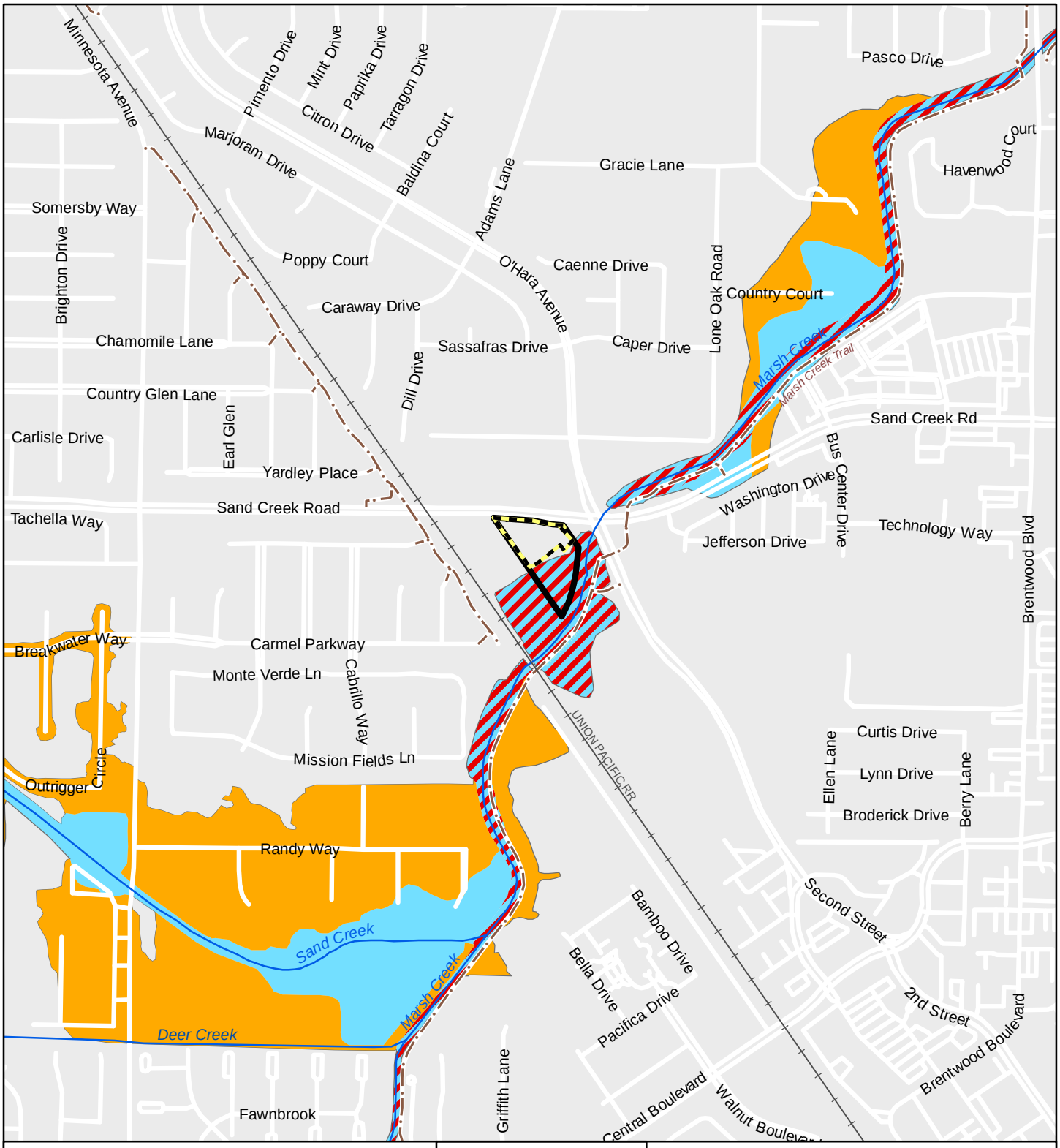
Responses c.iv): Less than Significant. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map(FIRM) shown in Figure 13, the project site is located within a regulatory floodway. According to FEMA, a regulatory flood way is the "channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height"6. Under FEMA requirements, project development on a floodway would require an encroachment review to determine their effect on flood flows and ensure that they do not cause problems. However, the limit of work for this carwash project would avoid all regulatory floodway areas on the project parcel (as evident in Figure 13), therefore a less than significant impact would result from implementation of the proposed project with respect to this environmental topic.

Similarly, as shown in Figure 14, the project site is located within the dam inundation area for the Marsh Creek Dam. However, the project would be limited to areas of the project site that are not within the March Creek Dam inundation area. Therefore, a **less than significant** impact would result from implementation of the proposed project with respect to this environmental topic.

Response d): Less than Significant. Tsunamis are defined as sea waves created by undersea fault displacement. A tsunami poses little danger away from shorelines; however, when a tsunami reaches the shoreline, a high swell of water breaks and washes inland with great force. Historic records of the Bay Area used by one study indicate that nineteen tsunamis were recorded in San Francisco Bay during the period of 1868-1968. Maximum wave height recorded at the Golden Gate tide gauge (where wave heights peak) was 7.4 feet. The available data indicate a standard decrease of original wave height from the Golden Gate to about half original wave height on the shoreline near Richmond, and to nil at the head of the Carquinez Strait. As Brentwood is several miles inland from the Carquinez Strait, the project site is not exposed to flooding risks from tsunamis and adverse impacts would not result. This is a **less than significant** impact.

[6] Federal Emergency Management Agency (FEMA). Floodway Definition. From: fema.gov/floodway.

A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, whose destructive capacity is not as great as that of tsunamis. Seiches are known to have occurred during earthquakes, but none have been recorded in the Bay Area. In addition, the project is not located near a closed body of water. Therefore, risks from seiches and adverse impacts would not result. This is a **less than significant** impact.



Legend

- Limit of Work
- Project Parcel

FEMA Designation

- 100-yr Flood Plain
- Regulatory Floodway
- 500-yr Flood Plain
- unshaded — Area of Minimal Flood Hazard

Source: Contra Costa County GIS; Open Street Map; FEMA Map Service Center.
Map date: May 9, 2019.

N

0 250 500

Feet

RAINFLOW CAR WASH

Figure 13. FEMA Flood Insurance Rate Map

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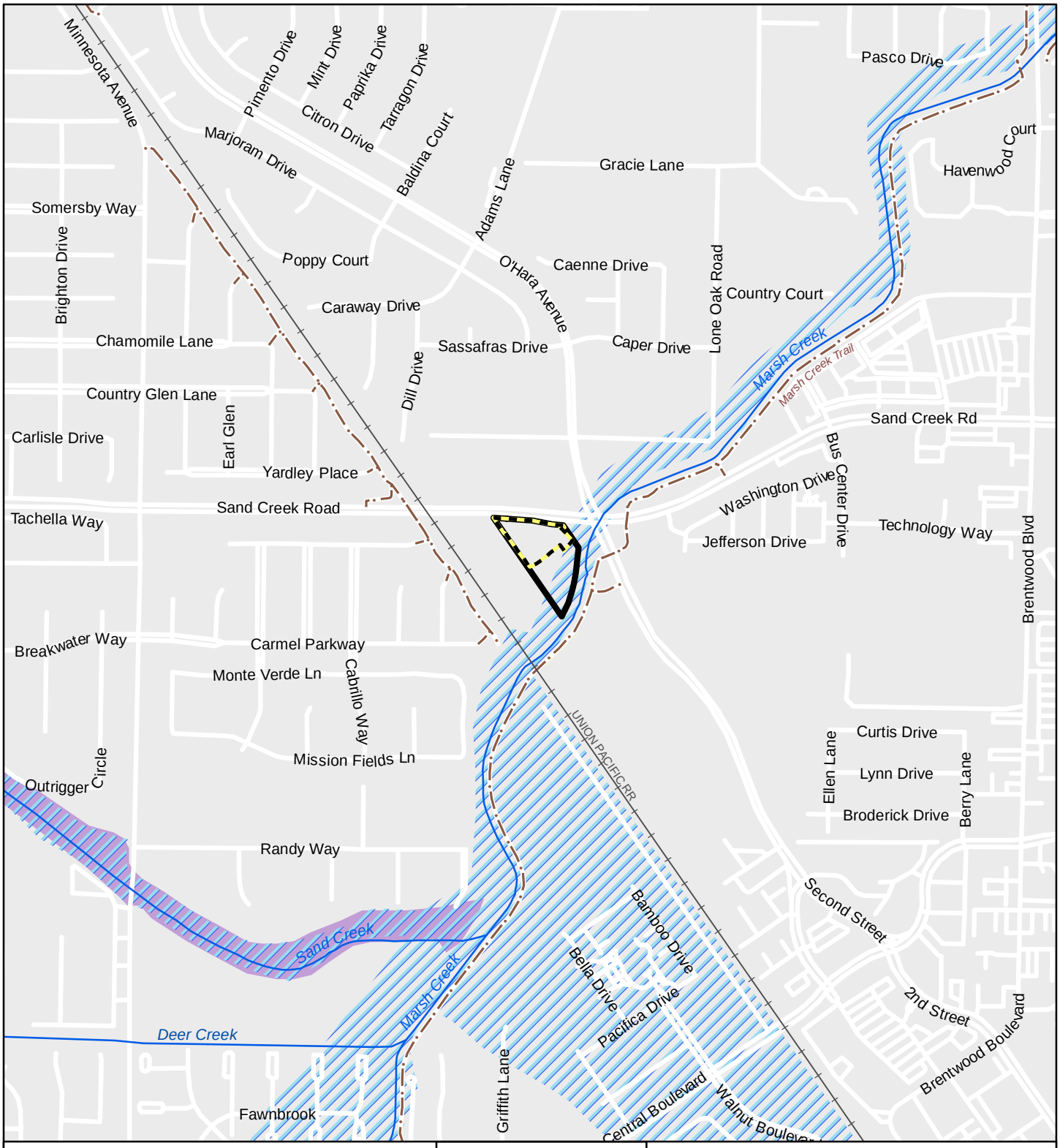

Legend

- Limit of Work
- Project Parcel

Dam Inundation Area

- Marshcreek Dam
- Deer Creek Dam & San Luis Reservoir

N

0 250 500

Feet

Source: Contra Costa County GIS; Open Street Map; Cal OES. Map date: May 9, 2019.

RAINFLOW CAR WASH

Figure 14. Dam Inundation Map

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XI. LAND USE AND PLANNING

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?			X	

Responses to Checklist Questions

Response a): No Impact. The project site is surrounded by undeveloped land and residential land uses. The project site would have a limited impact on surrounding land uses, and would be consistent and compatible with surrounding land uses. The project site does not contain an established community. The proposed project would not physically divide any established community. Therefore, there is **no impact** relative to this topic**.**

Responses b): Less than Significant. The 2014 Brentwood General Plan identifies the project site for GC (General Commercial) land uses. Additionally, the project site is currently zoned C-2 (General Commercial). The General Plan GC designation allows for a variety of mixed commercial uses and service type businesses to serve specific areas of the city and neighborhoods that are related to State Route 4 and some arterial intersections, on parcels generally ranging from one to 20 acres. The GC designation provides for the current and future uses along the Sand Creek Road corridor. The proposed project consists of the development of a car wash with multiple self-service vacuum stations, which are within the General Plan use requirements. A General Plan Amendment would not be required for the project. However, because the proposed carwash is not an explicitly permitted use in the Zoning Code, a Conditional Use Permit would be required.

The proposed project would not conflict with the General Plan, zoning, or any other land use plan, policy, or regulation with jurisdiction over the proposed project adopted for the purposes of avoiding or mitigating an environmental effect. Therefore, there is a **less than significant** impact relative to this topic.

XII. MINERAL RESOURCES

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
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	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

Responses to Checklist Questions

Responses a), b): Less than Significant. The 2014 Brentwood General Plan Update EIR does not identify significant mineral resources within the area. In addition, Figure 3.6-6 in the 2014 Brentwood General Plan Update EIR does not show any existing active oil and gas well on the project site. Therefore, the impact regarding the loss of availability of a known mineral resource that would be of value to the region would be **less than significant**.

XIII. NOISE

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located 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, would the project expose people residing or working in the project area to excessive noise levels?				X

Background

Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz). Noise is a subjective reaction to different types of sounds.

Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness

is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound. Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise. The day/night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10- decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response. Stationary point sources of noise – including stationary mobile sources such as

idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

Existing Ambient Noise Level

The existing ambient noise environment in the project vicinity is primarily defined by traffic on the local roadways adjacent to the project site, including Sand Creek Road and O'Hara Avenue.

To quantify the existing ambient noise environment on the project site, Saxelby Acoustics conducted a continuous noise measurement survey. The noise measurement location is shown on Figure 15**.** A summary of the noise level measurement survey results is provided in Table NOISE-1. The sound level meter was programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted Lmax, represents the highest noise level measured. The average value, denoted Leq, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L50, represents the sound level exceeded 50 percent of the time during the monitoring period. Larson Davis Laboratories (LDL) Model 820 and Model 831 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a B&K Model 4230 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE NOISE-1: SUMMARY OF THE BACKGROUND NOISE MEASUREMENT DATA

SITE	*DATE*	*CNEL/ LDN*	*AVERAGE MEASURED HOURLY NOISE LEVELS, DBA*					
			DAYTIME (7AM-10PM)			*NIGHTTIME (10PM-7AM)*		
			LEQ	*L50*	*LMAX*	*LEQ*	*L50*	*LMAX*
LT-1 (156' from centerline	5/11/19-5/13/19	53.0 dB	50	48	67	46	43	60
ST-1	5/20/19	N/A	71	68	79	N/A	N/A	N/A
ST-2	5/20/19	N/A	71	69	82	N/A	N/A	N/A
ST-3	5/20/19	N/A	51	49	64	N/A	N/A	N/A

SOURCE: SAXELBY ACOUSTICS, LLC. 2019

Regulatory Setting

The City of Brentwood Plan Noise Element establishes noise level criteria for both transportation and non-transportation noise sources. Table Noise-2 provides the noise level performance criteria for residential uses affected by non-transportation noise sources, such as car washes. These criteria are applied at the property lines of noise-sensitive land uses or a designated outdoor activity area at the discretion of the Community Development Director.

TABLE NOISE-2: STATIONARY (NON TRANSPORTATION) NOISE SOURCE STANDARDS (TABLE N-2 OF THE CITY OF BRENTWOOD GENERAL PLAN NOISE ELEMENT)

LAND USE RECEIVING THE NOISE	*HOURLY NOISE LEVEL DESCRIPTOR*	*EXTERIOR NOISE-LEVEL STANDARD (DBA)*	
		DAYTIME (7AM-10PM)	*NIGHTTIME (10PM-7AM)*
RESIDENTIAL	*LEQ*	*55*	*45*
	LMAX	*70*	*65*

Notes:
a) The residential standards apply to all properties that are zoned for residential use. The exterior noise level standard is to be applied at the property line of the receiving land use or at a designated outdoor activity area (at the discretion of the Community Development Director) of the new development. For mixed-use projects, the exterior noise level standard may be waived (at the discretion of the Community Development Director) if the project does not include a designated activity area and mitigation of property line noise is not practical. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). The City can impose standards that are more restrictive than specified above based upon determination of existing low ambient noise levels.
b) Each of the noise levels specified above shall be lowered by 5 dBA for tonal noises characterized by a whine, screech, or hum, noises consisting primarily of speech or music, or recurring impulsive noises. In no case shall mitigation be required to a level that is less than existing ambient noise levels, as determined through measurements conducted during the same operational period as the subject noise source.
c) In situations where the existing noise level exceeds the noise levels indicated in the above table, any new noise source must include mitigation that reduces the noise level of the noise source to the existing level plus 3 dB.
d) Exterior noise exposure level not exceeding 65 dB Ldn is allowed along the State Route 4 corridor, the Union Pacific Railroad corridor, and arterial roadways.

SOURCE: SAXELBY ACOUSTICS, LLC. 2019

The exterior noise level standard for residences which may be located in the project vicinity are 55-70 dBA during the day, and 45 to 65 dBA during the night. These are the thresholds that were used to determine if the proposed project would result in noise levels at existing receptors which would be considered "significant".

It should also be noted that for car wash uses, the average (Leq) noise descriptor is the most applicable standard due to continuous operation of the car wash blowers and vacuum producers. The City's daytime maximum (Lmax) standard of 70 dBA is 15 dBA higher than the average standard of 55 dBA Leq. It is expected that maximum (Lmax) noise levels from the car wash operation would typically be 10 dBA higher than the average (Leq) levels. Therefore, compliance with the City's average standard would also result in compliance with the maximum standard. For that reason and for the sake of simplicity, the Leq is the primary noise descriptor used in this analysis.

Responses to Checklist Questions

Responses a): Less than Significant with Mitigation.

Construction Activities

The new development, maintenance of roadways, installation of public utilities, and infrastructure improvements associated with the project will require construction activities. These activities include the use of heavy equipment and impact tools. Table Noise-3 provides a list of the types of equipment which may be associated with construction activities and the associated noise levels.

Activities involved in project construction would typically generate maximum noise levels ranging from 85 to 90 dBA at a distance of 50 feet. The nearest residential receptors would be located a minimum of 175-feet or more from the majority of project construction activities. At this distance, construction related activities are predicted to generate maximum noise levels ranging between 64 to 84 dB L_{max}. Based upon the daytime maximum noise levels of 63 to 81 dB L_{max}, maximum noise levels due to project construction are predicted to be within the range or less than existing maximum noise levels at the nearest sensitive receptors. Construction could result in periods of elevated ambient noise levels and the potential for annoyance. However, predicted maximum noise levels associated with project construction are predicted to be less than existing average maximum (L_{max}) noise levels, as measured at the nearest sensitive receptors. Table NOISE-3, below, provides a list of the types of equipment which may be associated with construction activities and the associated noise levels.

Table NOISE-3: Construction Equipment Noise

TYPE OF EQUIPMENT	*PREDICTED NOISE LEVELS, LMAX DB*				*DISTANCES TO NOISE CONTOURS (FEET)*	
	NOISE LEVEL AT 50'	*NOISE LEVEL AT 100'*	*NOISE LEVEL AT 200'*	*NOISE LEVEL AT 400'*	*70 DB LMAX CONTOUR*	*65 DB LMAX CONTOUR*
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic tools	85	79	73	67	281	500

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

Road improvements and construction of the new structures would require the use of trucks and minor fill and grading, which would result in short-term noise impacts to surrounding neighbors. These activities would be restricted to construction hours per the General Plan. Therefore, the noise associated with the project would be **less than significant**.

Project Operations

Based upon the footnote in Table Noise-2, project-related noise levels would be required to not exceed 55 dBA Leq at the nearest existing residenitial uses in the project vicinity during daytime (7:00 a.m. to 10:00 p.m.) operations. It should also be noted that for car wash uses, the average (Leq) noise descriptor is the most applicable standard due to continuous operation of the car wash blowers and vacuum producers. The City's daytime maximum (Lmax) standard of 70 dBA is 15 dBA higher than the average standard of 55 dBA Leq. It is expected that maximum (Lmax) noise levels from the car wash operation

would typically be 10 dBA higher than the average (Leq) levels. Therefore, compliance with the City's average standard would also result in compliance with the maximum standard. For that reason and for the sake of simplicity, the Leq is the primary noise descriptor used in this analysis.

Evaluation of Car Wash Noise at Residential Receptors

The air blower dryers are considered to be the dominate noise source for this type of a car wash. Additionally, the vacuum station area and associated central vacuum turbine are substantial noise-generating components. This analysis considers each of these primary noise sources along with vehicle circulation on the project site. The following is a list of assumptions used for the noise modeling. The data used is based upon a combination of manufacturer's provided data and Saxelby Acoustics data from similar car wash operations.

- Car Wash Blowers: 12 blowers at 87 dBA Leq each at 1 meter. Manufacturer's data.
- Vacuum Producer: 69 dBA Leq at 10 feet outside cinder block enclosure with wood joist roof. Manufacturer's data.
- Vacuum Station Area: 70 dBA Leq at edge of vacuum area. Saxelby Acoustics data.
- Parking Lot: Estimated 150 trips in peak hour @ 71 dBA SEL at 50 feet. Saxelby Acoustics data.

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed car wash tunnel, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation.

Figure 16 shows the predicted car wash noise level contours in terms of the average (Leq) noise descriptor. As evident from the noise contours, noise levels decrease as distance from the site increases, and the noise traveling north would be reduced because of the existing sound wall shown in light blue.

The noise analysis indicates that property line noise levels at the existing single-family residential uses would be less than 55 dBA Leq. Specifically, noise levels at the nearest receptors are predicted to range between 45-52 dBA Leq. This would comply with the City's daytime (7:00 a.m. to 10:00 p.m.) exterior noise level standard. Therefore, no additional noise control measures are recommended. These conclusions are based on the following assumptions:

- The car wash dryer used for the project shall not exceed 74 dBA Leq at 40 feet outside the car wash tunnel entrance or exit.
- The vacuum producer(s) shall be enclosed and shall not exceed a noise level of 69 dBA Leq at 10 feet outside of the enclosure(s).
- The car wash should operate only during daytime (7:00 am to 10:00 pm) hours.

In order to ensure that the analysis assumptions match actual operational conditions of the project, Mitigation Measure NOI-1 has been included as a project requirement. Compliance with the

requirements and standards identified in this mitigation measure would ensure compliance with the City's adopted noise standards. Therefore, with implementation of the following mitigation measures, the proposed project would have a **less than significant** impact relative to this issue.

Mitigation Measure(s)

Mitigation Measure NOI-1*: Prior to approval of improvement plans, the improvement plans shall indicate that the car wash operations will comply with the following requirements:*

- *The car wash dryer used for the project shall not exceed 74 dBA Leq at 40 feet outside the car wash tunnel entrance or exit. This shall be confirmed using an additional acoustical analysis which includes noise measurements at the vacuum producers. The additional analysis and measurements shall be submitted to the City Engineer.*
- *The vacuum producer(s) shall be enclosed and shall not exceed a noise level of 69 dBA Leq at 10 feet outside of the enclosure(s). This shall be confirmed using an additional acoustical analysis which includes noise measurements at the vacuum producers. The additional analysis and measurements shall be submitted to the City Engineer.*
- *The car wash shall operate only during daytime (7:00 am to 10:00 pm) hours. Should the operator desire to allow use of the carwash outside of these hours, a request shall be submitted for the review and approval of the Community Development Director. The request shall include additional acoustical analysis, including a proposal for additional mitigation measures, to maintain conformance with all Brentwood noise regulations in effect at the time of the request.*
- *The improvement plans shall be submitted for review and approval by the City Engineer.*

Response b): Less than Significant. Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. The threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and roadway construction occur.

Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 25 to 50 feet or further from the project site. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table NOISE-4 shows the typical vibration levels produced by construction equipment.

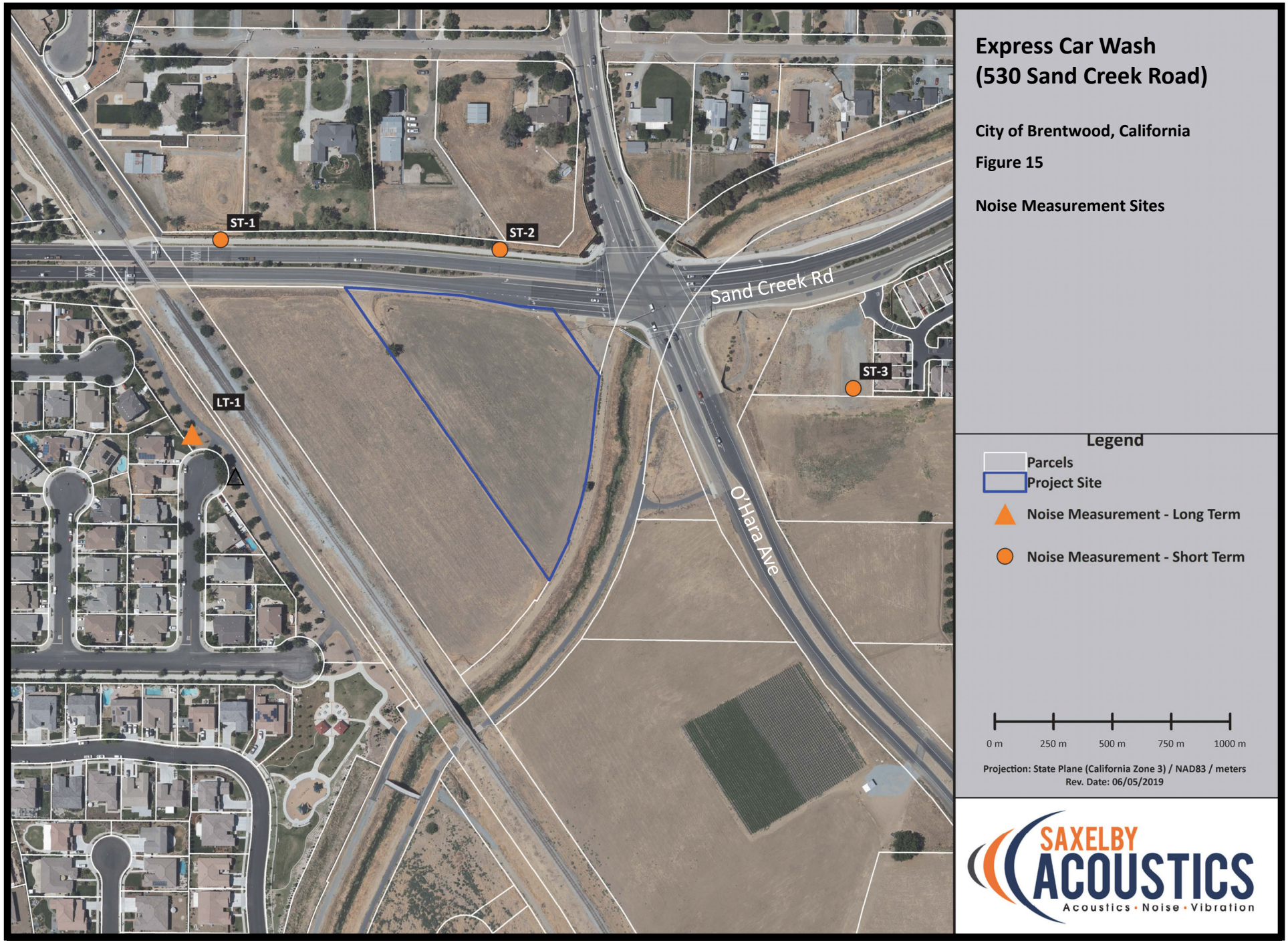
Table NOISE-4: Vibration Levels for Varying Construction Equipment

TYPE OF EQUIPMENT	*PEAK PARTICLE VELOCITY @ 25 FEET (INCHES/SECOND)*	*PEAK PARTICLE VELOCITY @ 100 FEET (INCHES/SECOND)*
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006

As shown in Table NOISE-4, construction vibration levels anticipated for the project are less than 0.21 in/sec p.p.v. threshold of damage to buildings and less than 0.1 in/sec threshold of annoyance criteria at distances of 100 feet. The nearest sensitive receptor is located at a minimum of 175 feet from the project site. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors provided that the vibratory compactor/roller is located a minimum distance of 100 feet from other structures. Therefore, the impact would be considered **less than significant** and no mitigation would be required.

Responses c): No Impact. The project site is not within an airport land use plan, and there are no public or private airports within two miles of the project site. Therefore, there would be **no impact** and no mitigation is required.



Express Car Wash
(530 Sand Creek Road)

City of Brentwood, California

Figure 15

Noise Measurement Sites

Legend

- Parcels
- Project Site
- Noise Measurement - Long Term
- Noise Measurement - Short Term

0 m 250 m 500 m 750 m 1000 m

Projection: State Plane (California Zone 3) / NAD83 / meters
Rev. Date: 06/05/2019

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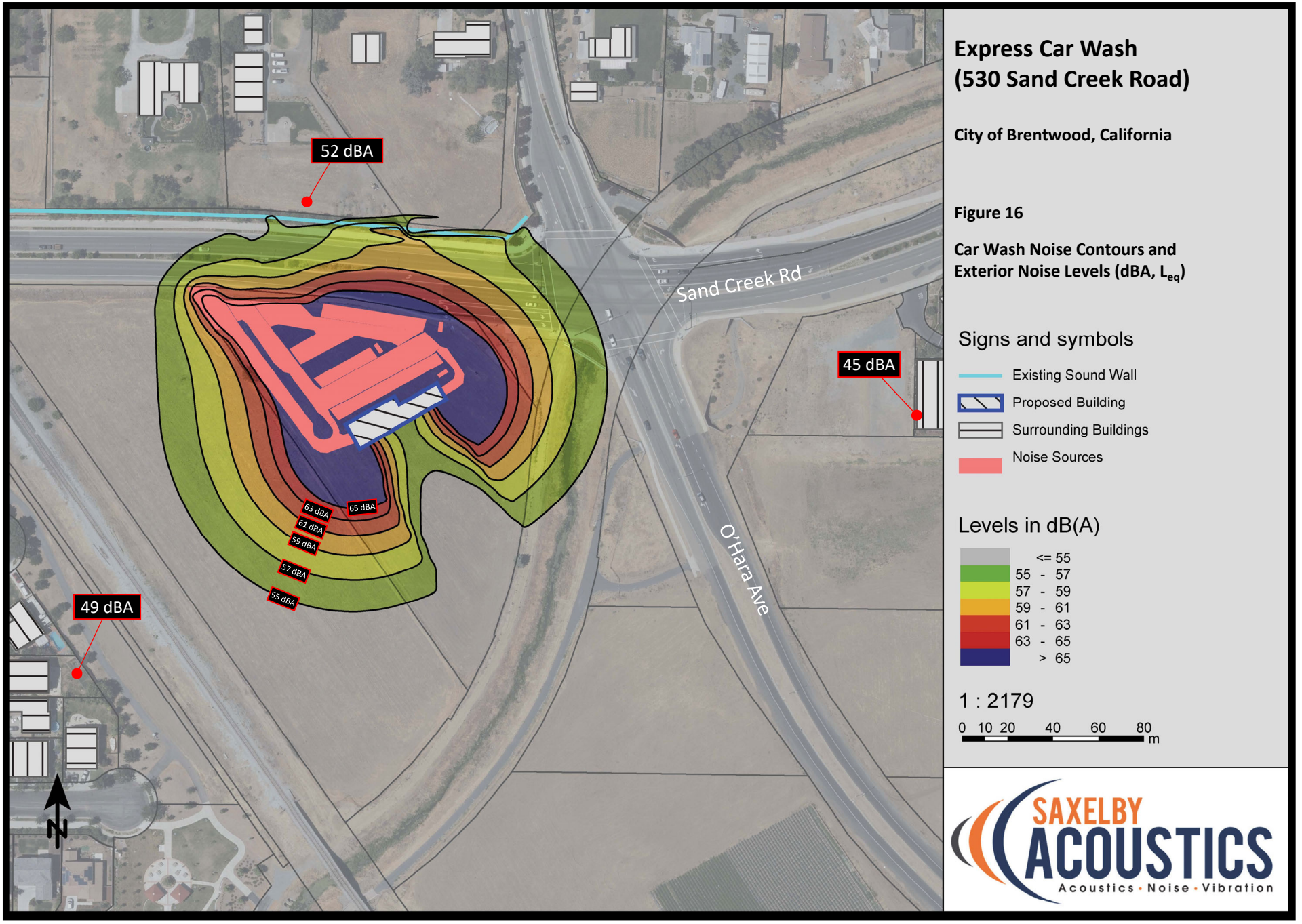
52 dBA
45 dBA
49 dBA
Sand Creek Rd
O'Hara Ave
63 dBA
65 dBA
61 dBA
59 dBA
57 dBA
55 dBA
N
Express Car Wash
(530 Sand Creek Road)
City of Brentwood, California
Figure 16
Car Wash Noise Contours and
Exterior Noise Levels (dBA, L_{eq})
Signs and symbols
Existing Sound Wall
Proposed Building
Surrounding Buildings
Noise Sources
Levels in dB(A)
<= 55
55 - 57
57 - 59
59 - 61
61 - 63
63 - 65
> 65
1 : 2179
0 10 20 40 60 80 m
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XIV. POPULATION AND HOUSING

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Responses to Checklist Questions

Response a): Less than Significant. The proposed project would convert the existing undeveloped site to a carwash facility. The project would construct and install a new parking lot, a small building, vacuum structures, signs, and additional paved pathways throughout the 3.3-acre site. The proposed project does not include the development of residential units. However, the proposed project includes the extension of infrastructure such as water and electricity. The water utility system serving the project could accommodate the additional demands created by the proposed project and the project includes infrastructure improvements needed to connect the project to these existing utility systems. In addition, public service providers, such as police and fire, could accommodate the additional demands for service created by the project. The proposed project site is connected to a nearby roadway, which has nearby access to public utilities and infrastructure. Approval and development of the proposed project would not indirectly induce new population growth in areas not currently served by utility infrastructure.

Therefore, it is not expected that the proposed project would directly or indirectly induce substantial population growth in the area. The carwash is meant to provide a car washing service for the existing population of the area and surrounding jurisdictions. Therefore, the proposed project would have a **less than significant** impact on population growth in the city and region.

Responses b): No Impact. There are no occupied housing units currently located on the project site. Construction and operation of the proposed project would not remove any existing housing units within the city, and would not displace any persons (i.e. residents or workers). There would be **no impact** and no mitigation is required.

XV. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?			X	

Existing Setting

The project site is located within Contra Costa County, and is within the jurisdiction of the East Contra Costa County Fire Protection District (ECCFPD). The City of Brentwood Police Department provides police services to the project area. The project site is located within the Brentwood Union Elementary School District and the Liberty Union High School District.

Responses to Checklist Questions

Responses a), b): Less than Significant. The proposed project would allow for the development of a car wash facility. Primary access to the project site would be provided by Sand Creek Road. No housing would be developed as part of the proposed project. Existing fire and police protection services that currently serve the project site would continue to serve the project site upon development of the proposed project. However, the proposed project is expected to induce a greater number of visitors to the project site as compared with the existing condition.

Fire Protection

The proposed project is located within the jurisdiction of the East Contra Costa Fire Protection District (ECCFPD). In accordance with ECCFPD efforts to reorganize due to budgetary constraints and the failure of the recent parcel tax, the district employs 28 personnel: 4 Battalion Chiefs, 9 Captains, 8 Engineers, and 7 Firefighters. The District currently staffs one station in Oakley, one in Discovery Bay, and one in Brentwood. An additional station is planned to be constructed along the East Cypress Road corridor in Oakley (to be known as Station 55) in the next several years.

- Station 52, at 201 John Muir Parkway, Brentwood
- Station 59, at 1685 Bixler Road, Discovery Bay
- Station 93, at 530 O'Hara Avenue, Oakley

The City of Brentwood is served primarily by Station 52. This fire station is approximately 3.7 miles from the project site. Emergency vehicle access is anticipated to be sufficient since the onsite road would connect to the entrance of the project site and emergency vehicles would have adequate ability to turn around on the site. Unpaved fire access is available from the west portion sides of the site. All new construction would meet all applicable building and safety codes. The project would not require the development of any new Contra Costa County Fire District fire protection facilities.

The Brentwood General Plan includes nine policies and four actions (Policies CSF 1-1 through 1- 3, and 4-1 through 4-6, and Actions CSF 1a, and 4a-c) to ensure that fire protection services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development pays their fair share of services. Among the action items included in the Brentwood General Plan that are applicable to the project area.

Action CSF 4a: Continue to enforce the California Building Code and the California Fire Code to ensure that all construction implements fire-safe techniques, including fire resistant materials, where required;

- Action CSF 1a: Requiring new development to pay their fair share fees of the cost of on and off-site community services and facilities;

- Action CSF 4b: As part of the City's existing development review process for new projects, the City would continue to refer applications to the ECCFPD for determination of the project's potential impacts on fire protection services. Requirements would be added as conditions of project approval, if appropriate.

The project would comply with these General Plan actions. For example, the City of Brentwood collects development impact fees that support the construction of new fire facilities in the amount of $0.1695 per new commercial building square foot. The City also has Community Facilities Districts (special tax revenue) that can be used for a variety of services, and which are currently being allocated primarily towards public protection and safety services. These funds could be used to fund new facilities, maintain existing facilities and equipment, and pay for salaries and benefits. In addition to providing additional revenue for fire facilities, the project would be required to comply with all ECCFPD standard conditions of approval related to provision of fire flow, roadway widths, etc. The project is also subject to the California Fire Code requirements set forth in Chapter 15.06 of the Municipal Code.

The 2014 Brentwood General Plan Update EIR concluded implementation of the General Plan would result in a less than significant impact related to the provision of public services throughout the City. The project is consistent with the General Plan designation for the site; therefore, the additional demand for fire protection services resulting from the proposed project has already been evaluated in the General Plan EIR. Given the project's compliance with the relevant General Plan policies and actions related to fire service, the impact from the proposed project, consistent with the General Plan EIR determination, would

be **less than significant** regarding the need for the construction of new fire protection facilities which could cause significant environmental impacts.

Police Protection

The City of Brentwood Police Department would provide police protection services to the project site. Currently, the Brentwood Police Department provides law enforcement and police protection services throughout the City. Established in 1948, the Brentwood Police Department is a full-service law enforcement agency that is charged with the enforcement of local, State, and Federal laws, and with providing 24-hour protection of the lives and property of the public. The Police Department functions both as an instrument of public service and as a tool for the distribution of information, guidance, and direction.

The Brentwood Police Department services an area of approximately 14 square miles. As of June 2019, the Department had 63 sworn police officers and another 29 civilian support staff. In addition to the permanent staff, the Department had approximately 20 volunteers who are citizens of the community and assist with day to day operations. The Department is located at 9100 Brentwood Boulevard, approximately 2.3 miles south of the project site.

The Brentwood General Plan includes eight policies and five actions (Policies CSF 1-1 through 1- 3, and 3-1 through 3-5; and Actions CSF 1a and 3a-d) to ensure that police protection services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development pays their fair share of services. Among the policies and actions items included in the Brentwood General Plan that are applicable to the project are:

- Policy CSF 3-4: Emphasize the use of physical site planning as an effective means of preventing crime. Open spaces, landscaping, parking lots, parks, play areas, and other public spaces should be designed with maximum feasible visual and aural exposure to community residents.

- Policy CSF 3-5: Promote coordination between land use planning and urban design through consultation and coordination with the Police Department during the review of new development applications.

- Action CSF 1a: Requiring new development to pay their fair share fees of the cost of on and off-site community services and facilities,

- Action CSF 3c: As part of the development review process, consult with the police department in order to ensure that the project design facilitates adequate police staffing and that the project addresses its impacts on police services.

The project applicant will be required by the City to comply with these policies and actions. Therefore, consistent with the General Plan EIR conclusion related to governmental facility impacts resulting from General Plan build-out, the project would have a **less than significant** impact regarding the need for the construction of new police protection facilities which could cause significant environmental impacts.

Responses c), d): ***Less than Significant.***

Schools

The proposed project does not include any housing. Therefore, the proposed project would not be expected to increase demand on the local school system directly. It is also not expected that the proposed project would increase demand on the local school system indirectly, since it is not expected that a carwash would induce population growth in the area. There would be no substantial adverse physical impact associated with the provision of school services.

Parks

Impacts associated with parks and recreation facilities are discussed under the Recreation section of this report. The proposed project does not include housing and would minimally disturb the surrounding conditions. Therefore, there would be no substantial adverse physical impact associated with the provision of parks. The project would have a **less than significant** impact related to environmental effects, including levels of service, associated with schools, and parks.

XVI. RECREATION

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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 which might have an adverse physical effect on the environment?			X	

Responses to Checklist Questions

Responses a), b): Less than Significant. The proposed project would not result in the construction of any new homes, and would provide limited new employment opportunities. Therefore, the use of existing parks and other recreational facilities would not be substantially increased, and no new or expanded facilities would be required. As such, this is a **less than significant** impact and no mitigation is required.

XVII. TRANSPORTATION

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
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	

Responses to Checklist Questions

Response a), b): Less than Significant. Access to the project site would occur via a new driveway located along Sand Creek Road. Sand Creek Road is an east-west corridor in central Brentwood that currently terminates at SR 4 to the west and Garin Parkway to the east. In the future, Sand Creek Road will be extended westerly to Heidorn Ranch Road and easterly to Sellers Avenue. This route generally has two lanes in each direction and turn lanes at intersections plus sidewalks and bicycle lanes. The posted speed limit varies between 35 and 45 mph.

The nearest major intersection to the project site, and the one most likely to be affected by project-generated traffic, is the intersection of Sand Creek Road and O'Hara Avenue, immediately east of the project site. As shown in Table 3.13-4 of the General Plan EIR, this intersection currently has an AM and PM peak hour LOS of B. General Plan Action CIR 1b identifies future improvements to this intersection, which include modifying the signal to provide right-turn overlap phases on the eastbound and westbound approaches.

As shown in Table 3.13-12 of the General Plan EIR, this intersection is projected to operate at LOS D during both the AM and PM peak hours, upon full General Plan buildout to the City limits. The General Plan designates the project site for commercial uses, consistent with the uses proposed by the project. As such, the traffic generated by the proposed project would fall within the analysis parameters in the General Plan EIR, and would not degrade roadway operations or level of service beyond the levels analyzed in the General Plan EIR.

The project would not have any detrimental effects on the existing and planned bicycle and pedestrian network in Brentwood, nor would it conflict with any plans or planned improvements to these systems. The project is a carwash, and as such, the vast majority of people travelling to the site would travel in their vehicles. It is possible that employees of the carwash would travel to work via bicycle or on foot.

The project site would be accessed via Sand Creek Road, which currently contains bicycle lanes on both the west and east bound travel lanes. Sidewalks exist on the westbound travel lane, immediately north of the project site. However, there is currently a gap in the sidewalk along the project frontage with the eastbound travel lane. The sidewalk gap that currently existing extends along the entire northern edge of the project site, and then the sidewalks continue east and west of the site, along the eastbound travel lane of Sand Creek Road.

The proposed project would include street frontage improvements that would close the sidewalk gap and provide better continuity for pedestrians walking along the eastbound land of Sand Creek Road. As such, the project would improve pedestrian conditions.

In summary, impacts related to conflicts with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be **less than significant** and any impacts related to an increase in vehicle miles travelled as addressed in CEQA Guidelines section 15064.3 would be **less than significant.**

Responses c): Less than Significant. No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The only circulation system alteration planned as part of the proposed project is the construction of the project site driveway on Sand Creek Road. Paved parking areas would also be located within the project site and would be connected to the project site driveway. Therefore, the project will not increase hazards due to a geometric design feature or incompatible use. In addition, the project will undergo a comprehensive site plan review by the City in order to be granted the necessary Conditional Use Permit. This impact would be **less than significant.**

Response d): Less than Significant. The proposed site plan provides adequate access to the project site, which would adequately accommodate emergency vehicles. Implementation of the proposed project would have a less than significant impact related to emergency access, and would not interfere with an emergency evacuation plan. This impact would be **less than significant**.

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.		X		

Background

Assembly Bill 52 (AB 52) requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation. The City of Brentwood received requests from two California Native American tribes to be informed through formal notification of proposed projects in the City's geographic area. No requests for consultation were received from either tribe with respect to this project.

Responses to Checklist Questions

Responses a.i), aii): Less than Significant with Mitigation. There are no known unique cultural resources known to occur on, or within the immediate vicinity of the project site. No instances of cultural resources or human remains have been unearthed on the project site. However, based on the record search conducted by the California Historic Resource Information System (CHRIS) (2018), the project site has the potential for the discovery of prehistoric, ethnohistoric, or historic archaeological sites that may

meet the definition of Tribal Cultural Resources. Although no Tribal Cultural Resources have been documented on the project site, the proposed project is located in a region where cultural resources have been recorded and there remains a potential that undocumented archaeological resources that may meet the Tribal Cultural Resource definition could be unearthed or otherwise discovered during ground-disturbing and construction activities.

Due to the possible presence of undocumented archeological or Tribal Cultural Resources within the project site, construction-related and/or operational impacts on tribal cultural resources would be potentially significant. Implementation of Mitigation Measures CR-1 and CR-2 would require appropriate steps to preserve and/or document any previously undiscovered resources that may be encountered during construction and/or operational activities, including human remains. Implementation of these measures would reduce this impact to **less than significant**.

Mitigation Measure(s):
Implement Mitigation Measures CR-1 and CR-2.

XIX. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporated***	***Less Than Significant Impact***	***No Impact***
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of the 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	

Responses to Checklist Questions

Response a): Less than Significant. The project site is located on Sand Creek Road. This roadway segment currently contains the full spectrum of utilities infrastructure within the roadway right-of-way, including water, wastewater, storm drainage, electric, natural gas, and telecommunications. The project site would connect to these utilities and extend them onsite the site. No other extensions or expansions of these facilities would be required as a result of project implementation.

As discussed in greater detail below under Response c, there is adequate capacity at the wastewater treatment plant to meet the wastewater treatment demands of the proposed project, and no expansions to this facility would be required as a result of the project. As such, this is a **less than significant** impact and no mitigation is required.

Response b): Less than Significant.

Water Usage

According to information provided by the project applicant, the proposed carwash would utilize a PurWater Reclaim System for the wash operations. The primary purpose of the reclaim system is to provide quality water to the wash so that the water can be re-used within the wash and still provide a clean car. The re-use of the water allows the operator to minimize the amount of incoming fresh water to the wash and the amount that is discharged from the wash. The system manufacturer states that approximately 70.2 total gallons of water are required (used) for each vehicle wash cycle. Of this amount, approximately 22.2 gallons, of the water would be "fresh" water (meaning it would come from the City's municipal supply), while the remaining water would come from onsite recycled water from the reclaim system.

Using a conservative assumption of 500 vehicle washes per day, the proposed project would use up to 11,100 gallons per day (gpd) of water from the municipal system. An additional negligible amount would be used in the onsite restrooms.

Water Availability

The City of Brentwood has prepared an Urban Water Management Plan (UWMP) that predicts the water supply available to the City of Brentwood in normal, single-dry, and multiple-dry years out to 2035. As part of the City's 2017 Water Master Plan (Ennis Consulting, 2017), the City used unit water use factors to estimate the water demands associated with land uses presented in the City's General Plan. These water use factors were derived from the 2006 Water System Master Plan model and were then adjusted accordingly to be in compliance with the Northern California Water Alliance– Land Use/Water Supply Analysis Guidebook (City of Brentwood 2017 WMP).

The City uses a water demand factor of 2,000 gpd/acre for commercial water use estimates. As such, the 3.3-acre project site was assumed to generate approximately 6,600 gpd demand in the UWMP and Water Master Plan.

While the proposed project would generate greater onsite water demand that the assumptions contained in the City's various water plans, the total water supply available in 2035 during all scenarios (normal, single-dry, and multiple-dry) well exceeds the projected demand associated with full buildout of the General Plan, including the proposed project. It should also be noted that the City has ample supplies of recycled water available, and is in the process of extending recycled water conveyance infrastructure to locations throughout Brentwood. While this infrastructure is not yet available at the project site, it will be available prior to 2035 General Plan buildout. As noted in the project description, the proposed project will construct recycled water infrastructure onsite that stubs out at Sand Creek Road. Once recycled water supplies are available at the site, the carwash facility will shift from potable to non-potable water supplies for the wash cycles.

There are adequate water supplies available to meet project demand in the near term and under cumulative conditions during normal, dry, and multiple dry years. The impact from the project would be **less than significant**.

Response c): Less than Significant.

The existing WWTP is located on approximately 70 acres of land owned by the City on the north side of Sunset Road and east of Brentwood Boulevard. The WWTP is designed to have sufficient capacity to handle all wastewater flows at build-out per the General Plan. The WWTP has a current treatment capacity of 5 million gallons per day (mgd) with an average dry weather flow (ADWF) of 3.8 mgd in 2017

Waste Water Treatment Plant Capacity

The City of Brentwood is the owner and operator of the Brentwood Wastewater Treatment Plant. The current Waste Water Treatment Plant system currently has the capacity to treat 5.0 million gallons of wastewater per day (mgd) but is designed and built to allow the City to expand to 10 mgd in 2.5 mgd increments. The City collects development impact fees from new development to fund future expansion efforts. Phase I of the WWTP expansion was completed in 1998-2002, to bring the treatment plant to current levels of 5 mgd. Preliminary planning of the Phase II expansion of the WWTP has been completed. Final design is currently underway and construction would follow after that. The existing 5 MGD (Million Gallons per Day) tertiary treatment facility was planned and constructed to accommodate future expansions, of up to 10 MGD. The original facility was designed based on 100 GPD (Gallons Per Day) per capita flow but the average flow in the last seven years has been 64 GPD per capita.

The Phase II Expansion is designed to treat 6.4 MGD flow based on 69 GPD per capita, which will service the final buildout population of the city per the current General Plan. The project includes the addition of one diffused air oxidation basin, retrofit of existing oxidation ditches to diffused air, secondary clarifiers, converting chlorine contact facilities to free chlorine disinfection, new solids mechanical dryer, dried bio-solids storage building, Electrical Distribution System Upgrade and all related appurtenances. This project is necessary to keep the city in compliance with ever more stringent discharge requirements. The expansion will also accommodate the planned and approved development within the city.

Buildout of the proposed project would result in the construction of a car wash facility which consists of a self-service automated car wash with a 150-foot car wash tunnel, 27 vacuum stations distributed across three areas, and associated parking and landscaped areas. The 2014 Brentwood General Plan Update EIR uses a wastewater generation factor of 1,785 gallons per day per acre of commercial, office, business park, and industrial development. Utilizing this rate, the proposed car wash would generate approximately 5,890.5 gallons per day. The manufacturer of the onsite water reclaim system to be used in project operations states that each vehicle wash will generate 16.2 gallons of

wastewater that would be sent to the municipal sewer system. Using a conservative assumption of 500 vehicle washes per day, this equates to 8,100 gpd for the proposed project.

While the actual wastewater generation rates of the project would exceed the assumptions used in the General Plan EIR, the current capacity of the WWTP would be sufficient to handle the wastewater flow from the proposed project in addition to existing and projected future demands. In addition, the proposed project is required to pay sewer impact fees which would contribute towards the cost of future upgrades, when needed. As a result, the proposed project would not have adverse impacts to wastewater treatment capacity. This is a **less than significant** impact.

Responses d), e): Less than Significant. The City's Solid Waste Division, a division of the Public Works Department, provides municipal solid waste collection and transfer services for residential and commercial use within the City of Brentwood. The solid waste from Brentwood is disposed of at Keller Canyon County landfill. Keller Canyon Landfill covers 2,600 acres of land; 244 acres are permitted for disposal. The site currently handles 2,500 tons of waste per day, although the permit allows up to 3,500 tons of waste per day to be managed at the facility. As of September 2008, the remaining capacity of the landfill's disposal area is estimated at 60-64 million cubic yards, and the estimated closing date for the landfill is 2050.

The proposed project would not generate significant or abnormal volumes of solid waste. Because the 2014 Brentwood General Plan Update EIR determined that solid waste capacity is adequate to serve the demand resulting from General Plan build-out and the proposed project's use is consistent with the General Plan designation for the project site; the project's impact to solid waste would be less than significant. This is a **less than significant** impact

XX. WILDFIRE

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, 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	
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?			X	
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?			X	

Responses to Checklist Questions

Responses a), b), d): Less than Significant. The proposed project would not impair an adopted emergency response plan or emergency evacuation plan. Implementation of the proposed project would not alter any roadways, access points, or otherwise degrade traffic operations and access to the area in such a way as to interfere with an emergency response or evacuation plan. Therefore, any impact would be less than significant.

In addition, as described under Section IX. Hazards and Hazardous Materials (of this IS/MND), the risk of wildland fire/wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point. The site is not located within an area where wildland fires occur. The site is predominately surrounded by existing development, which has a low potential for wildland fires. Project operation would not exacerbate any wildfire risks due to its presence on the project site. Therefore, any impact would be less than significant.

The project Applicant would be required to adhere to all fire prevention and protection requirements and regulations of Contra Costa County and the City of Brentwood, as applicable. Therefore, the potential for the proposed project to expose people or structures to significant risks related to (post-fire) landslides would be limited and **less than significant.**

Response c): Less than Significant. The proposed project would not include or require the installation or maintenance of infrastructure associated with wildfires (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that would exacerbate fire risk or result in impacts to the environment that have been disclosed elsewhere within this IS/MND. Therefore, there is a **less than significant** impact.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?			X	
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?			X	
c) 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)?			X	
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Responses to Checklist Questions

Response a): Less than Significant. As described in Section IV, there is the potential for special-status wildlife species/special-status plant species to occupy the site. In addition, although unlikely, the possibility exists for subsurface excavation of the site during interment, grading and other construction activities to unearth deposits of cultural significance. However, this Initial Study includes mitigation measures that would reduce any potential impacts to less than significant levels as described in Sections IV, Biological Resources, and V, Cultural Resources. Therefore, the proposed project would have **less than significant** impacts related to degradation of the quality of the environment, reduction of habitat, threatened species, and/or California's history or prehistory.

Response b): Less than Significant. Development that converts undeveloped areas to urban areas may be regarded as achieving short-term goals to the disadvantage of long-term environmental goals. However, the inevitable impacts resulting from population and economic growth are mitigated by long-range planning to establish policies, programs, and measures for the efficient and economical use of resources. Long-term environmental goals, both broad and specific, have been addressed previously in the 2014 General Plan Update, adopted on July 22, 2014. As discussed throughout this IS/MND, the

proposed project would comply with all relevant goals set forth in the General Plan. Therefore, the impact is **less than significant**.

Responses c) and d): Less than Significant. The proposed project in conjunction with other development would not significantly contribute to cumulative impacts in the area and/or impacts to human beings, either directly or indirectly. As described throughout this Initial Study, the proposed project would not result in any significant impacts that cannot be mitigated to a less than significant level and would not result in environmental affects that would adversely impact humans in the vicinity or region. This is a **less than significant** impact.

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