

**Arbor Express Car Wash
Initial Study
Mitigated Negative Declaration**

Lead Agency:

City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, California 91730



Prepared for:

Southwest Design Group, LLC
12223 Highland Avenue, Suite #106-201
Rancho Cucamonga, California 91739

Prepared by:

MIG, Inc.
1500 Iowa Avenue, Suite 110
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June 15, 2020

- This document is designed for double-sided printing -

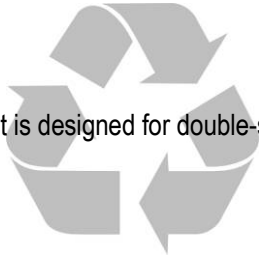


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1 Introduction

The City of Rancho Cucamonga (Lead Agency) received an application for Design Review and a Conditional Use Permit from Southwest Design Group (Project Proponent) for the construction and operation of an automated car wash and detail center (Project) on a 1.36-acre site consisting of two parcels in the City of Rancho Cucamonga, California. The Project includes a General Plan Amendment and Zone Change to one of the two parcels on which the car wash will be developed in order to bring the site into compliance with the Zoning Code. The Project also includes a request for a Variance for a reduction in the required commercial setback from adjacent residential land use. The approval of the application of the car wash development as well as the General Plan Amendment and Zone Change and Variance constitutes a project that is subject to review under the California Environmental Quality Act (CEQA) 1970 (Public Resources Code §§ 21000, *et seq.*), and the CEQA Guidelines (14 California Code of Regulations §§ 15000, *et seq.*).

This Initial Study was prepared to assess the short-term, long-term, and cumulative environmental impacts that could result from the Project.

This report was prepared to comply with CEQA Guidelines § 15063, which sets forth the required contents of an Initial Study. These include:

- A description of the Project, including the location of the Project (See Section 2);
- Identification of the environmental setting (See Section 2.11);
- Identification of environmental effects by use of a checklist, matrix, or other methods, provided that entries on the checklist or other form are briefly explained to indicate that there is some evidence to support the entries (See Section 4);
- Discussion of ways to mitigate significant effects identified, if any (See Section 4);
- Examination of whether the Project is compatible with existing zoning, plans, and other applicable land use controls (See Section 4.10); and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study (See Section 5).

1.1 – Purpose of CEQA

CEQA § 21000 of the California Public Resources Code provides as follows:

The Legislature finds and declares as follows:

- a) The maintenance of a quality environment for the people of this state now and in the future is a matter of statewide concern.
- b) It is necessary to provide a high-quality environment that at all times is healthful and pleasing to the senses and intellect of man.
- c) There is a need to understand the relationship between the maintenance of high-quality ecological systems and the general welfare of the people of the state, including their enjoyment of the natural resources of the state.
- d) The capacity of the environment is limited, and it is the intent of the Legislature that the government of the state take immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds being reached.
- e) Every citizen has a responsibility to contribute to the preservation and enhancement of the environment.
- f) The interrelationship of policies and practices in the management of natural resources and waste disposal requires systematic and concerted efforts by public and private interests to enhance environmental quality and to control environmental pollution.
- g) It is the intent of the Legislature that all agencies of the state government which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian.

The Legislature further finds and declares that it is the policy of the state to:

- h) Develop and maintain a high-quality environment now and in the future, and take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state.
- i) Take all action necessary to provide the people of this state with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from excessive noise.
- j) Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history.
- k) Ensure that the long-term protection of the environment, consistent with the provision of a decent home and suitable living environment for every Californian, shall be the guiding criterion in public decisions.
- l) Create and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations.
- m) Require governmental agencies at all levels to develop standards and procedures necessary to protect environmental quality.
- n) Require governmental agencies at all levels to consider qualitative factors as well as economic and technical factors and long-term benefits and costs, in addition to short-term benefits and costs and to consider alternatives to proposed actions affecting the environment.

A concise statement of legislative policy, with respect to public agency consideration of Projects for some form of approval, is found in CEQA § 21002, quoted below:

The Legislature finds and declares that it is the policy of the state that public agencies should not approve Projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such Projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of Projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such Project alternatives or such mitigation measures, individual Projects may be approved in spite of one or more significant effects thereof.

1.2 – Public Comments

Comments from all agencies and individuals are invited regarding the information contained in this Initial Study. Such comments should explain any perceived deficiencies in the assessment of impacts, identify the information that is purportedly lacking in the Initial Study or indicate where the information may be found. All materials related to the preparation of this Initial Study are available for public review. To request an appointment to review these materials, please contact:

Tabe Van der Zwaag, Associate Planner
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, California 91730
909-477-4316

Following a 30-day period of circulation and review of the Initial Study, all comments will be considered by the City of Rancho Cucamonga prior to adoption. All materials related to the preparation of this Initial Study are available for public review. To request an appointment to review these materials, please contact the Planning Division.

2.1 – Project Title

Arbor Express Car Wash

2.2 – Lead Agency Name and Address

City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, California 91730
909-477-2750

2.3 – Contact Person and Phone Number

Tabe Van der Zwaag, Associate Planner
909-477-4316

2.4 – Project Location

The Project site is located approximately 2.45 miles to the south of Interstate 210 (I-210), approximately 3.02 miles to the west of Interstate 15 (I-15), and approximately 2.18 miles to the north of Interstate 10 (I-10) in the City of Rancho Cucamonga, San Bernardino County, California (See Exhibit 1, Regional Context Map). The Project site is comprised of two parcels totaling 1.36 acres located on the north side of Arrow Route, just east of Archibald Avenue (See Exhibit 2, Project Vicinity Map). Parcel 1 is located at 9744 Arrow Route (APN# 208-291-06 and Parcel 2 is located at 9760 Arrow Route (APN# 208-291-03). The Project Site will be developed with the proposed car wash development (See Section 2.8, below, for detailed Project description). As part of a gas station project that was recently approved by the City at the northeast corner of Arrow Route and Archibald Avenue (8477 Archibald Avenue), Parcel 1 has previously undergone a General Plan Amendment and Zone Change from Low Medium Residential to General Commercial. Parcel 2 will undergo an identical change from Low Medium Residential to General Commercial as part of the Project.

- Latitude 34° 5' 58.85" North, Longitude 117° 35' 32.14" West

2.5 – Project Sponsor's Name and Address

Southwest Design Group, LLC
12223 Highland Avenue, Suite #106-201
Rancho Cucamonga, California 91739

2.6 – General Plan Land Use Designation

Parcel 1: General Commercial
Parcel 2: Low Medium Residential

2.7 – Zoning District

Parcel 1: General Commercial (GC)
Parcel 2: Low Medium Residential (4-8 du/ac)

2.8 – Project Description

As previously described, the Project is located on approximately 1.36 acres, or 60,160 square feet, and is comprised of two adjacent parcels along Arrow Route east of Archibald Avenue. Parcel 1 is undeveloped while Parcel 2 contains an occupied single-family home. The single-family residence on Parcel 2 is currently used as a rental unit and will be demolished as part of the Project. As previously mentioned, Parcel 1 is currently zoned for General Commercial use as a result of a previously approved gas station Project. Parcel 2 is currently zoned for Low Medium Density Residential. As such, the Project includes a similar General Plan Amendment and Zone Change on Parcel 2 from Low Medium Density Residential to General Commercial. This would bring the entire Project site into conformance for commercial uses in order to allow for the car wash use. In addition, the Project is requesting a Variance for a reduction in the required 20-foot setback from the adjacent residential land use and from the required 45-foot average landscape setback related to site plan and architectural review of the 5,865 square foot car wash and 1,428 square foot car detail center. The car wash development includes the construction of an automated express car wash building, a detail center building, shaded vacuum canopies/stalls, and associated parking and landscaping on Parcels 1 and 2 (See Exhibit 3, Site Plan). Parcels 1 and 2 encompass approximately 1.36 acres, or 59,297 square feet. The 5,865-square foot car wash structure will have two floors (See Exhibit 4, Floor Plan). The first floor will include an enclosed 140-foot long car wash tunnel, enclosed area for mechanical equipment, restrooms, office space, cashier space, and storage space. The second floor will include an equipment room, an office and restrooms. The detail center building will be 1,428 square feet and consist of a single floor. The detail center will be used for auto detailing, which will be a separate service from the automated car wash and will contain restrooms and an office. Three separate shaded vacuum canopy areas will be included in the parking lot area, totaling 32 stalls. An additional 13 customer-employee parking stalls will also be provided, including one clean air vehicle stall and one Americans with Disabilities Act (ADA) accessible parking stall.

Access to the site will be provided via a 50-foot wide common-approach driveway on Arrow Route with one inbound lane and one outbound lane. This will be a shared driveway with the parcel to the west of the Project site on the northeast corner of Arrow Route and Archibald Avenue, which is currently being developed with a gas station. Upon entering the site, three lanes are provided for cars to line up at three automated cashier pay stations with barrier gate arms to pay for their wash and wait their turn. The automated barrier gate arms would allow one vehicle through the car wash tunnel at a time. Upon exiting the car wash tunnel, cars will be directed to the covered vacuum stations via a one-way interior lane. To exit the site, cars would continue on the one-way lane and loop back out to the driveway onto Arrow Route. Three ADA accessible pedestrian walkways will be provided on the site: one between the car wash building and the detail center, one between the car wash building and the vacuum canopy areas and trash enclosure on the western side of the site, and one from the car wash building to the sidewalk on Arrow Route. The Project will also include LED site and building lighting as well as solar roof panels.

Architecturally, the proposed car wash structure would be comprised of a terra cotta tile roof, stucco exterior walls with stone veneer accents, recessed faux window arches, decorative doors and columns, and lattice covers to replicate the design of the historic vineyards in the area (see Exhibit 5, Elevations). The detail center building will be of similar architectural design as the car wash building. Various shades of brown and tan as well as stone accents are utilized to provide contrast and visual interest. The covered vacuum canopies will consist of “Alumawood” arbors, with bronze framing and shade fabric with color accents. The car wash development will also include a monument sign and decorative grape arbor with columns along the southern edge of the site to provide for an aesthetic appeal along Arrow Route and replicate the grape vineyards that once occupied that area.

Express Car Wash System

The express car wash will include a New Wave Industries, Inc. *PurClean* Spot Free Rinse System and *PurWater* Water Recovery System. The *PurWater* Reclaim System consists of two primary components: the underground reclaim tank(s) and the above ground *PurWater* unit. The below ground tanks are normally supplied by a local concrete vault vendor, with their capacity and lay-out per *PurWater* specifications. 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 to the municipal sewer system. The reclaim system is not designed to meet a specific effluent quality of the discharge, although in many cases

the water discharged from the system goes directly to sewer or a leach field. However, the system will allow for up to 86% water recycling, which will limit the amount of discharge into the municipal system at any given time. In addition, all cleaning products proposed to be used during operation of the Project would be biodegradable and environmentally friendly.

As the primary purpose of the *PurWater* Reclaim System is to provide quality water for re-use within the wash, the system is designed to separate settleable solids (typically sand, grit) and free hydrocarbons, from fat oil and greases, from the water going to the wash. These solids and oils can affect the wash quality, and increase the maintenance on wash pumps, piping, and nozzles. The large settleable solids (60-70 micron and larger) are settled within the underground tanks prior to entering the above ground *PurWater* unit. The *PurWater* unit uses high efficiency cyclones to remove down to 5 micron settleable solids prior to the wash. The solids-laden water from the *PurWater* unit is re-introduced into the reclaim water at the front end of the underground tanks, where some solids settle, and some continue with the water phase to be retreated or go out with the effluent. The free oils (60-70 micron and larger) float to the surface within the underground tanks and are trapped within the tanks. Accumulated settleable solids and free oils are periodically (normally every 3- 6 months) removed from the reclaim system by pumping out the underground tanks and replacing with fresh water. Some amount of water is continuously discharged from the reclaim system in order to satisfy the water balance for the wash. The volume of discharge is dependent on the amount of fresh water used by the wash, less any water that is lost to evaporation and carry-out. Depending upon local municipal requirements, the discharge can be sent directly to sewer or to a leach field or may require additional treatment before final discharge. As each municipality will have its own discharge requirements, it is important to understand what contaminants the *PurWater* Reclaim System can and cannot affect.

The *PurWater* Reclaim system uses two processes to reduce contaminant loading. The first is physical separation using centrifugal force (the cyclones) and gravity settling (the reclaim tanks). Physical separation will directly affect the amount of free oil & grease (FOG) and total suspended solids (TSS) left in the discharge water, and indirectly affect the BOD / COD level as it removes oil & grease. The second process is chemical, oxidation using ozone. Ozone will affect the bacterial count, BOD/ COD, total suspended solids (primarily bacterial), and some dissolved oils and chemicals. From field testing and experience, the *PurWater* Reclaim system has been shown to produce effluent qualities as follows: TSS, FOG, and BOD are typically the main concerns by municipalities receiving an effluent from a car wash. Given the type of processes used by the *PurWater* Reclaim system, there is 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. No heavy metals are used in the process so the *PurWater* system will not add or impact existing heavy metals.

The above effluent qualities are going to be similar for other types of systems that incorporate physical separation (plate separators, screen / bag filters, media filters, etc.) and chemical oxidation. Biological processes, when operating properly, may produce lower TSS, FOG, and BOD levels than the above, but still will not affect dissolved minerals and some dissolved chemicals in the water. The above effluent quality estimates are based on normal contaminant loadings seen by car washes. The estimates are not a guarantee of performance. The estimated discharge quality from the *PurWater* Reclaim System may or may not be acceptable for direct discharge to sewer or a leach field. Local authorities and municipalities should be consulted to determine whether additional treatment is required to meet discharge permits. The second component of the reclaim system is the above ground treatment system, which further removes solids from the reclaim water so that it is acceptable for the high-pressure pumps and nozzles within the wash. The *PurWater* reclaim unit has a suction pump that brings water up from the reclaim tank to be treated. The pump speed is controlled by a Variable Frequency Drive (VFD) to either continuously recirculate water (low speed) or to provide water to the wash (high speed). Several pump speeds can be programmed into the VFD to meet various or multiple demands. The *PurWater* unit uses high efficiency cyclones to remove down to 5 micron settleable solids prior to the wash. The cyclones create nearly 1000 G's of centrifugal force to obtain this fine particle separation. The treated (cleaned) water is sent to the wash and / or back to the reclaim tank as part of its continual recirculation mode. The solids-laden water from the *PurWater* unit is re-introduced into the reclaim water at the front end of the underground tanks, where some solids settle, and some continue with the water phase to be re-treated or go out with the effluent.

The above ground reclaim system also has the function of providing odor control for the reclaim water. Reclaim water is a great environment for growing bacteria which can create plugging and odor problems. Typically, anaerobic bacteria (bacteria that grow in the absence of oxygen) will grow beneath the settled solids in the reclaim water tank. This type of bacteria

produces hydrogen sulfide which produces an odor similar to rotten eggs. To control this bacterial growth, the *PurWater* reclaim system continuously recirculates water through the tanks to keep the water moving so that it does not go septic. The *PurWater* system also incorporates one of three odor control devices to further keep the bacterial growth in check. The first method uses an Air Sparger, which brings in air as the recirculation water passes through it. This puts oxygen in the water stream and helps control the anaerobic bacteria. The second method adds an enzyme into the recirculation water, plus uses the Air Sparger. The enzyme breaks down the dissolved organic material in the water, which takes away the bacteria's food source to keep their population controlled. The third method used is the addition of ozone, which is a powerful disinfectant similar to chlorine. The ozone kills the bacteria to provide a nearly bacteria free water. Also, ozone oxidizes dyes in the water, so it will remove the color created by wash chemicals (i.e. triple foams).

Stormwater

Stormwater would be collected on site and conveyed to the existing storm drain system under Arrow Route. The car wash development would consist of approximately 15,607 square feet of landscaped area along the boundaries of the site and in landscaped planters in the interior of the site, comprising approximately 26% of the overall site total. An additional 10-foot landscaping dedication will be included along the car wash's southern boundary with the sidewalk on Arrow Route, totaling 2,660 square feet of additional landscaping. These landscaped areas would serve as bio swales for runoff collection and treatment. In addition, the car wash development includes a water runoff retention basin near the south-central portion of the site that will act to treat flows before being discharged into the Municipal storm drain system.

Project Construction Details

Default assumptions for construction phases were used, and construction of the proposed car wash is anticipated to take approximately four to six months to complete. Soil cut and fill will be balanced on site. Details about construction (e.g. start date, schedule, number of workers, number and type of equipment) are not available at this time; therefore, default construction details were used where necessary throughout the analysis. The proposed development will connect to existing water, sanitary sewer, electricity, and gas facilities. Water and sewer service are provided by the Cucamonga valley Water District. Electricity would be provided by Southern California Edison and natural gas will be provided by the Southern California Gas Company. Utility undergrounding would be required. The start date for construction is not currently known as of the circulation of this document. As such, CalEEMod default settings for construction were utilized to provide an estimate of construction phasing, scheduling, equipment, etc. (See Appendix A). As shown in the CalEEMod output file in Appendix A of this document, construction was estimated to begin on January 1, 2020 and conclude June 10, 2020 for an approximately 6-month construction length. As shown below, construction will include a demolition phase, site preparation phase, grading phase, building construction phase, paving phase, and architectural coating phase. Demolition activities will include use of concrete saws, rubber-tired dozers, and tractor/loaders. Site Preparation activities will include use of graders, rubber-tired dozers, and tractor/loaders. Grading activities will include use of graders, rubber-tired dozers, and tractor/loaders. Building Construction activities will include use of a crane, forklifts, generator sets, tractor/loaders, and welders. Paving activities will include use of cement and mortar mixers, pavers, rollers, and tractor/loaders. Architectural Coating activities will include use of air compressors. Construction activities will be limited to the hours of 7:00 a.m. to 8:00 p.m. on weekdays, including on Saturdays, with no activity allowed on Sundays and holidays. The number of construction workers is not known at this time.

Construction Phase	Start Date	End Date	No. Days	Construction Equipment
Demolition	1/1/2019	1/1/2019	1	Concrete Saw, Rubber-Tired Dozer, Tractor/Loader
Site Preparation	1/2/2019	1/2/2019	1	Grader, Rubber-Tired Dozer, Tractor/Loader, Water Truck
Grading	1/3/2019	1/7/2019	3	Grader, Rubber-Tired Dozer, Tractor/Loader, Water Truck
Building Construction	1/8/2019	5/27/2019	100	Crane, Forklift, Generator Set, Tractor/Loader, Welder
Paving	5/28/2019	6/3/2019	5	Cement Mixer, Paver, Roller, Tractor/Loader
Architectural Coatings	6/4/2019	6/10/2019	5	Air Compressor

2.9 – Surrounding Land Uses

The Project site is bounded by commercial uses to the west and south, residential uses to the east, and an early education center to the north. A gas station project is currently under construction immediately to the west of the Project site at the northeast corner of Arrow Route and Archibald Avenue. To the west of the gas station, on the northwest corner of Arrow Route and Archibald Avenue is vacant land designated for office professional uses. Immediately to the east of the Project site are single-family homes. To the south of the Project site, on the south side of Arrow Route, is a strip-mall retail center with various businesses. Surrounding uses are summarized in Table 1, *Surrounding Land Uses*.

Table 1
Surrounding Land Uses

Direction	General Plan Designation	Zoning District	Existing Land Use
Project Site	Parcel 1: General Commercial Parcel 2: Low Medium Residential	Parcel 1: General Commercial (GC) Parcel 2: Low Medium Residential (4-8 du/ac)	Parcel 1: Vacant Land Parcel 2: Single Family Home
North	Low Medium Residential	Low Medium Residential (4-8 du/ac)	Mulberry Early Education Center
South	General Commercial/ Low Medium Residential	General Commercial (GC)/ Low Density Residential (2-4 du/ac)	Strip Mall/ Single Family Homes
East	Low Medium Residential	Low Medium Residential (4-8 du/ac)	Single Family Home
West	General Commercial/ Office	General Commercial (GC)/ Office Professional (OP)	Gas Station Under Construction/ Vacant Land

2.10 – Environmental Setting

The Project is located on two parcels (one vacant) in a developed area in the City of Rancho Cucamonga, San Bernardino County, California. The Project site is surrounded by commercial and residential uses and the area is built-out and urbanized. Disturbed non-native vegetation and limited pavement is located on the site. The Project site is bounded by commercial uses to the west and south, vacant land and residential uses to the east, and an early education center to the north. The Project site is relatively flat with an elevation ranging between approximately 1,153 to 1,162 feet above mean sea level (AMSL).

- The site contains a local landmark known as the Beverly Hills House. The Beverly Hills House includes limited historic landscaping in the immediate vicinity of the structure.
- The site does not contain scenic resources.
- The site is not currently being used for agricultural purposes.
- On-site vegetation consists of disturbed non-native vegetation and pavement and does not provide suitable habitat for any sensitive, or special status species.
- There are no on-site water features indicative of potential riparian habitat or wetlands.

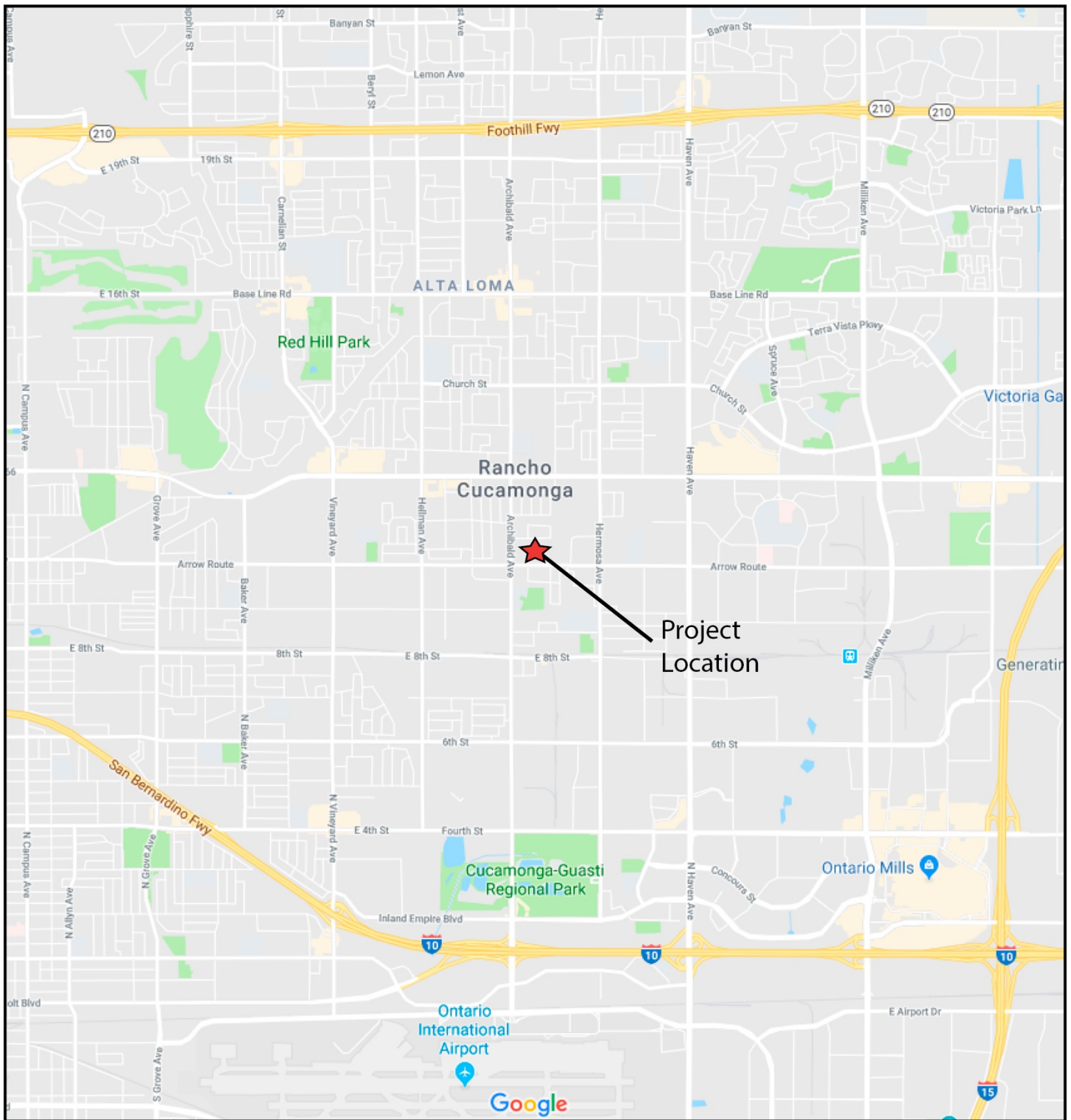
2.11 – Required Approvals

The City of Rancho Cucamonga is the only land use authority for this Project requiring the following approvals:

- Conditional Use Permit
- Design Review
- General Plan Amendment
- Zone Change
- Variance

2.12 – Other Public Agency Whose Approval is Required

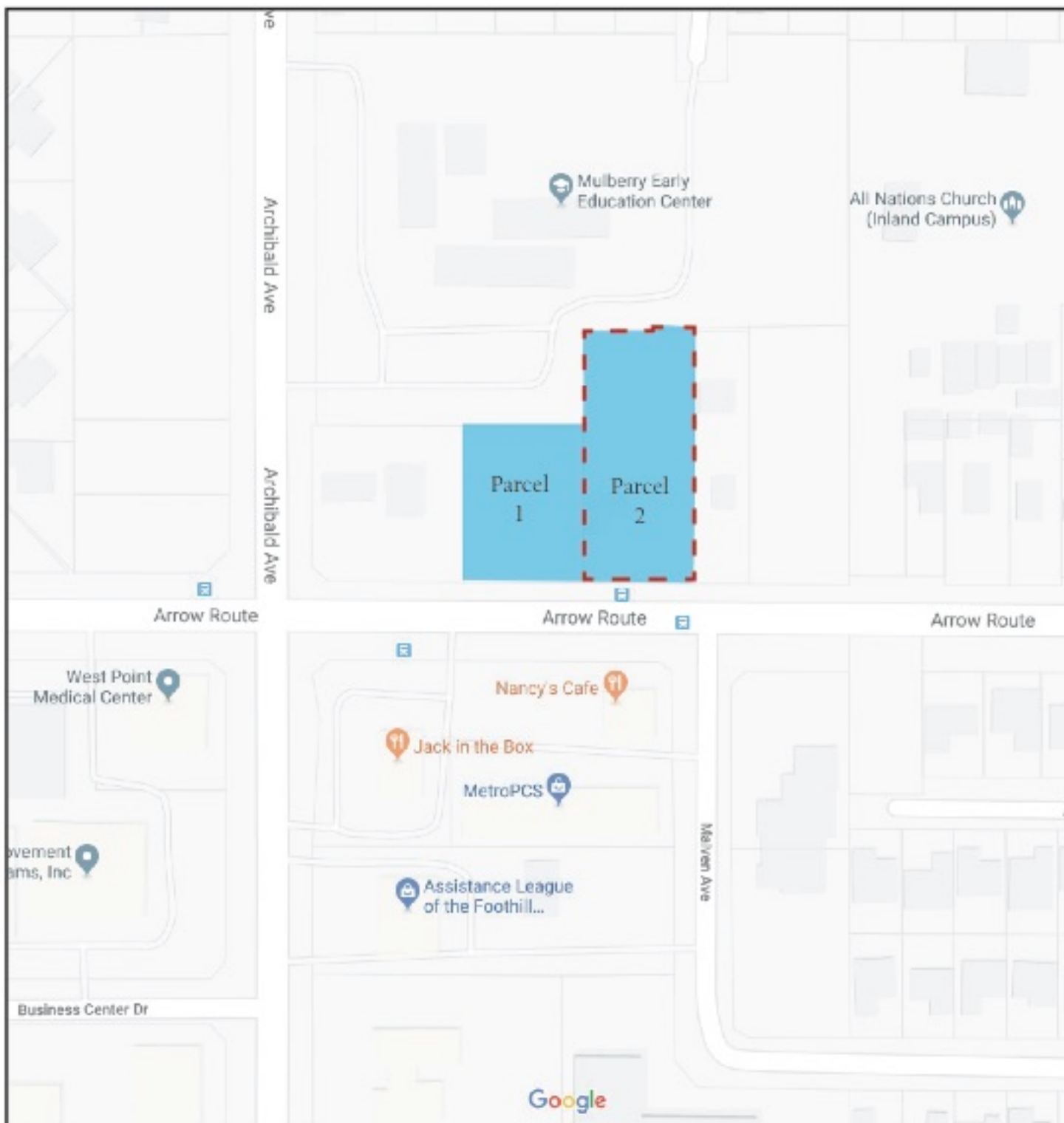
None



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Source: Google



- Project Site

- GPA/ Zone Change Area



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Exhibit 2 Project Vicinity Map

Arbor Express Car Wash Project
Rancho Cucamonga California



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SITE SUMMARY (9744, 9760 ARROW ROUTE)

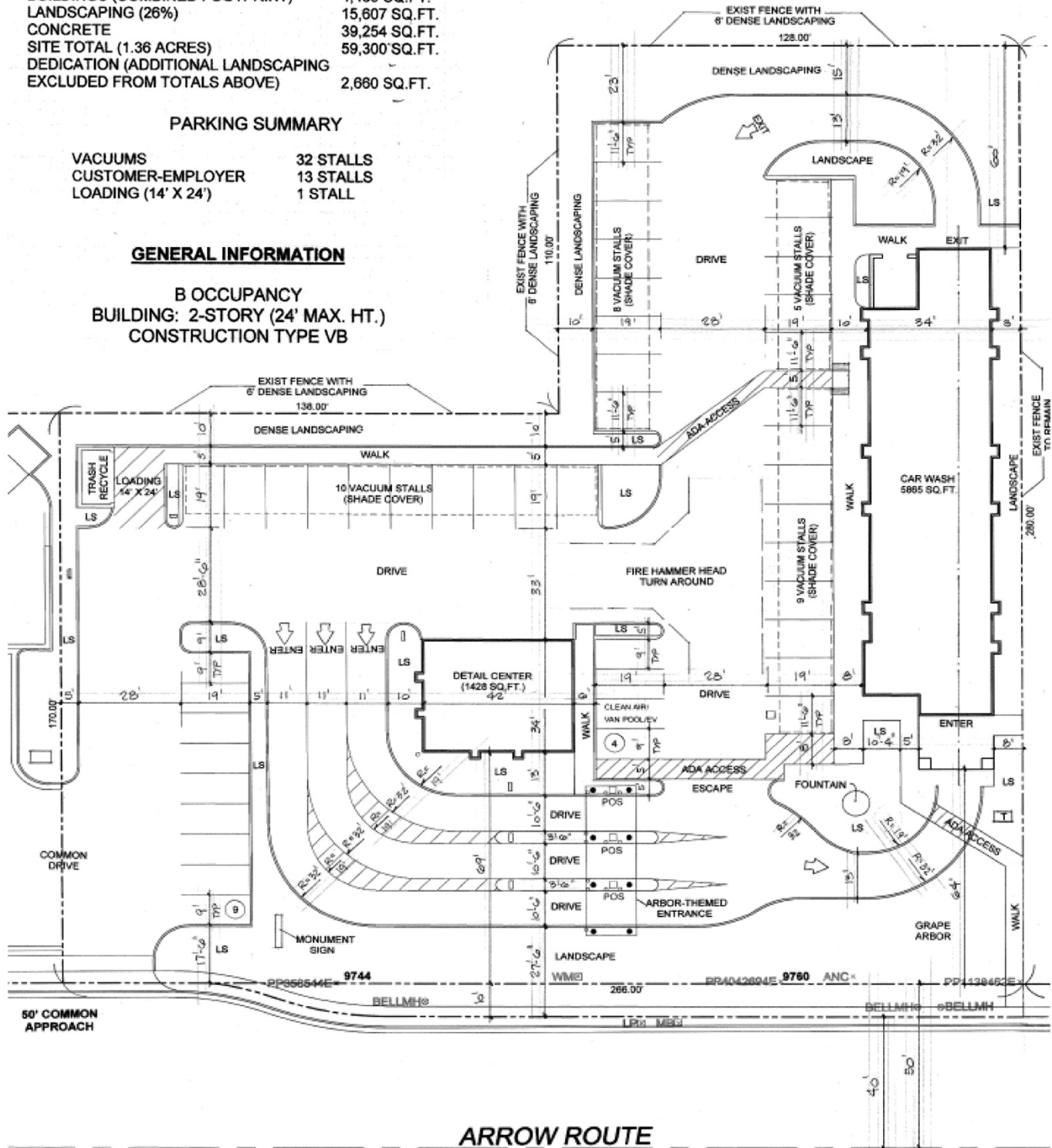
BUILDINGS (COMBINED FOOTPRINT)	4,439 SQ.FT.
LANDSCAPING (26%)	15,607 SQ.FT.
CONCRETE	39,254 SQ.FT.
SITE TOTAL (1.36 ACRES)	59,300 SQ.FT.
DEDICATION (ADDITIONAL LANDSCAPING EXCLUDED FROM TOTALS ABOVE)	2,660 SQ.FT.

PARKING SUMMARY

VACUUMS	32 STALLS
CUSTOMER-EMPLOYER	13 STALLS
LOADING (14' X 24')	1 STALL

GENERAL INFORMATION

B OCCUPANCY
BUILDING: 2-STORY (24' MAX. HT.)
CONSTRUCTION TYPE VB



ARROW ROUTE

Source: Southwest Design Group



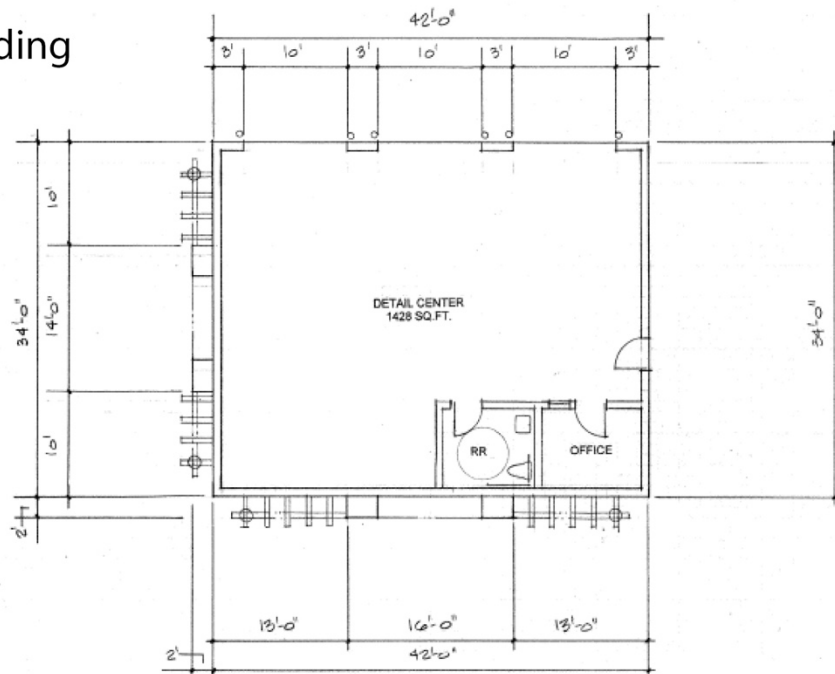
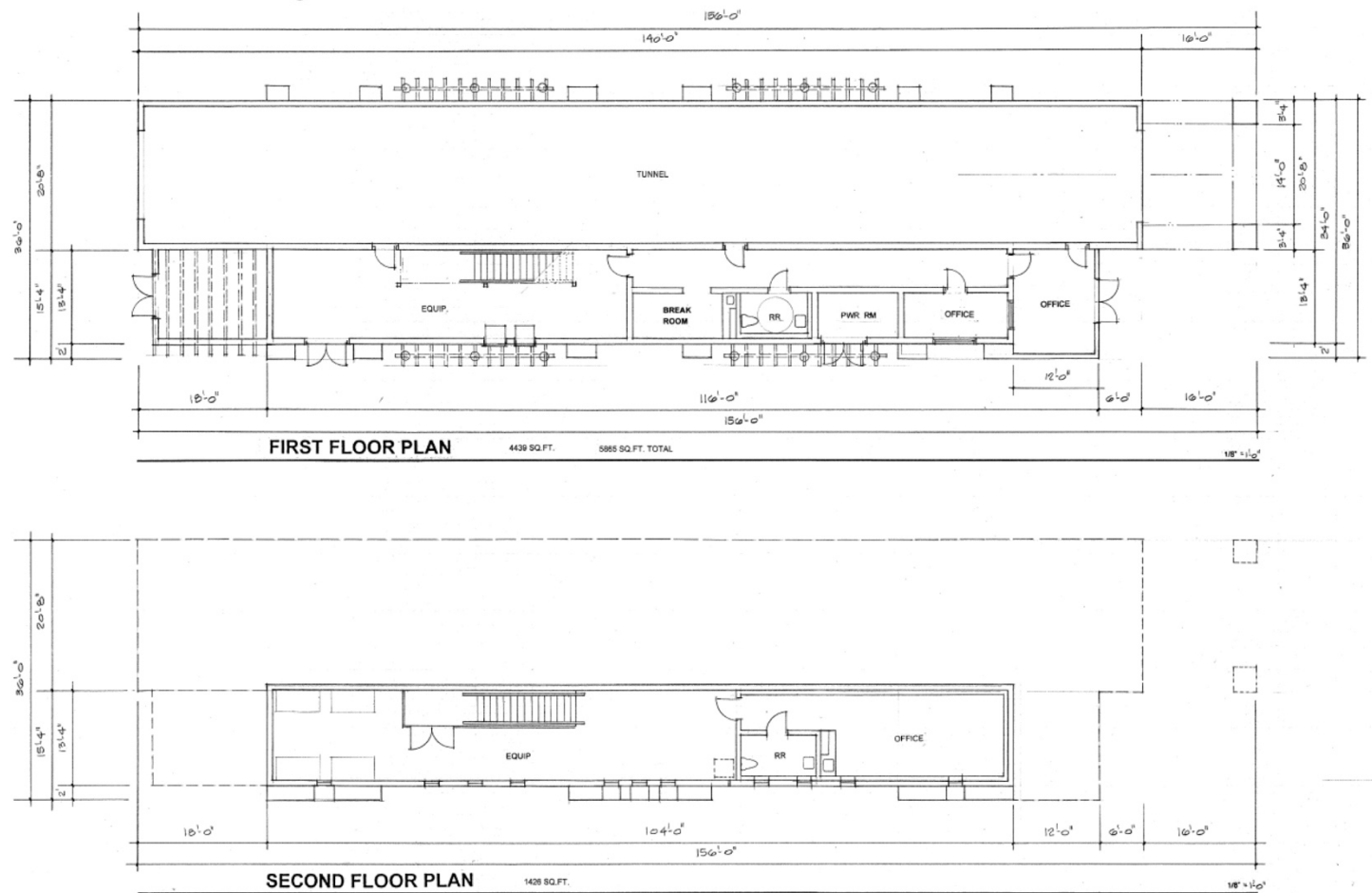
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Exhibit 3 Site Plan

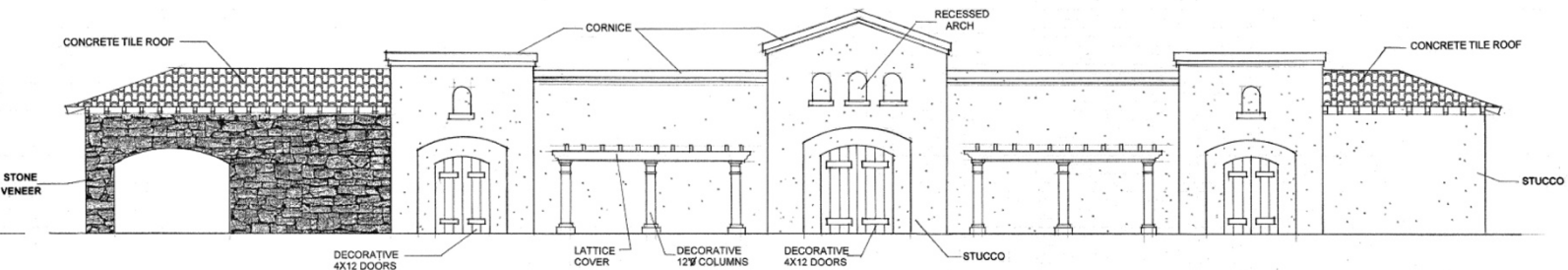
Arbor Express Car Wash Project
Rancho Cucamonga, California

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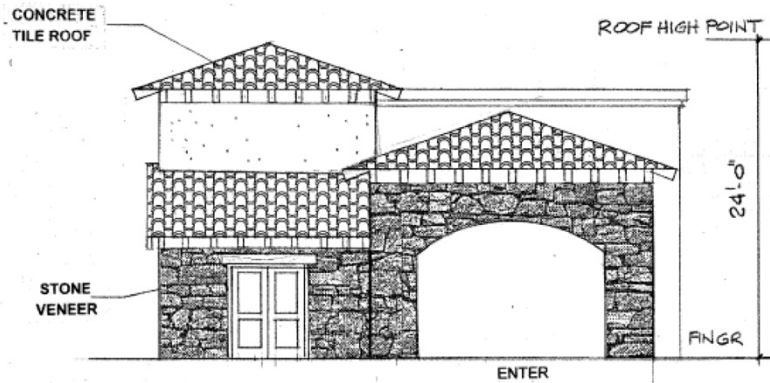


Source: Southwest Design Group

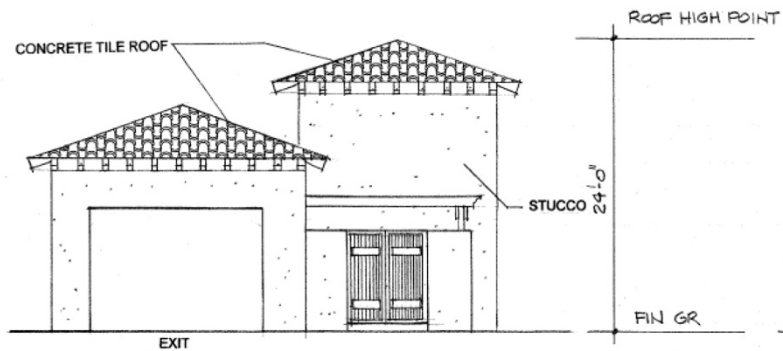
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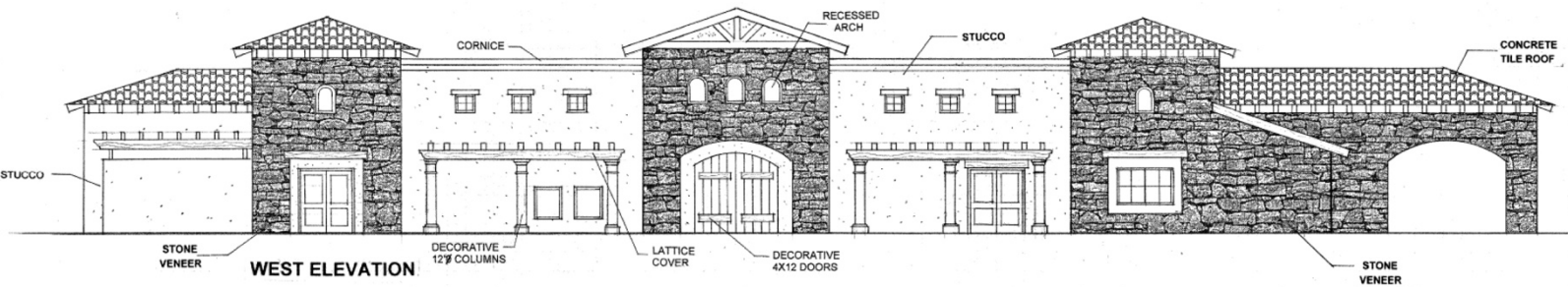
EAST ELEVATION



SOUTH ELEVATION



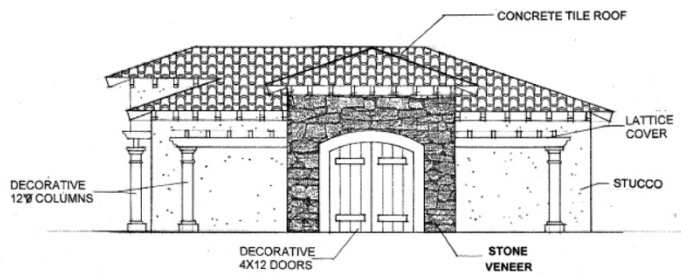
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WEST ELEVATION

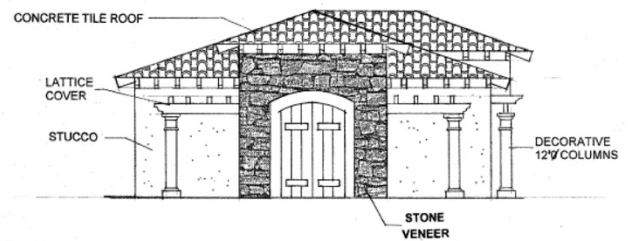
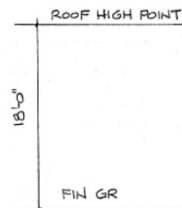
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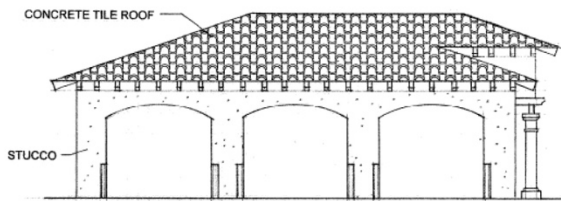
SOUTH ELEVATION

DETAIL AREA



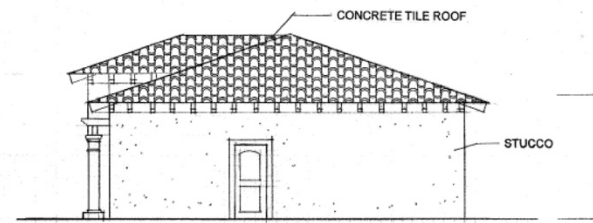
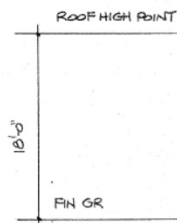
WEST ELEVATION

DETAIL AREA



NORTH ELEVATION

DETAIL AREA



EAST ELEVATION

DETAIL AREA

Source: Southwest Design Group

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3 Determination

3.1 – 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 Resources	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Geology /Soils
☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials	☐	Hydrology / Water Quality
☐	Land Use / Planning	☐	Mineral Resources	☐	Noise
☐	Population / Housing	☐	Public Services	☐	Recreation
☐	Transportation/Traffic	☐	Tribal Cultural Resources	☐	Utilities / Service Systems
☐	Mandatory Findings of Significance				

3.2 – Determination

☐	I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the 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 Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the 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 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 Project, nothing further is required.

Name: Tabe Van der Zwaag, Associate Planner

Date

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4 Evaluation of Environmental Impacts

4.1 – Aesthetics

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

A Cultural Resources Assessment and Historical Resources Evaluation report was prepared by BCR Consulting and dated April 6, 2020. The report is attached as Appendix B.

a) **No Impact.** Scenic vistas can be impacted by development in two ways. First, a structure may be constructed that blocks the view of a vista. Second, the vista itself may be altered (i.e., development on a scenic hillside). According to the City of Rancho Cucamonga 2010 General Plan Update Managing Land Use, Community Design and Historic Resources chapter, the primary scenic resources within the City include the San Gabriel Mountains and the foothills.¹ The Project site is relatively flat with an elevation ranging between approximately 1,153 to 1,162 feet above mean sea level. The Project is located on two adjacent parcels (one undeveloped parcel and one parcel with an occupied single-family home), within a fully urbanized area, visually dominated by commercial uses, residential uses, and surface streets. This site is not considered to be within or to comprise a portion of a scenic vista.² Compliance with Municipal Code guidelines and regulations restricting height would ensure that views of scenic resources, including views of the San Bernardino Mountains to the north, would be preserved through standard height restrictions. Views of the surrounding hillsides from the Project site are obstructed by existing development and landscaping and are limited. The proposed car wash building would be developed at a maximum height of 24 feet at its highest point, which complies with the City's Zoning Code (Section 17.36.030) restrictions for building height. The Project will include an 8-foot concrete wall between the car wash and the Beverly Hills House; however, this wall will not block existing views of scenic vistas to the north. Because the proposed development would not result in structures greater in height than currently exists in the vicinity, development of the Project and accessory landscaping elements would have no effect on a scenic vista. As such, the Project would result in no direct or indirect impact with respect to view of a scenic vista.

b) **No Impact.** The Project is located in an urbanized area and not adjacent to a designated state scenic highway or eligible state scenic highway as identified on the California Scenic Highway Mapping System.³ Additionally, as discussed in Section 4.1.c. below, the Beverly Hills House would not be directly or indirectly impacted by the proposed Project, as construction and operation of the proposed Project would not result in any changes or damage to the Beverly House (Please also see discussion of vibration-related impacts in Section 4.1.2 (Noise) of this document). Because the Project is not located adjacent

to a designated or eligible state scenic highway, and the Beverly Hills House would not be directly or indirectly impacted by the proposed Project, no impact to scenic resources visible from a state scenic highway or local scenic road would occur.

c) **Less than Significant Impact.** Development of the Project could result in a significant impact if it resulted in substantial degradation of the existing visual character or quality of the site and its surroundings. Degradation of visual character or quality is defined by substantial changes to the existing site appearance through construction of structures such that they are poorly designed or conflict with the site's existing surroundings.

Construction of the proposed Project would result in short-term impacts to the existing visual character and quality of the area. Construction activities would require the use of equipment and storage of materials within the Project site. However, construction activities are temporary and would not result in any permanent visual impact.

Upon Project completion, the Project would consist of one car wash facility that includes a car wash tunnel, office, restrooms, vacuum area, and parking. Access to the site will be provided via a shared 50-foot driveway on Arrow Route. The building heights will not exceed 24 feet at its highest point. The proposed car wash building would be developed at a maximum height of 24 feet at its highest point, which complies with the City's Zoning Code (Section 17.36.030) restrictions for building height. Architecturally, the proposed car wash structure would be comprised of a terra cotta tile roof, stucco exterior walls with stone veneer accents, recessed faux window arches, decorative doors and columns, and lattice covers to replicate the design of the historic vineyards in the area. The detail center building will be of similar architectural design as the car wash building. Various shades of brown and tan as well as stone accents are utilized to provide contrast and visual interest. The covered vacuum canopies will consist of "Alumawood" arbors, with bronze framing and shade fabric with color accents. The car wash development will also include a monument sign and decorative grape arbor with columns along the southern edge of the site to provide for an aesthetic appeal along Arrow Route and replicate the grape vineyards that once occupied that area.

Parcel 1 is undeveloped, while Parcel 2 contains a single-family residence. Project construction would result in demolition of the vacant single-family home. While no direct or indirect changes to the single-family residence located to the east of the site (the Beverly Hills House) would occur as a result of construction of the proposed Project, the General Plan Amendment and Zone Change that could alter the visual character of the Project site and its surroundings. According to the Cultural Resources Assessment and Historical Resources Evaluation report, the residence directly to the east of the Project site, dubbed the Beverly Hills House, has been designated in the City's Historic Landmarks Points of Interest as City Landmark #32. According to the report, the Beverly Hills House was constructed between 1927 and 1932, and was subsequently relocated from Beverly Hills to its present-day location. Evaluations performed during the Cultural Resources Assessment for the proposed Project recommended the property as eligible for listing in the California Register; therefore, the Beverly Hills House is recommended a historical resource (i.e. significant) under CEQA.

Construction of the Project would alter the existing visual character of the site. Preservation in place is the preferred manner of mitigating impacts to historical resources under CEQA. Preservation is anticipated at 9786 Arrow Route (the Beverly Hills House), since project-related impacts are not proposed within the boundaries of this property and no direct or indirect impacts from construction and operation of the car wash development would occur. Should any alterations be proposed to the Beverly Hills House in the future, they will take place pursuant to the U.S. Secretary of the Interior Standards for Rehabilitation, under the supervision of a professional that meets the U.S. Secretary of the Interior Professional Qualification Standards for Historic Architecture. Although the house itself will not be moved or altered, the Project will substantially alter the historic property's setting. Setting is one of the seven aspects of integrity, and while it is particularly important to integrity of historic districts, it is less important for an individual landmark. This house was moved in the 1950s and lost its original integrity of location and setting. A building that has been moved, however, may retain sufficient integrity to qualify for historic listing after it has been moved if, like this house, its primary significance is architecture or design (Criterion C). Therefore, the proposed alteration to the current setting will not have a substantial impact on the building's integrity, since it is able to convey its important architectural features even though its circa 1928 setting and location are no longer present. The proposed Project will therefore not result in a substantial negative impact to the visual character of the site or its surroundings.

The Project is adjacent to gas station at the northeast corner of Arrow Route and Archibald Avenue, as well as strip-mall type commercial uses on the south side of Arrow Route, across from the proposed Project. Surrounding uses are generally one

to two stories in height, which is similar to the proposed car wash building. The surrounding area is not visually distinct and does not portray a particular architectural theme or aesthetic. However, there is a historical theme relating to the region's agricultural past, that the City encourages in proposed development projects. These themes have been incorporated into the proposed Project. Therefore, the car wash development would represent a new commercial feature within a primarily commercial area. Because of the commercial uses in the immediate vicinity of the Project site, the addition of the Project would provide a new architectural aesthetic in an area that is older in character and would not conflict with the existing character. With specified design features included, the car wash development and General Plan Amendment and Zone change would have less than significant impacts on the visual character of the site and the surroundings.

d) **Less than Significant Impact.** Excessive or inappropriately directed lighting can adversely impact night-time views by reducing the ability to see the night sky and stars. Glare can be caused from unshielded or misdirected lighting sources. Reflective surfaces (i.e., polished metal) can also cause glare. Impacts associated with glare range from simple nuisance to potentially dangerous situations (i.e., if glare is directed into the eyes of motorists). Sources of daytime glare are typically concentrated in commercial areas and are often associated with retail uses. Glare results from development and associated parking areas that contain reflective materials such as hi-efficiency window glass, highly polished surfaces, and expanses of pavement.

There are lighting sources adjacent to this site, including free-standing street lights, light fixtures on buildings, and pole-mounted lights. The car wash development includes interior lighting and outdoor security lighting. Light spillover and glare would be avoided by requiring that light be designed to Project downward and prohibiting the creation of glare on adjacent properties per the requirements of Municipal Code Section 17.58.050.A-D (General Lighting Requirements). The Project also includes solar roof panels; however, solar roof panels are designed to absorb light and would not cause glare. Compliance with the Municipal Code standards for lighting and glare during construction and operation of the proposed Project would ensure that lighting and glare impacts would be less than significant.

Cumulative Impacts

The potential aesthetic impacts related to views and aesthetics are generally site specific. As discussed above, Project-related impacts would be less than significant. Lighting and sources of glare, while not always site-specific, would be consistent with the majority of the surrounding urban area and would be used during similar hours as surrounding uses. While the Project plus cumulative development would change the appearance of the site and surrounding area, all development Projects would be expected to be conditioned to follow applicable local planning and design guidelines as specified in Section 17.58.050 of the City's Municipal Code. Therefore, aesthetic impacts are not expected to be cumulatively considerable and no adverse impacts would occur.

4.2 – Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?	☐	☐	☐	☒
d) Result in loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) **No Impact.** The Project would be located in a fully developed, urbanized area that does not contain agriculture or forest uses. The Important Farmland in California (2014) prepared by the Department of Conservation identifies the Project site as Urban and Built-Up Land and does not identify the Project site as being Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.⁴ Therefore, there would be no conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to a non-agricultural use as a result of construction of the proposed Project. No impact would occur.

b) **No Impact.** No Williamson Act contracts are active for the Project site.⁵ Therefore, there would be no conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

c) **No Impact.** Public Resources Code § 12220(g) identifies forest land as *land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.* The Project site and surrounding properties are not currently being managed or used for forest land as identified in Public Resources Code § 12220(g). The Project site has already been disturbed by previous development and is surrounded by residential and commercial uses. Therefore, development of this Project would have no impact to any timberland zoning.

d) **No Impact.** The Project site is partially developed, disturbed land with limited non-native vegetation; thus, there would be no loss of forestland or conversion of forestland to non-forest use as a result of this Project. No impact would occur.

e) **No Impact.** The Project site is a partially developed site within an urban environment. The Project is surrounded by commercial and residential uses and surface streets. None of the surrounding sites contains existing forest uses. Development of the proposed Project would not change the existing environment in a manner that would result in the conversion of forestland to a non-forest use. No impact would occur.

Cumulative Impacts

The Project would have a less than significant impact on agricultural and forestry resources. Development of the Project would not preclude or hinder existing or future agricultural operations in the surrounding area. Therefore, the Project would not contribute to a cumulatively considerable impact.

4.3 – Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or Projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

a) **Less than Significant Impact.** A significant impact could occur if the Project conflicts with or obstructs implementation of the South Coast Air Basin 2016 Air Quality Management Plan (AQMP). Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2016 AQMP is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP.⁶ Consistency review is presented below:

(1) The Project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD, as demonstrated herein; therefore, the Project would not result in an increase in the frequency or severity of any air quality standards violation and would not cause a new air quality standard violation.

(2) The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and *significant Projects*. *Significant Projects* include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities. This Project is considered *significant* because it includes a General Plan Amendment. This Consistency Criterion refers to the growth forecasts and associated assumptions included in the 2016 AQMP. The 2016 AQMP was designed to achieve attainment for all criteria air pollutants within the Basin while still accommodating growth in the region. Projects that are consistent with the AQMP growth assumptions would not interfere with attainment of air quality standards, because this growth is included in the projections used to formulate the AQMP. Therefore, if the growth under the Project is consistent with the regional population, housing, and employment forecasts identified by SCAG in the RTP/SCS, plan

implementation would be consistent with the AQMP, even if emissions could potentially exceed the SCAQMD's recommended daily emissions thresholds.

The proposed Project would result in the loss of one (1) single-family residential unit with a decrease of between two (2) and six (6) residents. The Project will also result in an increase of employees in the area by approximately three (3) to six (6) employees. The 2016 RTP/SCS population and employment projections for the City of Rancho Cucamonga, as well as the decrease in population and increase in employment that would occur with the implementation of the proposed General Plan Amendment and Zone Change, are shown in Table 2 (RTP/SCS and Specific Plan Growth Assumptions).

Table 2
RTP/SCS and Specific Plan Growth Assumptions

Proposed Project	Population	Employment
Arbor Car Wash and GPA/ZCA	-2 to -6	3 to 6
RTP/SCS Growth 2012 - 2040	34,200	34,700
Within Growth Assumptions?	Yes	Yes
Source: SCAG 2016. ⁷		

As shown in Table 2, the implementation of the proposed Project would not exceed the growth assumptions contained in the AQMP. Impacts will be less than significant.

b) **Less than Significant Impact.** A project may have a significant impact if Project-related emissions would exceed federal, state, or regional standards or thresholds, or if Project-related emissions would substantially contribute to existing or Project air quality violations. The Project is located within the South Coast Air Basin, where efforts to attain state and federal air quality standards are governed by the South Coast Air Quality Management District (SCAQMD). Both the state of California (state) and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as 'criteria pollutants'). These pollutants include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), inhalable particulate matter with a diameter of 10 microns or less (PM₁₀), fine particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), and lead (Pb). The state has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS are more stringent than the national AAQS (except for Federal NO₂ standards which are stricter). Air pollution levels are measured at monitoring stations located throughout the air basin. Areas that are in nonattainment with respect to federal or state AAQS are required to prepare plans and implement measures that will bring the region into attainment. Table 3, *South Coast Air Basin Attainment Status*, summarizes the attainment status in the Project area for the criteria pollutants. Discussion of potential impacts related to short-term construction impacts and long-term area source and operational impacts are presented below.

Table 3
South Coast Air Basin Attainment Status

Pollutant	Federal	State
O ₃ (1-hr)	--	Nonattainment
O ₃ (8-hr)	Nonattainment	Nonattainment
PM ₁₀	Attainment	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
Pb	Nonattainment	Attainment
Source: ARB, 2020. See Appendix A.		

Construction Emissions

Short-term criteria pollutant emissions will occur during demolition, site preparation, grading, building construction, paving, and architectural coating activities related to development of the proposed car wash. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of onsite soils (fugitive dust). To determine if construction of the Project could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 has been utilized. CalEEMod defaults have generally been used as construction inputs into the model (see Appendix A), with modifications to the model described in detail below. The methodology for calculating emissions is included in the *CalEEMod User Guide*, freely available at <http://www.caleemod.com>. The “Automobile Care Center” land use category was used in the model to represent the proposed car wash and detail center, and a total of 7,292 square feet of floor area was included. A total of 39,254 square feet of the “Other Asphalt Surfaces” land use category was used in the model to account for on-site surface parking and the covered vacuum stalls. Finally, a total of 18,267 square feet of landscaping was also included in the model as “Other Non-Asphalt Surfaces”. Demolition of the single-family home on Parcel 2 would occur as a result of Project construction; therefore, a total of 1,912 square feet of demolition was included in the model. Soils imports and exports will balance on site. Construction activities are anticipated to start in January 2019 and be completed by summer 2019. As such, the first full operational year for the Project will be 2020. CalEEMod defaults for equipment needs were utilized. Based on the results of the model, maximum daily emissions from the construction of the car wash would not result in excessive emissions of criteria pollutants. As indicated in Table 4, *Car Wash Maximum Daily Construction Emissions (lbs./day)*, emissions of criteria pollutants would not exceed SCAQMD daily construction thresholds. Impact would be less than significant.

Table 4
Car Wash Maximum Daily Construction Emissions (lbs/day)

Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
<i>Summer</i>						
2019	17.01	25.40	16.01	0.03	3.82	2.19
<i>Winter</i>						
2019	17.01	25.44	16.00	0.03	3.82	2.19
Threshold	75	100	550	150	150	55
Substantial?	No	No	No	No	No	No
Source: MIG, 2018. See Appendix A.						

Operational Emissions

Operation of the proposed car wash facility would result in long-term criteria air pollutant emissions. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions would result from vehicle sources associated with daily trips to and from the proposed car wash. Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products, and periodic repainting of the small structure. Energy demand emissions result from use of electricity and natural gas. The proposed car wash consists of one automated tunnel designed to reclaim and recycle water. According to the International Carwash Association, “self-serve” automatic car washes use approximately 30 gallons of freshwater per vehicle.⁸ As such, water use for the proposed car wash was estimated at 30 gallons per vehicle – though each individual vehicle washed would require more water, the Project Proponent estimates that the car wash would recycle up to 86% of all water used. As such, 30 gallons per vehicle is likely an overestimation for total water usage. Number of vehicles washed was estimated at 350 per day, based on the Project proponent’s estimates of similar developments. With a resulting total of 127,750 vehicles washed annually, total water demand is estimated at 3,832,500 gallons per year. Because data are not widely available on energy consumption by the type of vacuums used at these types of facilities, the default energy use amounts were. CalEEMod was utilized to estimate mobile source emissions. Project trip generation rates were taken from the Project Traffic Impact Analysis, performed by Trames Solutions, Inc. in September 2018 (See Appendix G).⁹ CalEEMod also includes default outdoor water demand for landscape irrigation. Default inputs for all operational sources were used for the Project. Daily operational emissions as estimated by CalEEMod are summarized in Table 6, *Car Wash Operational Daily Emissions*. Operational emissions generated by operation of the car wash would not exceed the thresholds established by SCAQMD. Impacts will be less than significant.

Table 5
Car Wash Operational Daily Emissions (lbs/day)

Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
<i>Summer</i>						
Area Sources	0.19	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.01	0.06	0.05	0.00	0.00	0.00
Mobile Sources	1.24	5.70	14.55	0.05	3.72	1.03
<i>Summer Total</i>	<i>1.43</i>	<i>5.76</i>	<i>14.61</i>	<i>0.05</i>	<i>3.72</i>	<i>1.03</i>
<i>Winter</i>						
Area Sources	0.19	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.01	0.06	0.05	0.05	0.00	0.00
Mobile Sources	1.20	5.81	13.91	0.05	3.72	1.03
<i>Winter Total</i>	<i>1.39</i>	<i>5.87</i>	<i>13.97</i>	<i>0.05</i>	<i>3.72</i>	<i>1.03</i>
SCAQMD Daily Threshold	55	55	550	150	150	55
Potentially Significant?	No	No	No	No	No	No
Source: MIG, 2018. See Appendix A.						

c) **Less than Significant Impact.** Cumulative short-term, construction-related emissions from the Project will not contribute considerably to any potential cumulative air quality impact because short-term Project emissions will be less than significant and other concurrent construction Projects in the region will be required to implement standard air quality regulations and mitigation pursuant to State CEQA requirements, just as this Project has. The SCAQMD CEQA Air Quality Handbook identifies methodologies for analyzing long-term cumulative air quality impacts for criteria pollutants for which the Basin is nonattainment. These methodologies identify three performance standards that can be used to determine if long-term emissions will result in cumulative impacts. Essentially, these methodologies assess growth associated with a land use Project and are evaluated for consistency with regional Projections. These methodologies are outdated and are no longer recommended by SCAQMD. SCAQMD allows a project to be analyzed using the Projection method such that consistency with the AQMP will indicate that a project will not contribute considerably to cumulative air quality impacts. As discussed in AQMP Consistency, the Project is consistent with growth assumptions in the AQMP and would not exceed any applicable SCAQMD thresholds for short- and long-term emissions. Therefore, the Project will not contribute to any potential cumulative air quality impacts.

d) **Less than Significant Impact.** Sensitive receptors are those segments of the population that are most susceptible to poor air quality such as children, the elderly, the sick, and athletes who perform outdoors. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors in the vicinity of the proposed Project include residences to the east and the early childhood education center to the north of the site.

Localized Significance Thresholds

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutant that exceed national and/or State air quality standards.

Construction LST's

Construction-related criteria pollutant emissions and potentially significant localized impacts from the proposed car wash were evaluated pursuant to the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five-acre Project scenarios, depending on the amount of site disturbance during a day using the Fact Sheet for equipment usage in CalEEMod.¹⁰ Daily oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM₁₀ and PM_{2.5}) emissions will occur during site preparation and grading activities on the site. Table 8, *Car Wash Localized Significance Threshold Analysis (lbs/day)*, summarizes on- and off-site emissions as compared to the local

thresholds established for Source Receptor Area (SRA) 32 (Northwest San Bernardino Valley). The car wash site is approximately 1.36-acres in size; therefore, the 1-acre threshold was used. A 25-meter receptor distance was used to reflect the proximity of the single-family home located just to the east of the Project site. This receptor is the closest to the Project site; therefore, would have the highest noise impacts.

Table 6
Car Wash Localized Significance Threshold Analysis (lbs/day)

Phase	CO	NO _x	PM ¹⁰	PM ^{2.5}
Demolition	14.89	22.68	2.13	1.33
Site Preparation	7.89	19.48	3.73	2.17
Grading	6.61	16.04	3.01	1.82
Building Construction	13.49	15.98	0.92	0.88
Paving	8.90	9.17	0.52	0.48
Architectural Coating	1.84	1.84	0.13	0.13
Threshold	863	118	5	4
Potentially Substantial?	No	No	No	No
Source: MIG, 2018. See Appendix A.				

As shown in Table 8, emissions of NO_x and CO will be greatest during demolition, site preparation, grading, and building construction activities associated with the proposed car wash. Emissions of particulate matter will be greatest during site preparation and grading activities. It should be noted that the CalEEMod results summarized in Table 8 include application of SCAQMD Rule 403 and require the utilization of applicable best management practices to minimize fugitive dust emissions. A 50 percent reduction in fugitive dust emissions is assumed based on rule requirements (while the Project Construction Noise Analysis states that water trucks would not be used during construction, such trucks will in fact be used to control fugitive dust during Project construction- See Section 4.12 for Noise Analysis). Based on CalEEMod calculations, and assuming that exposed areas will be watered two times daily during construction activities, localized emissions of criteria pollutants will not exceed the SCAQMD thresholds during construction of the proposed car wash. Impacts will be less than significant.

Operation LST's

Operation-related LSTs become of concern when there are substantial on-site stationary sources such as smoke stacks or furnaces that could impact surrounding receptors. The Project does not include such on-site operations, and the General Plan Amendment and Zone Change would not permit such operations; therefore, impacts related to operational LSTs will not occur.

Carbon Monoxide Hot Spots

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. The California Department of Transportation Project-Level Carbon Monoxide Protocol (Protocol) screening procedures have been utilized to determine if the Project could potentially result in a CO hotspot. Based on the recommendations of the Protocol, a screening analysis should be performed for the Project to determine if a detailed analysis will be required. The California Department of Transportation notes that because of the age of the assumptions used in the screening procedures and the obsolete nature of the modeling tools utilized to develop the screening procedures in the Protocol, they are no longer accepted. More recent screening procedures based on more current methodologies have been developed. The SCAQMD has not developed a screening threshold. The Sacramento Metropolitan Air Quality Management District (SMAQMD) developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010, which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. Additionally, a CMP Intersection refers to the intersection of two CMP roadways, of which both Arrow Highway and Archibald are considered CMP roadways.¹¹ However, the Project's operations would not generate 31,600 or 44,000 vehicle trips per hour. The Project would also not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where

vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway). Finally, the Project is consistent with the applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans. Therefore, the Project passes the screening analysis and impacts are deemed less than significant. Based on the local analysis procedures, the Project would not result in a CO hotspot, and would not expose sensitive receptors to substantial pollutant concentrations.

e) **Less than Significant Impact.** According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. The proposed Project does not include any of the above noted uses or processes. While short-term odors could be generated during construction as a result of activities like asphalt laying and application of architectural coatings, these impacts will be temporary and will cease upon Project completion. Less than significant impacts would occur.

Cumulative Impacts

No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the SCAQMD construction and/or operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact. As described in this section, the proposed car wash operational emissions would not exceed thresholds. Therefore, the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

4.4 – Biological Resources

Would the Project:

	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 Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) **Less than Significant Impact.** According to the California Department of Fish and Wildlife BIOS viewer, a total of six sensitive wildlife species and no sensitive plant species were identified as occurring within the Guasti 7.5-Minute Quadrangle, within which the Project site is located.¹² However, given the previously disturbed nature of the site and surrounding area, it is highly unlikely that any plant or wildlife species listed by the State and/or Federal government as endangered or threatened occur at the Project site. Based on site visits there is limited ornamental landscaping and trees on site; however, there is no identifiable natural habitat on site. Construction of the car wash will include replacement of existing ornamental landscaping with similar landscaping upon Project completion. Therefore, less than significant impacts would occur with construction of the Project.

b-c) **No Impact.** The Project site consists of two parcels: one undeveloped parcel and one parcel containing a single-family home. According to the federal National Wetlands Inventory, the Project site does not contain any riparian habitat or wetlands and the Project would not disturb any offsite wetlands.¹³ There is no vegetation or on-site water features indicative of potential wetlands. No impact would occur.

d) **Less than Significant with Mitigation Incorporated.** The Project site consists of two parcels: one undeveloped parcel and one parcel containing a single-family home. The site is bounded by roadways to the west and south, a school to the north, and residential uses to the east, preventing the use of the Project site and surrounding area as a wildlife corridor. There are no substantial vegetated areas or waterbodies located onsite that could serve as habitat. However, there are a number of trees on the Project site that have the potential to provide habitat for nesting birds. Vegetation communities on the Project Site have the potential to provide nesting habitat for bird species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) Sections 3503 and 3513. There is potential for ground- and tree-nesting birds to establish nests on the Project Site prior to project construction. Destruction of, or disturbance to, an active nest is prohibited. Construction activities including site mobilization, tree removal other vegetation clearing activities, grubbing, grading, and noise/vibration from the operation of heavy equipment also has the potential to result in significant direct (i.e., death or physical harm) and/or indirect (i.e., nest abandonment) impacts to nesting birds. Implementation of Mitigation Measure BIO-1 would be required to reduce potential impacts to nesting birds to a less than significant level.

Mitigation Measures

BIO-1: Pre-Construction Nesting Bird Survey. If vegetation removal is scheduled during the nesting season (typically February 1 to September 1), then a focused survey for active nests shall be conducted by a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) no more than five (5) days prior to the beginning of project-related activities (including but not limited to equipment mobilization and staging, clearing, grubbing, vegetation removal, and grading). Surveys shall be conducted in proposed work areas, staging and storage areas, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys shall be conducted within a 250-foot radius surrounding the work area (in areas where access is feasible). For larger raptors, such as those from the genus *Buteo*, the survey area shall encompass a 500-foot radius. Surveys shall be conducted during weather conditions suited to maximize the observation of possible nests and shall concentrate on areas of suitable habitat. If a lapse in project-related work of five (5) days or longer occurs, an additional nest survey shall be required before work can be reinitiated. If nests are encountered during any preconstruction survey, a qualified biologist shall determine if it may be feasible for construction to continue as planned without impacting the success of the nest, depending on conditions specific to each nest and the relative location and rate of construction activities. If the qualified biologist determines construction activities have potential to adversely affect a nest, the biologist shall immediately inform the construction manager to halt construction activities within minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on species and location. Active nest(s) within the Project Site shall be monitored by a qualified biologist during construction if work is occurring directly adjacent to the established no-work buffer. Construction activities within the no-work buffer may proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g. young have fledged, predation, or other non-anthropogenic nest failure).

e) **No Impact.** The Project site consists of two parcels: one undeveloped parcel and one parcel containing a single-family home. The Project includes the removal of five trees. The proposed Project will comply with the provisions of the City of Rancho Cucamonga Municipal Code (Section 17.80, Tree Preservation), which prohibits the removal of a City tree by any person or entity other than the City of Rancho Cucamonga. There are no City trees on the Project site. Therefore, development of the proposed express car wash and adoption of the General Plan Amendment and Zone Change will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact will occur.

f) **No Impact.** The Project site is not within any Habitat Conservation Plan area and no impacts would occur.¹⁴

Cumulative Impacts

As discussed above, impacts related to Biological Resources are anticipated to be less than significant. Similar to the proposed car wash development, all cumulative Projects would be subject to individual project review and conformance with conservation plans and standard provisions for compliance with state and federal protection laws. Since Project-related impacts would be less than significant and because cumulative Project-related impacts would be reduced to less than significant levels through mitigation, the cumulative impact from other past, present, and reasonably foreseeable projects, would be expected to be less than significant. Therefore, cumulative impacts would be less than significant.

4.5 – Cultural Resources

Would the Project:

	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 as defined in '15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

A Cultural Resources Assessment and Historical Resources Evaluation report was prepared by BCR Consulting and dated April 6, 2020 and provides the basis for the analysis in this Section.

a) **Less than Significant Impact.** The Project site encompasses approximately 1.36 acres and is bounded by Arrow Route to the south, an educational center to the north, and a privately-owned residential property to the east. To the west of the site is a parcel currently being developed with a gas station. As discussed in the Historical Resources Evaluation, a cultural resources records search, additional research, intensive-level pedestrian field survey, Sacred Lands File search with the Native American Heritage Commission (NAHC), and vertebrate paleontological resources assessment were conducted for the project. The records search revealed that 23 previous cultural resources studies have taken place, and 24 cultural resources (22 historic-period buildings, one historic road, and one historic district) have been recorded within one-mile of the Project site. None of the previous studies has assessed the Project site, and no cultural resources have been previously recorded within its boundaries. During the field survey, BCR Consulting personnel identified two historic-period residential buildings within the Project site boundaries. The first historic-period residential building was located at 9760 Arrow Route. It is recommended not eligible for listing in the California Register of Historical Resources (California Register). As such, it is not a recommended "historical resource" under CEQA and does not warrant further consideration. The residential building located at 9786 Arrow Route (Parcel 3) is known as the Beverly Hills House. The Beverly Hills House was designated as City Landmark #32 in 1989. The listing criteria was requested and not available to the applicant. Access issues to the Beverly Hills house prevented a full evaluation of this property. However, it is presumed eligible for listing in the California Register. Therefore, the Beverly Hills House is presumed a historical resource (i.e. significant) under CEQA.

CEQA guidelines state "a project that may cause a substantial adverse change in the significance of a historical resource...may have a significant effect on the environment." Furthermore, substantial adverse change is defined by the California Public Resource Code as "demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired" (PRC §5020.1[q]). Any project that proposes such impacts would result in a loss of integrity and as such would constitute a "substantial adverse change in the significance of a historical resource." The Project includes demolition of the existing single-family home on Parcel 2, construction of an express car wash and detail center, and associated parking and landscaping improvements and a General Plan Amendment and Zone Change from Low Medium Residential to General Commercial on Parcel 2. The Project has been designed to include an 8-foot concrete-block wall and 17-foot setback to provide a buffer along the eastern edge of the development. Construction of the car wash development will involve minimal

ground disturbing activities. No physical changes to the Beverly Hills House would occur with development of the car wash and there are no direct impacts to the Beverly Hills House from the car wash development. The Project will not result in demolition, destruction, relocation, or alteration such that the significance of the resource would be impaired.

Preservation in place is the preferred manner of mitigating impacts to historical resources under CEQA. Preservation is anticipated at 9786 Arrow Route (the Beverly Hills House), since Project-related impacts are not proposed within the boundaries of this property. Should any alterations be proposed to the Beverly Hills House, they would take place pursuant to the U.S. Secretary of the Interior Standards for Rehabilitation, under the supervision of a professional that meets the U.S. Secretary of the Interior Professional Qualification Standards for Historic Architecture. The Project proposes to construct an express carwash adjacent to the house at 9786 Arrow Route, "The Beverly Hills House." The Project will take place on parcels adjacent to the Beverly Hills House property, and the house will be preserved in place. Although the house itself will not be moved or altered, the Project will substantially alter the historic property's setting. Setting is one of the seven aspects of integrity, and while it is particularly important to integrity of historic districts, it is less important for an individual landmark. This house was moved in the 1950s and lost its original integrity of location and setting. A building that has been moved, however, may retain sufficient integrity to qualify for historic listing after it has been moved if, like this house, its primary significance is architecture or design (Criterion C). Therefore, the proposed alteration to the current setting will not have a substantial impact on the building's integrity, since it is able to convey its important architectural features even though its c1928 setting and location are no longer present. The proposed Project will therefore not result in a significant adverse to a historical resource.

The proposed Project does not include any direct or indirect changes to the Beverly Hills House and is therefore preserving the house and property as they currently exist. According to the Historical Resources Evaluation, construction and operation of the express car wash development would not cause a substantial adverse change in the Beverly Hills House. There would be no direct impact on the resource; therefore, there would be no adverse impact. In the future should any physical changes be proposed for the Beverly Hills House, the City would require completion of an evaluation to determine eligibility for listing in the California Register. Any applicant(s) for future development at 9786 Arrow Route would be required to conduct a full historic resource impact analysis on the Beverly Hills House prior to receipt of demolition permits. The analysis would include the following: 1) a full California Register eligibility evaluation of the Beverly Hills House, 2) an analysis of direct and indirect construction and operation impacts of the proposed development on the Beverly Hills House, and 3) recommendations for mitigation measures, if necessary. If it is determined that the development would result in demolition, destruction, relocation, or alteration of the Beverly Hills House, such that the significance of the resource would be impaired, the applicant would be required to implement the recommended mitigation measures to the satisfaction of the City's Community Development Director and/or Historic Preservation Commission. Mitigation measures shall include, but not be limited to, data collection, preservation of the resource in place, or resource relocation. Should the property be determined to be eligible, a report would be prepared indicating options for mitigation in priority preference order of Preservation, Data Collection, and Resource Relocation. As such, the Project will have a less than significant impact.

b) Less than Significant Impact with Mitigation Incorporated. Based on the cultural resources records search and field survey, findings for archaeological resources were negative. Given the urbanized nature of the Project vicinity, previously recorded archaeological resources are not anticipated to be uncovered during Project construction activities. However, formal mitigation was requested during consultation with local Native American Tribes. Specifically, the San Manuel Band of Mission Indians (SMBMI) requested incorporation of Mitigation Measures SMBMI-1 and SMBMI-2 to reduce impacts to archaeological resources. In addition, the Gabrieleño Band of Mission Indians-Kizh Nation (GBMIKN) requested inclusion of Mitigation Measures GBMIKN-1 through GBMIKN-3 to reduce impacts buried archaeological resources. With implementation of Mitigation Measures SMBMI-1 and SMBMI-2 and GBMIKN-1 through GBMIKN-3, impacts to archaeological resources will be less than significant.

Mitigation Measures

SMBMI-1: In the event that pre-contact cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area

may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within SMBI-4, if any such find occurs and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

SMBMI-2: If significant Native American historical resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within SMBI-4. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

GBMIKN-1: Retain a Native American Monitor/Consultant: The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

GBMIKN-2: Unanticipated Discovery of Tribal Cultural and Archaeological Resources: Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and archaeological resources.

GBMIKN-3: Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

c) Less than Significant Impact with Mitigation Incorporated. The Project site consists of two previously disturbed parcels. One of the parcels is currently undeveloped (Parcel 1) and one contains a single-family residence (parcels 2). The Project will include demolition of the existing single-family home on parcel 2 and construction of an express car wash and associated parking and landscaping improvements. The Project also includes a General Plan Amendment and Zone Change from residential to commercial on Parcel 2. Any buried paleontological resources would have already been uncovered or destroyed at the time of initial grading of the Project site. However, in the event that paleontological materials are uncovered, Mitigation

Measures CUL-1 through CUL-4 are required to reduce potentially significant impacts to previously undiscovered paleontological resources and/or unique geological features that may be accidentally encountered during Project implementation to a less than significant level. Mitigation Measure CUL-1 requires that a paleontological sensitivity training for construction personnel be conducted before commencement of excavation activities. Mitigation Measure CUL-2 requires that a qualified paleontologist conduct periodic paleontological spot checks to determine if excavations have extended into older Pleistocene alluvial deposits as well as the presence of a paleontological monitor during all excavations into the local geologic formation or into older Pleistocene alluvial deposits. Mitigation Measure CUL-3 requires that ground-disturbing activities be halted or diverted away from the vicinity and that a buffer of at least 50 feet be established if paleontological materials are encountered until an appropriate treatment plan is coordinated. Mitigation Measure CUL-4 requires that a professional paleontologist prepare a report summarizing the results of the monitoring efforts, methodology used, and the description of fossils collected and their significance. With implementation of Mitigation Measures CUL-1 through CUL-4, impacts to paleontological resources will be less than significant as a result of construction of the proposed car wash.

Mitigation Measures

- CUL-1: Conduct Paleontological Sensitivity Training for Construction Personnel.** The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and, the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.
- CUL-2: Conduct Periodic Paleontological Spot Checks During Grading and Earth-Moving Activities.** The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, shall conduct periodic Paleontological Spot Checks beginning at depths below six (6) feet to determine if construction excavations have extended into older Quaternary deposits. After the initial Paleontological Spot Check, further periodic checks will be conducted at the discretion of the qualified paleontologist. If the qualified paleontologist determines that construction excavations have extended into the older Quaternary deposits, construction monitoring for Paleontological Resources will be required. The Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into the older Pleistocene alluvial deposits. Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known paleontological resources and/or unique geological features, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of paleontological resources and/or unique geological features encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional paleontologist.
- CUL-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered.** In the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with

subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.

CUL-4: Prepare Report Upon Completion of Monitoring Services. Upon completion of the above activities, the professional paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to the Applicant, the City, the Natural History Museums of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.

d) Less than Significant Impact with Mitigation Incorporated. No known human remains are anticipated to be located on or beneath the Project site. However, formal mitigation was requested during consultation with local Native American Tribes. Specifically, the San Manuel Band of Mission Indians (SMBMI) requested incorporation of Mitigation Measures SMBMI-3 to reduce impacts to previously undiscovered buried human remains. In addition, the Gabrieleño Band of Mission Indians-Kizh Nation (GBMIKN) requested inclusion of Mitigation Measures GBMIKN-4 through GBMIKN-8 to reduce impacts to buried human remains. In the unlikely event that human remains are uncovered the contractor is required to halt work in the immediate area of the find and to notify the County Coroner, in accordance with Health and Safety Code § 7050.5, who must then determine whether the remains are of forensic interest. If the Coroner, with the aid of a supervising archaeologist, determines that the remains are or appear to be of a Native American, he/she must contact the Native American Heritage Commission for further investigations and proper recovery of such remains, if necessary. Therefore, with implementation of Mitigation Measures SMBMI-3 and GBMIKN-4 through GBMIKN-8, impacts to buried human remains will be less than significant.

Mitigation Measure

SMBMI-3: If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

GBMIKN-4: Unanticipated Discovery of Human Remains and Associated Funerary Objects: Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

GBMIKN-5: Resource Assessment & Continuation of Work Protocol: Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

GBMIKN-6: Kizh-Gabrieleno Procedures for burials and funerary remains: If the Gabrieleno Band of Mission Indians-Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact.

Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

GBMIKN-7: Treatment Measures: Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

GBMIKN-8: Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

Cumulative Impacts

With mitigation, the Project would result in no impacts to historical resources and less than significant impacts to known archaeological or paleontological resources and known human remains. The chances of cumulative impacts occurring as a result of Project implementation plus implementation of other Projects in the region is not likely since Projects would be subject to individual Project-level environmental review. Since there would be no Project-related impacts and due to existing laws and regulations in place to protect cultural resources and prevent significant impact to paleontological resources, the potential incremental effects of the Project would not be cumulatively considerable.

4.6 – Geology and Soils

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

a.i) **Less than Significant Impact.** Although the Project site is located in seismically active Southern California, the site is not located within an Alquist-Priolo Earthquake Fault Zone.¹⁵ No active faults have been identified at the ground surface on the Project site. Impacts would be less than significant.

a.ii) **Less than Significant Impact.** The Project site is located in an area of high regional seismicity. The Red Hill fault is approximately 3 miles northwest of the Project site and the Cucamonga fault is approximately 5.75 miles north of the Project site. Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults. The Project is subject to the seismic design criteria of the California Building Code (CBC). The 2016 California Building Code (California Building Code, California Code of Regulations, Title 24, Volume 2) contains seismic safety provisions with the aim of preventing building collapse during a design earthquake, so that occupants would be able to evacuate after the earthquake. A design earthquake is one with a two percent chance of exceedance in 50 years, or an average return period of 2,475 years. Adherence to these requirements will reduce the potential of the building from collapsing during an earthquake, thereby minimizing injury and loss of life. Although structures may be damaged during earthquakes, adherence to seismic design requirements will minimize damage to property within the structure because the structure is designed not to collapse. The CBC is intended to provide minimum requirements to prevent major structural failure and loss of life. Adherence to existing regulations will reduce the risk of loss, injury, and death; impacts due to strong ground shaking would be less than significant with construction of the proposed car wash.

a.iii) **Less than Significant Impact.** Liquefaction generally occurs as a “quicksand” type of ground failure caused by strong ground shaking. The primary factors influencing liquefaction potential include groundwater, soil type, relative density of the sandy soils, confining pressure, and the intensity and duration of ground shaking. The California Geological Survey (CGS) has not yet conducted seismic hazard mapping in the area of the Project site. The San Bernardino County Geologic Hazard Overlay Map does not include the Project site within a liquefaction susceptibility area; therefore, the subsurface conditions at the site are not considered to be conducive to liquefaction.¹⁶ Based on the mapping performed by San Bernardino County and the conditions encountered at the site, which have been discussed in detail in previous sections, adverse impacts due to the risk of liquefaction are less than significant.

a.iv) **No Impact.** Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. The Project site is relatively flat and, according to the San Bernardino County Geologic Hazard Overlay Map, is not located within an area susceptible to landslides. Therefore, there would be no impact from landslides on the Project and no mitigation is required.

b) **Less than Significant Impact.** Topsoil is used to cover surface areas for the establishment and maintenance of vegetation due to its high concentrations of organic matter and microorganisms. Little native topsoil is likely to occur on the site because of previous development activities. Construction of the proposed Project would have the potential to expose surficial soils to wind and water erosion during construction activities. Wind erosion would be minimized through soil stabilization measures required by South Coast Air Quality Management District (SCAQMD) Rule 403 (Fugitive Dust), such as daily watering. Water erosion would also be prevented through the City’s standard erosion control practices (Municipal Code Section 8.21.160) required pursuant to the California Building Code and the National Pollution Discharge Elimination System (NPDES), such as silt fencing or berms. Following Project construction, the site would be covered completely by paving, the car wash structure, and landscaping. Impacts related to soil erosion would be less than significant with implementation of existing regulations.

c) **Less than Significant Impact.** Impacts related to liquefaction and landslides are discussed above in Sections 4.6.a and 4.6.b. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake shaking combined. Such movement can occur on slope gradients of as little as one degree. Lateral spreading typically damages pipelines, utilities, bridges, and structures.

Lateral spreading of the ground surface during a seismic activity usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place toward a free face (i.e. retaining wall, slope, or channel) and to lesser extent on ground surfaces with a very gentle slope. Due to the absence of any channel within or near the Project site, and the subsurface soil conditions that are not conducive to liquefaction, the potential for lateral spread occurring on the Project site is considered to be negligible. As shown above, the Project site is not identified as being located on a geologic unit or soil that has been identified as being unstable or having the potential to result on-site or off-site landslide, lateral spreading, subsidence,

liquefaction or collapse. The Project site is relatively flat and consists of non-native alluvial soils. The Project is required to be constructed in accordance with the CBC. Compliance with existing CBC regulations would limit hazard impacts arising from unstable soils to less than significant levels. Therefore, the Project would not likely result in landslides, lateral spreading, subsidence, liquefaction or collapse and no mitigation is required.

d) **Less than Significant Impact.** It is unknown whether the Project would be located on expansive soils. In any case, the Project would be required to be in conformance with the California Building Code, City regulations, and other applicable standards. Conformance with standard engineering practices and adherence to design criteria would reduce impacts related to expansive soil potential to a less than significant level.

e) **No Impact.** The Project proposes to connect to the existing municipal sewer system. The Project would connect to this system and would not require use of septic tanks. No impact would occur.

Cumulative Impacts

The potential cumulative impact related to earth and geology is typically site-specific. The analysis herein determined that the Project would not result in any significant impacts related to landform modification, grading, or the destruction of a geologically significant landform or feature with implementation of mitigation. Moreover, existing State and local laws and regulations are in place to protect people and property from substantial adverse geological and soils effects, including fault rupture, strong seismic ground shaking, seismic-induced ground failure (including liquefaction), and landslides. Existing laws and regulations also protect people and property from adverse effects related to soil erosion, expansive soils, loss of topsoil, development on an unstable geologic unit or soil type that could result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. These existing laws and regulations would render potentially adverse geological and soil effects of the Project to a level considered less than significant. Moreover, these existing laws and regulations ensure that past, present, and reasonably foreseeable future projects in the Rancho Cucamonga region do not result in substantial adverse geological and soils effects. As a result, the existing legal and regulatory framework would ensure that the incremental geological and soils effects of the Project would not result in greater adverse cumulative effects when considered together with the effects of other past, present, and reasonably foreseeable future projects in the Rancho Cucamonga region. The impacts of the Project-related to geology and soils would be less than cumulatively considerable.

4.7 – Greenhouse Gas Emissions

Would the Project:

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

a) **Less than Significant Impact.** Climate change is the distinct change in measures of climate for a long period of time.¹⁷ Climate change is the result of numerous, cumulative sources of greenhouse gas emissions all over the world. Natural changes in climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (e.g., changes in ocean circulation). Human activities can affect the atmosphere through emissions of greenhouse gases (GHG) and changes to the planet's surface. Human activities that produce GHGs are the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and raising livestock, deforestation activities; and some agricultural practices.

Greenhouse gases differ from other emissions in that they contribute to the "greenhouse effect." The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Greenhouse gases occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Since 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. Emissions of greenhouse gases affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way the Earth absorbs gases from the atmosphere.

The County of San Bernardino adopted its Greenhouse Gas Reduction Plan (GHG Plan) in 2011, which provides guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the County of San Bernardino. The reduction strategies in the GHG Plan correspond to reduction measures. Measurable reductions in GHG emissions are achieved through adherence to the County's DRP procedures. The County's GHG DRP procedures, updated in 2015, are streamlined by 1) applying a uniform set of performance standards to all development project, and 2) utilizing Screening Tables to mitigate project GHG emissions. Projects have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions in lieu of the utilizing the Screening Tables. A review standard of 3,000 MT CO₂e per year is used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions.

Projects that exceed the 3,000 MTCO₂e per year are required to either achieve a minimum 100 points per the Screening Tables or a 31% reduction over 2007 emissions levels. Consistent with CEQA guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

The car wash project will include activities that emit greenhouse gas emissions over the short- and long-term. While one Project could not be said to cause global climate change, individual Projects contribute cumulatively to greenhouse gas emissions that result in climate change. A greenhouse gas emissions inventory was prepared for the Project and is analyzed below.

Short-Term Emissions

The Project will result in short-term greenhouse gas emissions from activities associated with construction of the car wash. Construction assumptions for the proposed Project are discussed in Section 4.3 of this document. Greenhouse gas emissions will be released by equipment used for demolition, site preparation, grading, building construction, paving, and architectural coating activities. GHG emissions will also result from worker and vendor trips to and from the site. Table 9, *Car Wash Construction Greenhouse Gas Emissions*, summarizes the estimated yearly emissions from construction activities. Carbon dioxide emissions from construction equipment and worker/vendor trips were estimated utilizing the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (see Appendix A). Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Because of this difference, SCAQMD recommends in its draft threshold to amortize construction emissions over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions in order to generate an approximate Project GHG inventory. Amortized car wash construction emissions are included in Table 10.

Table 7
Car Wash Construction Greenhouse Gas Emissions

Construction Year	GHG Emissions (MT/YR)			
	CO ₂	CH ₄	N ₂ O	TOTAL*
2019	126.76	0.02	0.00	127.29
TOTAL	126.76	0.02	0.00	127.29
AMORTIZED TOTAL [^]	4.23	0.00	0.00	4.23
* MTCO ₂ E Note: Slight variations may occur due to rounding and variations in modeling software ^ Amortized over 30-years				

Long-Term Emissions

The proposed car wash/detail center activities will result in continuous greenhouse gas emissions from mobile and operational sources. Mobile sources including vehicle trips to and from the development will result primarily in emissions of CO₂ with minor emissions of CH₄ and N₂O. The most significant GHG emission from natural gas usage will be methane. Electricity usage by the Project and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO₂ emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas emissions for construction of the car wash.

To determine long-term emissions, CalEEMod was used. The methodology utilized for each emissions source is based on the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* handbook.¹⁸ A summary of the car wash's net long-term greenhouse gas emissions is included in Table 12, *Car Wash Operational Greenhouse Gas Emissions*. Mobile sources are based on annual vehicle miles traveled (VMT) based on daily trip generation identified in the Project traffic report.¹⁹ Natural gas usage and electricity usage are based on default demand figures utilized in CalEEMod. Solid waste generation is also based on CalEEMod defaults. Emissions are presented as metric tons of carbon dioxide equivalent (MTCO₂E) meaning that all emissions have been weighted based on their Global Warming Potential (GWP) (a metric ton is equal to 1.102 US short tons).

Table 8
Car Wash Operational Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO ₂	CH ₄	N ₂ O	TOTAL *
Area	0.00	0.00	0.00	0.00
Energy	36.23	0.00	0.00	36.38
Mobile	766.55	0.04	0.00	767.57
Solid Waste	5.65	0.33	0.00	14.01
Water/Wastewater	10.05	0.06	0.00	12.08
TOTAL	818.47	0.44	0.00	830.05
* MTCO ₂ E/YR Note: Slight variations may occur due to rounding				

Greenhouse Gas Emissions Inventory

Table 14, *Car Wash Greenhouse Gas Emissions Inventory*, summarizes the yearly estimated greenhouse gas emissions from construction and operational sources. The total yearly carbon dioxide equivalent emissions for the car wash are estimated at 834.28 MTCO₂E. This does not exceed the established GHG emissions threshold of 3,000 MTCO₂E per year. Impacts from the proposed car wash development will be less than significant.

Table 9
Car Wash Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)			
	CO ₂	CH ₄	N ₂ O	TOTAL *
Construction	4.23	0.00	0.00	4.23
Operation	818.47	0.44	0.00	830.05
Total				834.28
Significance Threshold				3,000
Significant Impact?				No
* MTCO ₂ E/YR Note: Slight variations may occur due to rounding ^ Construction impacts amortized over 30-years				

b) **Less than Significant Impact.** As shown above, the Project would be consistent with the County of San Bernardino GHG Plan. Additionally, the Project's consistency with AB 32 and Senate Bill (SB) 32 are discussed below.

AB 32 Consistency. AB 32 was adopted in 2006 and requires California to reduce its GHG emissions to 1990 levels by 2020. CARB identified reduction measures to achieve this goal as set forth in the CARB Scoping Plan. Thus, projects that are consistent with the CARB Scoping Plan are also consistent with AB 32 goal.

The Project would generate GHG emissions, directly and indirectly, from a variety of sources. The CARB Scoping Plan includes strategies for implementation at the statewide level to meet the goals of AB 32. These strategies serve as statewide measures to reduce GHG emissions levels. The Project would be subject to the applicable measures established in the Scoping Plan because these measures are implemented at the state level. Therefore, the Project would not conflict or otherwise interfere with implementation of AB 32.

SB 32 Consistency. SB 32 was adopted in 2016 and requires the state to reduce statewide GHG emissions 40% below 1990 levels by 2030. SB 32 codifies the reduction target issued in Executive Order B-30-15. SB 32 builds upon the AB 32 goal of 1990 levels by 2020 and provides an interim goal to achieving Executive Order S-3-05's 2050 reduction goal of 80% below 1990 levels.

The CARB 2017 Scoping Plan identified reduction measures to achieve the SB 32 GHG reduction goal. Like the previously adopted Scoping Plans, the 2017 Scoping Plan includes statewide reduction measures that are implemented at the state level. The Project would be subject to the applicable measures established in the 2017 Scoping Plan because these measures are implemented at the state level.

Additionally, the 2014 Scoping Plan Update indicates "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32"; and it recognizes the potential for California to "reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050."

Moreover, the Project does not propose facilities or operations that would substantively interfere with any future County-mandated, state-mandated, or federally-mandated regulations enacted or promulgated to legally require development to assist in meeting state-adopted GHG emissions reduction targets, including those established under Executive Order S-3-05, Executive Order B-30-15, SB 32, or the 2017 Scoping Plan.

Therefore, the Project would not conflict with implementation of SB 32 or otherwise interfere with implementation of this or future goals.

Cumulative Impacts

GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. As discussed above, the Project's emissions would be below the County's threshold for of 3,000 MT per year of CO₂e for commercial projects and would not conflict with applicable plans. Thus, the Project's cumulative contribution of GHG emissions would be less than significant.

4.8 – Hazards and Hazardous Materials

Would the Project:

	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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

a) **Less than Significant Impact.** The Project could result in a significant hazard to the public if it includes the routine transport, use, or disposal of hazardous materials or places housing near a facility, which routinely transports, uses, or disposes of hazardous materials. The Project is located within a commercial and residential area and is bound by surface streets, commercial, uses and vacant land. The Project would not place housing near any hazardous materials facilities. The routine use, transport, or disposal of hazardous materials is primarily associated with industrial uses, which require such materials for manufacturing operations or produce hazardous wastes as by-products of production applications. The Project includes a car wash and a General Plan Amendment and Zone Change from residential to commercial and does not propose or facilitate any activity involving significant use, routine transport, or disposal of hazardous substances.

Construction of the car wash would require the use and transport of hazardous materials such as asphalt, paints, and other solvents. Construction activities could also produce hazardous wastes associated with the use of such products. Construction would require ordinary construction activities and would not require a substantial or uncommon amount of hazardous materials to complete. All hazardous materials are required to be utilized and transported in accordance with their labeling pursuant to federal and state law. Routine construction practices include good housekeeping measures to prevent/contain/clean-up spills and contamination from fuels, solvents, concrete wastes and other waste materials. Impacts would be less than significant.

With regard to Project operation, widely used hazardous materials common at commercial uses include paints and other solvents, cleaners, and pesticides. Operation of the proposed car wash would involve the use of cleaning solutions for daily operation and paints for routine maintenance and re-coating of structures. The remnants of these and other products are disposed of as household hazardous waste (HHW) that includes used dead batteries, electronic wastes, and other wastes that are prohibited or discouraged from being disposed of at local landfills. Through compliance with existing regulations, use of common household hazardous materials and their disposal does not present a substantial health risk to the community. Impacts associated with the routine transport, use, or disposal of hazardous materials or wastes would be less than significant.

b) **Less than Significant Impact.** According to the State Water Resources Control Board, there are no open cases of leaking underground storage tanks (LUST) within one-quarter mile of the Project site.²⁰ The property located at the northeast corner of Arrow Route and Archibald that is scheduled to be developed with a gas station, is the site of a former gas station and a former LUST cleanup site. This case has been closed since 2001, and according to the Project Phase I Environmental Site Assessment (ESA), performed by RGS Engineering Geology, the likelihood of petroleum product contamination existing on, or migrating onto the site, is considered low (See Appendix C, Phase I ESA). There would be a less than significant impact related to the release of hazardous materials into the environment as a result of development of the proposed car wash and adoption of the General Plan Amendment and Zone Change.

Construction of the Project would require the use and transport of hazardous materials such as asphalt, paints, and other solvents. Construction activities could also produce hazardous wastes associated with the use of such products. Construction of the proposed express car wash would require ordinary construction activities and would not require a substantial or uncommon amount of hazardous materials to complete. All hazardous materials are required to be utilized and transported in accordance with their labeling pursuant to federal and state law. Routine construction practices include good housekeeping

measures to prevent/contain/clean-up spills and contamination from fuels, solvents, concrete wastes and other waste materials. Impacts would be less than significant.

Activities associated with the demolition of the existing single-family home may pose a hazard with regard to asbestos containing materials (ACM) and lead-based paints. ACM were used on a widespread basis in building construction prior to and into the 1980s; therefore, it is assumed that ACM is present on the Project site and will need to be handled following specific regulations/guidelines described below.

Asbestos generally does not pose a threat when it remains intact. When asbestos is disturbed it becomes airborne. SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) requires work practices that limit asbestos emissions from building demolition and renovation activities, including the removal and disturbance of ACM.²¹ This rule is designed to protect uses and persons adjacent to demolition or renovation activity from exposure to asbestos emissions. Rule 1403 requires a certified inspector to survey any facility being demolished or renovated for the presence of all friable and Class I and Class II non-friable ACM. The applicant must also notify SCAQMD of their intent to perform demolition or renovation of any buildings that may contain asbestos prior to demolition and requires that all ACM is removed prior to any demolition. Rule 1403 also establishes notification procedures, removal procedures, handling and clean-up procedures, storage, disposal, landfilling requirements, and warning label requirements, including HEPA filtration, the "glovebag" method, wetting, and some methods of dry removal that must be implemented when disturbing appreciable amounts of ACM (more than 100 square feet of surface area). All ACM shall be disposed of at a waste disposal site operated in accordance with Rule 1403. The applicant will also ensure the safety of construction workers involved in the ACM removal by complying with all California Asbestos Standards in Construction, including, but not limited to minimum air circulations, use of respirators, wetting of materials, clothing laundering, construction and demolition equipment requirements, and shielding specifications. Adherence to SCAQMD Rule 1403 would ensure that impacts related to the release of ACM are less than significant.

Exposure of construction workers to lead-based paint during demolition activities is also of concern, similar to exposure to asbestos. Exposure of surrounding land uses to lead from demolition activities is generally not a concern because demolition activities do not result in appreciable emissions of lead.²² The primary emitters of lead are industrial processes. Any lead-based paint utilized on the exterior and interior of the existing single-family home would generally remain inside the structure or close to the exterior of the building and would be removed during demolition. Improper disposal of lead-based paint could contaminate soil and subsurface groundwater in and under landfills not properly equipped to handle hazardous levels of this material. Due to the age of the buildings it is assumed that lead-based paint is present. Therefore, 8 CCR Section 1532.1 (California Construction Safety Orders for Lead) must be followed for the demolition of all existing structures requiring exposure assessment and compliance measures to keep worker exposure below action levels. The Project is also subject to Title 22 requirements for the disposal of solid waste contaminated with excessive levels of lead. Testing, monitoring, containment, and disposal of lead-based materials will comply with all Cal/OSHA standards and regulations under California Construction Safety Orders for Lead section 1532. Adherence to standard regulation would ensure that impacts related to the release of lead based paints would be less than significant.

With regard to operation, the proposed car wash would not involve the use of hazardous materials or generate hazardous waste that could 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. Project operation would involve the use of solvents, cleaners, and waxes used for typical car wash operations, and with compliance with existing regulations, would not pose a significant risk to the environment or humans. Impacts would be less than significant.

c) **Less than Significant Impact.** There is a special education school located approximately 200 feet to the north of the Project site (Mulberry Early Education Center). However, as mentioned above, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Impacts will be less than significant.

d) **No Impact.** The Project is not located on a site listed on the state *Cortese List*, a compilation of various sites throughout the state that have been compromised due to soil or groundwater contamination from past uses.²³

Based upon review of the *Cortese List*, the Project site is not:

- listed as a hazardous waste and substance site by the Department of Toxic Substances Control (DTSC),²⁴
- listed as a leaking underground storage tank (LUFT) site by the State Water Resources Control Board (SWRCB),²⁵
- listed as a hazardous solid waste disposal site by the SWRCB,²⁶
- currently subject to a Cease and Desist Order (CDO) or a Cleanup and Abatement Order (CAO) as issued by the SWRCB,²⁷ or
- developed with a hazardous waste facility subject to corrective action by the DTSC.²⁸

No impact will occur in relation to hazardous materials sites.

e-f) **No Impact.** There are no public airports, private airstrips, or heliports within two miles of the Project site.²⁹ The nearest airport is Ontario International Airport, located approximately 3.25- miles to the south. The Project will not exceed 24-feet in height. No impact related to airport operations would occur.

g) **Less than Significant Impact.** Per state Fire and Building Codes, sufficient space will have to be provided around the buildings for emergency personnel and equipment access and emergency evacuation. All Project elements, including landscaping, would be sited with sufficient clearance from existing and proposed structures so as not to interfere with emergency access to and evacuation from the facility. The car wash will be required to comply with the California Fire Code as adopted by the Rancho Cucamonga Municipal Code (Chapter 15.04.010). The car wash site plan includes one ingress/egress access point via a 50-foot wide driveway on Arrow Route. The car wash driveway would be constructed to California Fire Code specifications and would allow emergency access and evacuation from the site. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or evacuation plan because no permanent public street or lane closures are proposed. Construction work in the street associated with the buildings would be limited to lateral utility connections would be limited to nominal potential traffic diversion. Project impacts would be less than significant.

h) **No Impact.** The Project site is not located within a fire hazard zone, as identified on the latest Fire Hazard Severity Zone (FHSZ) maps prepared by the California Department of Forestry and Fire Protection (CALFIRE).³⁰ There are no wildland conditions in the urbanized area where the Project site is located. No impact would occur.

Cumulative Impacts

The incremental effects of the Project related to hazards and hazardous materials, if any, are anticipated to be minimal, and any effects would be site-specific. Therefore, the Project would not result in incremental effects to hazards or hazardous materials that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future. The Project would not result in cumulatively considerable impacts to or from hazards or hazardous materials.

4.9 – Hydrology and Water Quality

Would the Project:

	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?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) 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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a) **Less than Significant Impact.** A project normally would have an impact on surface water quality if discharges associated with the project would create pollution, contamination, or nuisance as defined in Water Code § 13050, or that cause regulatory standards to be violated as defined in the applicable National Pollutant Discharge Elimination System (NPDES) stormwater permit or Water Quality Control Plan for the receiving water body. For the purpose of this specific issue, a significant impact could occur if the proposed Project would discharge water that does not meet the quality standards of the agencies that regulate surface water quality and water discharge into stormwater drainage systems. Significant impacts could also occur if the Project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board (SWRCB). These regulations include preparation of a Stormwater Pollution Prevention Plan (SWPPP) to reduce potential water quality impacts during construction activity (Rancho Cucamonga Municipal Code Section 19.20.190) and the implementation of post-construction best management practices (BMPs) such as detention basins, infiltration ponds, porous pavement, sand and organic filters, etc. (Rancho Cucamonga Municipal Code Section 19.20.110).

Construction Impacts

Three general sources of potential short-term, construction-related stormwater pollution associated with the Project include: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth-moving activities which, when not controlled, may generate soil erosion via storm runoff or mechanical equipment. All new development Projects equal to one acre or more are subject to San Bernardino County NPDES Permit No. CAS618036. The car wash development would disturb approximately 1.36 acres of land and therefore will be subject to NPDES permit requirements during construction activities. In addition, pursuant to Municipal Code Section 19.20.190, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared and submitted for the proposed Project. All construction projects must apply BMPs that include drainage controls such as detention ponds, dikes, filter berms, and down drains to prevent runoff, and utilizing plastic covering to prevent erosion. Compliance with City discharge requirements would ensure that construction of the Project would not violate any water quality standards or discharge requirements, or otherwise substantially degrade water quality. Impacts would be less than significant with implementation of existing regulations.

Operational Impacts

An Infiltration Testing Report was prepared by Christopher Krall, P.G. of RGS Engineering Geology, dated September 12, 2018 (See Appendix D). The purpose of the testing was to determine the vertical infiltration rate of stormwater infiltration for the soil below the site in order to include the appropriate storage capacity for the proposed infiltration basin. Proposed construction will increase impervious areas on the Project site as the site currently consists of mostly impervious surfaces. The approximately 1.36-acre site will be replaced with a car wash structure, vacuum area, detail center, and associated paving and landscaping. Runoff from the developed site would result in increased potential water contamination from urban pollutants that are commonly found in surface parking lots, ornamental landscape planters and from atmospheric buildup on rooftops. Runoff from the car wash itself would not occur, as all waste water used in the car wash will be retained in the car wash building and recycled and reused in future car wash operations.

Stormwater would be collected on site and conveyed to the existing storm drain system under Arrow Route. The Project would

be subject to post-construction BMPs to address increases in impervious surfaces, methods to decrease incremental increases in off-site stormwater flows, and methods for decreasing pollutant loading in off-site discharges. A key design criterion is to treat the first $\frac{3}{4}$ -inch rainstorm flows, since the first rains typically carry the most concentrated levels of pollution that have built up since the last storm. Common post-construction BMPs include retaining stormwater on-site to filter back into the groundwater. The car wash development would consist of approximately 15,607 square feet of landscaped area along the boundaries of the site and in landscaped planters in the interior of the site, comprising approximately 26% of the overall site total. An additional 10-foot landscaping dedication will be included along the car wash's southern boundary with the sidewalk on Arrow Route, totaling 2,660 square feet of additional landscaping. These landscaped areas would serve as bio swales for runoff collection and treatment. As previously mentioned, the car wash development includes a water runoff retention basin near the south-central portion of the site that will act to treat flows before being discharged into the Municipal storm drain system.

Landscaped areas and on-site storm drainage facilities will collect stormwater to be conveyed to the bio swales for treatment, and then pumped to the City storm drainage system on Arrow Route. The proposed Project would not generate hazardous wastewater that would require any special waste discharge permits. All wastewater associated with the building's interior plumbing system would be discharged into the local sewer system for treatment at the regional wastewater treatment plant. Although the amount of impervious surface would be greater than existing conditions, runoff would be captured on site and conveyed through a proposed on-site storm drainage system that includes water treatment at the site's various bio swales prior to being discharged into the municipal storm drain at Arrow Route. Impacts associated with operation of the proposed Project would be less than significant with implementation of existing regulations.

b) **Less than Significant Impact.** If the Project removes an existing groundwater recharge area or substantially reduces runoff that results in groundwater recharge such that existing wells would no longer be able to operate, a potentially significant impact could occur. As described in the Infiltration Testing Report, groundwater was encountered in both exploratory trench excavations at a depth of approximately 15 feet below the ground surface corresponding to a depth of more than 10 feet below the proposed infiltration invert. In general, groundwater does not occur in this area within 100 to 200 feet of the ground surface. Project-related grading would only go a few feet below the surface and would not reach the depth of the groundwater table. No disturbance of groundwater is anticipated. The proposed building footprint and pavement area would increase impervious surface coverage on the site, thereby reducing the total amount of infiltration onsite. However, infiltration of irrigation water through soil and water from runoff through soft-bottom channels would ensure continued groundwater recharge in Rancho Cucamonga as impervious surfaces increase. The Project site is not utilized for groundwater recharge and will include landscaped areas that would serve as infiltration. Because this site is not managed for groundwater supplies and would provide landscaped areas for continued infiltration, this change in infiltration would not have a significant effect on groundwater table level. Impacts related to development of the proposed Project would be less than significant.

c) **Less than Significant Impact.** Potentially significant impacts to the existing drainage pattern of the site or area could occur if development of the Project results in substantial on- or off-site erosion or siltation. Stormwater would be collected on site and conveyed to the various on-site bio swales and an infiltration basin for treatment and then conveyed to the City's storm drainage system in Arrow Route. Therefore, the drainage pattern would not be substantially altered in a manner that could cause increases in erosion off-site. Erosion and siltation reduction measures would be implemented during construction. At the completion of construction, the site would consist of impervious surfaces and would therefore not be prone to substantial erosion. No streams cross the Project site; thus, the Project would not alter any stream course. Impacts would be less than significant.

d-e) **Less than Significant Impact.** No streams traverse the Project site; thus, the Project would not result in the alteration of any stream course. During construction, the Project applicant would be required to comply with drainage and runoff guidelines pursuant to Municipal Code Chapter 19.20.

With regard to Project operation, construction of the car wash would increase the net area of impermeable surfaces on the site; therefore, increased discharges to the City's existing storm drain system would likely occur. As shown on the Project site plans, stormwater associated with the proposed Project would be collected on site and conveyed to the various on-site bio

swales for treatment and then conveyed to the City's storm drainage system at Arrow Route. Permits to connect to the existing storm drainage system would be obtained prior to construction. All drainage plans are subject to City review and approval. These requirements would apply to the proposed Project. Therefore, the increase in discharges would not impact local storm drain capacity. The Project is not an industrial use and therefore would not result in substantial pollutant loading such that treatment control BMPs would be required to protect downstream water quality. In addition, as mentioned above, runoff from the car wash itself would not occur, as all waste water used in the car wash will be retained in the car wash building and recycled and reused in future car wash operations. Post-construction BMP's, as described above, would ensure the Project would not result in substantial pollutant loading. Impacts related to the proposed Project Change would be less than significant.

f) **Less than Significant Impact.** The Project does not propose any uses that could have the potential to otherwise degrade water quality beyond those issues discussed in Section 4.9 herein. Impacts would be less than significant.

g & h) **No Impact.** According to flood maps prepared by the Federal Emergency Management Agency, the Project site is not located within a 100-year flood floodplain.³¹ No impact would occur.

i) **No Impact.** According to the Rancho Cucamonga General Plan Health and Safety Element, the Project site is not located within a dam inundation area.³² No impact would result.

j) **No Impact.** The City is not exposed to tsunami hazards due to its inland location. In addition, no large water bodies that would pose potential for seiche are located in the Project area. The potential for mudflows is unlikely given the site's distance from hillside and mountainous terrain. No impact would occur.

Cumulative Impacts

The potential impacts related to hydrology and storm water runoff are typically site-specific BMPs are implemented at the project level. The analysis above determined that the implementation of the Project would not result in significant impacts. Therefore, the Project would have a less than significant impact under most hydrology criteria, and therefore could not contribute toward a cumulative impact. In regard to Project impacts that would be considered less than significant, such impacts are not expected to result in compounded or increased impacts when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects, as other projects would be subject to similar laws and requirements regarding hydrology practices.

4.10 – Land Use and Planning

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a) **No Impact.** The Project is surrounded by commercial uses to the west and south, a school to the north, and residential uses to the east. The site is currently designated in the City's General Plan and Zoning Code for General Commercial uses on Parcel 1, and Low Medium Density Residential on Parcel 2. The Project includes a General Plan Amendment and Zone Change on Parcel 2 from Low Medium Density Residential to General Commercial, bringing the entire Project site under the same General Commercial designation. Therefore, the Project is consistent and compatible with the surrounding land uses. The Project does not involve construction of any roadway, flood control channel, or other structure that would physically divide any portion of the community. Therefore, no impact would occur.

b) **Less than Significant Impact.** Parcel 1 is designated as General Commercial in the City's General Plan and is zoned (GC) General Commercial. However, Parcel 2 is designated as Low Medium Density Residential in the General Plan, and zoned (LM) Low Medium (4-8 du/ac) residential. Therefore, the Project includes a General Plan Amendment and Zone Change for Parcel 2 in order to make the site consistent. Section 17.34 (General Development Standards) of the Rancho Cucamonga Municipal Code provides general site development standards for commercial uses. The primary purpose of the General Commercial zone is to provide for general shopping with a variety of business, retail, personal, and related or similar services. The Project does not conflict with the intent or implementation of this designation as it allows for a variety of businesses and related services, of which a car wash and detail center would be. Furthermore, the Project would maintain the integrity of the commercial areas to the west and south in terms of density, use, and design. The Project does not include any feature that would circumvent any mitigating policies in the Rancho Cucamonga General Plan. Impacts would be less than significant.

c) **No Impact.** As discussed in Section 4.4.f above, the Project site is not located within any habitat conservation plan or community conservation plan. Therefore, no impact will occur.

Cumulative Impacts

The Project does not conflict with any existing land use regulations and therefore could not contribute towards any cumulative impacts. The Project does not propose any new roadways or other significant infrastructure improvements that would restrict access or require a diversion for existing travel routes. The Project does not result in an impact on any sensitive plant or animal species covered by a habitat conservation plan or natural community conservation plan, nor does it hinder the implementation

or establishing of such plans. For these reasons, the Project would not cumulatively contribute to land use conflicts and potential impacts are considered less than cumulative considerable.

4.11 – Mineral Resources

Would the Project:

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a-b) **No Impact.** The Project site is located in an almost completely urbanized area characterized by residential and commercial development and some vacant land. The Project site is not shown in the City's General Plan to be within an area defined by regionally significant aggregate resources and there are no mineral extractions or process facilities on or near the site.³³ No mineral resources are known to exist within the vicinity. Impacts related to the proposed car wash and General Plan Amendment and Zone Change would not occur.

Cumulative Impacts

The Project would not result in direct or indirect permanent or temporary impacts related to mineral resources. Therefore, the Project would not result in incremental effects to mineral resources that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. Thus, no cumulative impacts related to mineral resources would occur.

4.12 – Noise

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☒	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☒	☐	☐
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 expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

A Project Operational Noise Assessment was prepared by Jeremy Loudon, Principal, of Ldn Consulting, Inc. and dated August 28, 2019. A Project Construction Noise Assessment was also prepared by Mr. Loudon, and is dated January 7, 2019. These reports are included as Appendix E, *Noise Analyses*.^{34 35}

Fundamentals of Sound and Environmental Noise

Noise can be defined as unwanted sound. Sound (and therefore noise) consists of energy waves that people receive and interpret. Sound pressure levels are described in logarithmic units of ratios of sound pressures to a reference pressure, squared. These units are called *bels*. In order to provide a finer description of sound, a *bel* is subdivided into ten *decibels*, abbreviated dB. To account for the range of sound that human hearing perceives, a modified scale is utilized known as the A-weighted decibel (dBA). Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces a sound pressure level of 70 dBA when it passes an observer, two cars passing simultaneously would not produce 140 dBA. In fact, they would combine to produce 73 dBA. This same principle can be applied to other traffic quantities as well. In other words, doubling the traffic volume on a street or the speed of the traffic will increase the traffic noise level by 3 dBA. Conversely, halving the traffic volume or speed will reduce the traffic

noise level by 3 dBA. A 3 dBA change in sound is the beginning at which humans generally notice a *barely perceptible* change in sound and a 5 dBA change is generally *readily perceptible*.³⁶

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise have been developed. According to the California General Plan Guidelines for Noise Elements, the following are common metrics for measuring noise:³⁷

L_{EQ} (Equivalent Energy Noise Level): The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. L_{EQ} is typically computed over 1-, 8-, and 24-hour sample periods.

CNEL (Community Noise Equivalent Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00pm to 10:00pm and after addition of ten decibels to sound levels in the night from 10:00pm to 7:00am.

L_{DN} (Day-Night Average Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of ten decibels to sound levels in the night after 10:00pm and before 7:00am.

CNEL and L_{DN} are utilized for describing ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. L_{EQ} is better utilized for describing specific and consistent sources because of the shorter reference period.

City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code, under Section 17.66.050 – Noise Standards, provides the local government ordinance relative to community noise level exposure, guidelines, and regulations.

Operational Noise Standards

Pursuant to Rancho Cucamonga Municipal Code Section 17.66.050(F), exterior noise levels should not exceed 65 dBA between the hours of 7:00 AM and 10:00 PM at residential uses. The City of Rancho Cucamonga has adopted performance standards for commercial and office uses. All commercial and office uses shall not create any noise that would exceed an exterior noise level of 70 dBA when measured at the adjacent property line between the hours of 7:00 AM and 10:00 PM.

Construction Noise Restrictions

To control noise associated with the construction of the proposed Project the City of Rancho Cucamonga has established permitted hours of operation and noise level limits. According to Section 17.66.050(D)(4)(a) of the City of Rancho Cucamonga Development Code the following activities are exempt from the provisions of the noise standards:

- When adjacent to a residential land use, school, church or similar type of use, the noise generating activity does not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday, and provided that noise levels created do not exceed the base noise level standard of 65 dBA when measured at the adjacent property line.
- When adjacent to a commercial or industrial use, the noise generating activity does not take place between the hours of 10:00 p.m. and 6:00 a.m. on weekdays, including Saturday and Sunday, and provided noise levels created do not exceed the standards of 70 dBA at the adjacent property line.

Based on the nearby residential and school uses, the permitted hours of construction activity at the Project site shall be between 7:00 a.m. to 8:00 p.m. on weekdays, including on Saturdays, with no activity allowed on Sundays and holidays. In addition, the noise level standard of 65 dBA Leq shall apply to noise levels generated by Project construction at the nearby land uses. If the Project demonstrates compliance with these standards, the construction noise level impacts are considered exempt from the noise standards.

Existing Noise Environment

Noise level measurements were conducted by Ldn Consulting between the hours of 12:00 p.m. and 1:30 p.m. on May 9, 2018. Noise measurements were taken with a Larson Davis Model LxT Type 1 sound level meter set on “slow” response and “A-weighting.” The meter was positioned 5 feet above the existing ground elevation at all measurement locations. The sound level meter was calibrated before and after each measurement using a Larson-Davis calibrator, Model CAL 200. Table 16, *Summary of Existing Noise Level Measurements*, provides a summary of the noise level measurement and detailed measurement data is included in Appendix E.

Table 10
Summary of Existing Noise Level Measurements

ID	Location Description	Noise Level (dBA)		
		Leq	Lmin	Lmax
1	Central of site at northern property line – set back from roadways.	63.4	37.1	90.8

Source: Ldn Consulting, Inc. *Arbor Car Wash Facility Operational Noise Assessment*. August 28, 2019.

a, c, d) **Less than Significant Impact with Mitigation Incorporated.** The Rancho Cucamonga Municipal Code (Section 17.66.050) sets allowable levels for residential and commercial land uses. Exterior noise exposure for residential use is allowable up to 60 dBA and for commercial uses is allowable up to 65 dBA.

Construction Noise Levels

As previously mentioned, short-term construction noise impacts were analyzed by Ldn Consulting Inc. and presented in a Noise study dated January 7, 2018. Noise generated by the Project construction equipment will include a rubber tire dozer, a backhoe, power tools, concrete mixers and paving machine that can reach high levels. The number and mix of construction equipment are expected to occur from grading, building construction, and paving activities. This construction noise analysis was prepared using reference noise level measurements taken at similar sites and construction activities to describe the typical construction noise levels for each stage of Project construction. Noise levels generated by heavy construction equipment can range from approximately 65 dBA Leq to in excess of 80 dBA Leq when measured at 50 feet. However, these noise levels diminish with distance from the construction site at a rate of 6 dBA Leq per doubling of distance. For example, a noise level of 80 dBA Leq measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA Leq at 100 feet from the source to the receiver and would be further reduced to 68 dBA Leq at 200 feet from the source to the receiver. According to the project’s contractor, grading of the project will occur all in a single phase using a single rubber-tired dozer. No water truck will be required due to the size of the sight, access to a water supply line and the fact that the grading operations will only occur for 2-3 weeks. Trenching and underground earthwork will be completed using a single backhoe. Building construction will consist of concrete trucks and paving activities will utilize a paving machine. To determine the Project construction noise levels, measurements were collected for similar activities at several construction sites. Table 17, *Construction Reference Noise Levels*, provides a summary of the construction reference noise level measurements.

Table 11
Construction Reference Noise Levels

Noise Source	Reference Distance from Source (Feet)	Reference Noise Levels @ 50 Feet (dBA Leq)	Reference Noise Levels @ 100 Feet (dBA Leq) ⁵
Grading Activities ¹	50	73.5	67.5
Foundation Trenching ²	50	68.2	62.2
Building Construction ³	50	67.2	61.2
Paving Activities ⁴	50	70.4	64.4

¹ As measured by Ldn Consulting on 9/3/15 at a construction site located in the Ramona.
² As measured by Ldn Consulting on 6/20/16 at a construction site located in Corona.
³ As measured by Ldn Consulting on 4/10/18 at a commercial construction site located in San Jacinto.
⁴ As measured by Ldn Consulting on 10/30/18 during roadway construction in San Diego.
⁵ Reference noise levels are calculated at 100 feet using a drop off rate of 6 dBA per doubling of distance.

The dozer will be moving along the property line and then moving away from the property line as needed to complete the finished site elevations. Therefore, the dozer would be adjacent to property line for only a short period of time and then moving away from that same location by at least 100-150 feet, in a loop or sweeping motion. The acoustical center of the activities, on an hourly basis, would be in between those two distances from the property line. An example of how the dozer would move around the site is provided in Figure 2 of the Construction Noise Assessment.

Trenching, building construction and paving activities will also move around the site. Typically, the equipment will be more than 50 feet from the nearest sensitive receptors. To be conservative, an average distance of 50 feet was used to determine potential impacts. Utilizing the noise levels from Table 18 above, at an average distance of 50 feet, the construction noise levels from each phase would exceed the City's 65 dBA hourly threshold. Table 18, *Construction Noise Level Reductions Required*, summarizes the maximum noise levels at each of the studied receivers. Therefore, inclusion of Mitigation Measure NOI-1 is required to reduce temporary construction noise impacts to less than significant. Mitigation Measure NOI-1 requires installation of temporary noise attenuation barriers will be installed along the northern and eastern property lines during the grading operations. It is recommended that the temporary barriers stay in place until all construction activities are completed. In addition, Mitigation Measure NOI-1 includes requirements for construction hours, combustion-engine equipment, equipment staging areas, equipment idling, loading and unloading of materials, public communication. These measures are discussed in more detail below

Table 12
Construction Noise Level Reductions Required

Noise Source	Reference Noise Levels @ 50 Feet (dBA Leq)	Noise Reduction Needed to Achieve 65 Decibels (dBA) ¹	Resultant Noise Levels (dBA)
Grading Activities ¹	73.5	-8.5	65
Foundation Trenching ²	68.2	-3.2	65
Building Construction ³	67.2	-2.2	65
Paving Activities ⁴	70.4	-5.4	65

¹ Temporary noise barrier needed to achieve additional reductions.

Construction Noise Mitigation

The Fresnel Diffraction Method was utilized for determining the relative noise reduction associated with a temporary wooden noise attenuation wall. The proposed noise attenuation wall would need to be 8-foot high and located at the property line to break the line of sight from the equipment at the adjacent property. The attenuation wall would reduce mid octave-band (250-Hz and 500-Hz) sound levels associated with typical construction activities between 8.5 dB and 10.1 dB. The reduction is dependent upon the source elevation and the topography between the source and receptor. The effective mitigated sound level at the nearest occupied residential area is therefore anticipated to be at or below 65 decibels (73.5 dB minus 8.5 dB) with the incorporation of the 8-foot high temporary noise attenuation barrier. Impacts are anticipated to be less than significant with inclusion of the temporary noise attenuation barrier and no further mitigation is required for the proposed grading activities.

Mitigation Measures

NOI-1: The following measures are required during construction to reduce noise impacts associated with construction:

- Temporary noise barriers will be constructed along the northern and eastern property lines. Temporary noise barriers must be constructed of material with a minimum weight of 3 pounds per square foot with no gaps or perforations. Noise barriers may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, hay bales, or any other suitable material such that a minimum reduction of 8.5 dBA is achieved at the nearest sensitive land use. These barriers will need to be a minimum of 8-feet in height.

The following measures are required of all construction projects implemented under the Proposed Plan to reduce noise associated with construction:

- Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating Project construction activities shall only occur between the hours of 7:00 a.m. to 8:00 p.m. on weekdays, including on Saturdays, with no activity allowed on Sundays and holidays.
- All internal combustion-engine-driven equipment will be equipped with mufflers that are in good operating condition and appropriate for the equipment.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the Project site (i.e., to the center) during construction.
- Unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes) will be prohibited.
- The Project will designate a “construction liaison” that will be responsible for responding to any local complaints about construction noise. The liaison will determine the cause of the noise complaints (starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. A telephone number for the liaison will be conspicuously posted at the construction site.
- If a noise complaint(s) is registered, the liaison or project representative will retain a noise consultant to conduct noise measurements at the location where the complaint was registered. The noise measurements will be conducted for a minimum of 1 hour and will include 1-minute intervals. The consultant will prepare a letter report summarizing the measurements and potential measures to reduce noise levels to the maximum extent feasible. The letter report will include all measurement and calculation data used in determining impacts and resolutions.

Operational Noise levels

Pursuant to Rancho Cucamonga Municipal Code Section 17.66.050(F), exterior noise levels should not exceed 65 dBA between the hours of 7:00 AM and 10:00 PM at residential uses. The City of Rancho Cucamonga has adopted performance standards for commercial and office uses. All commercial and office uses shall not create any noise that would exceed an exterior noise level of 70 dBA when measured at the adjacent property line between the hours of 7:00 AM and 10:00 PM. As previously mentioned, long-term operational noise impacts were analyzed by Ldn Consulting Inc., and presented in a Noise study dated August 28, 2019. A substantial increase in ambient noise is an increase that is *barely perceptible* (3 dBA). The applicant proposes to place a carwash along with blower fans for drying vehicles along the eastern edge of Parcel 2. The applicant proposes to utilize a Peco Automated Car Wash system. The car wash entrance and exist would be oriented from the south to the north and the blowers would be located on the northern end of the building. The blowers would be located at least 8 feet in the tunnel and would be partially blocked by the building. The blowers would be located approximately 85 feet from the property line to the north. The location of the blowers is shown in Figure 3 of the Operational Noise Assessment. The applicant proposes to utilize a central vacuum unit, a VacuTech (60 HP Turbine Vacuum Producer), or equivalent, placed at the northwestern end of the building. The modeling includes an 8-foot high wall located around the central vacuum. Rooftop mechanical ventilation units (HVAC) will be installed on the proposed buildings. In order to evaluate the HVAC noise impacts, the analysis utilized reference noise level measurements provided by Trane. The unshielded noise levels for the HVAC units was found to be 78-80 dBA (See Appendix E). Receptors used in the noise modeling (Figure 4 of the Noise Study) do not represent actual noise sensitive land uses. The receptor locations that were chosen for the analysis are located on the Project site and are for noise modeling purposes only. However, these receptor locations are located closer to the Project site than actual existing noise sensitive receptors located at the residential uses to the east and the elementary school to the north.

Noise levels from the proposed operation activities were modeled with SoundPLAN Essential, version 4.1, a three-dimensional acoustical modeling software package (NAVCON 2017). Propagation of modeled stationary noise sources was based on ISO Standard 9613-2, “Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation.” The model includes digital terrain modeling, which allows the calculation to take topography into account. The terrain model was developed from project specific topographical data. The ISO Standard 9613-2 assumes that all receptors would be downwind of stationary sources. This is a worst-case assumption for total noise impacts, since, in reality, only some receptors will be downwind at any one time due to the fact that wind patterns fluctuate. Typical increases or decreases of sound levels depend

on the ground absorption factor between the source and receiver. Acoustically hard sites include surfaces, such as pavement, bare hard ground, water, and ice, with high reflectivity (i.e., 0.0 absorption). A higher ground factor defines more absorptive ground, such as vegetation or tilled and loose soil (typically 0.5 to 1.0). Based on field observations, portions of the site and off-site uses are considered acoustically soft, or absorptive, therefore, an acoustic ground factor of 0.5 was used for modeling. Elevations were taken from the project plans. The modeled source noise levels are presented in Table 19, *Operational Reference Noise Levels(dBA)*, below.

Table 13
Operational Reference Noise Levels (dBA)

Noise Source	Number of Sources	Reference Sound Power Level ¹
Car Wash Blowers	3	90.5
Central Vacuum	1	89.7
3-Ton HVAC	2	78.0
5-Ton HVAC	4	80.0
¹ Reference Noise Level provided in Operational Noise Assessment Attachments.		

The results of the noise modeling at specific modeled receptor locations are shown in Table 20, *Operational Noise Levels (dBA)*, below. The results of the noise modeling along with the modeled receptor locations are shown in Figure 4 of the Operational Noise Analysis. As shown in Table 20, noise levels would not exceed the City's standard of 65 dBA at the modeled receptor locations with incorporation of Mitigation Measure NOI-1. Because the nearest sensitive receptors are located further away than the modeled receptor locations, noise levels would be even lower at these locations due to distance attenuation. Therefore, with mitigation incorporated, operational noise levels would not exceed City standards at nearby sensitive land uses.

Table 14
Operational Noise Levels (dBA)

Modeled Receptor Location	With Mitigation Measures
R-1	60
R-2	59
R-3	42
R-4	33
R-5	37
R-6	34
R-7	43
R-8	40
* Noise levels are hourly averages (L_{eq})	

Mitigation Measures

NOI-2: The car wash dryer system shall not exceed 82.5 dBA at a distance of five (5) feet and shall be set back within the car wash tunnel approximately eight (8) feet from the exit allowing the tunnel structure to function as a sound attenuation barrier. All car wash supporting equipment including pumps, compressors, vacuum motors, and canister system shall be installed within a dedicated equipment room equipped with passive rooftop ventilation. The car wash shall cease daily operation activities no later than 10:00 p.m.

b) **Less than Significant Impact.** Vibration is the movement of mass over time. It is described in terms of frequency and amplitude and unlike sound; there is no standard way of measuring and reporting amplitude. Vibration can be described in units of velocity (inches per second) or discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes

particle movement over time (in terms of physical displacement of mass). For purposes of this analysis, PPV will be used to describe all vibration for ease of reading and comparison. Vibration can impact people, structures, and sensitive equipment.³⁸ The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments such as electron microscopes. Common sources of vibration within communities include construction activities and railroads. Operation of the Project does not include uses that cause vibration.

Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used. The construction of the car wash would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. According to the Caltrans vibration manual, large bulldozers, vibratory rollers (used to compact earth), and loaded trucks utilized during grading activities can produce vibration, and depending on the level of vibration, could cause annoyance at uses within the Project vicinity or damage structures. Caltrans has developed a screening tool to determine if vibration from construction equipment is substantial enough to impact surrounding uses. The Caltrans vibration manual establishes thresholds for vibration impacts on buildings and humans. These thresholds are summarized in Table 21, *Vibration Damage Potential Threshold Criteria*, and Table 22 *Vibration Annoyance Potential Threshold Criteria*.

Table 15
Vibration Damage Potential Threshold Criteria

Structural Integrity	Maximum PPV (in/sec)	
	Transient	Continuous
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50
<i>Source: Caltrans 2013</i>		

Table 16
Vibration Annoyance Potential Threshold Criteria

Human Response	PPV Threshold (in/sec)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40
<i>Source: Caltrans 2013</i>		

Construction of the car wash would not require rock blasting, or pile driving, but could require use a vibratory roller, small bulldozer, loaded trucks, and jackhammer. Construction activities that use vibratory rollers and bulldozers are repetitive sources of vibration; therefore, the *continuous* threshold is used. Commercial and residential uses adjacent to the Project site are located to the north and east, respectively. As a worst-case scenario, the *historic and some older buildings* threshold is used. Based on the threshold criteria summarized in Tables 21 and 22, vibration from use of heavy construction equipment for the Project would be below the thresholds to cause damage to nearby structures at the receptors shown in Table 23, *Construction Vibration Impacts*. This includes the Beverly Hills House, which will not be directly or indirectly impacted by construction vibration. With regard to long-term operational impacts, activities associated with the car wash would not result in any excessive vibration-related impacts to adjacent or on-site properties. All of the receptors will experience *barely perceptible* vibration from the use of this equipment (See Appendix F, *Vibration Calculations*). Furthermore, pursuant to the

Rancho Cucamonga Municipal Code, these construction activities will be limited to the hours of 7:00 AM to 8:00 PM. Therefore, the Project would not result in excessive, strongly perceptible vibration. Impacts will be less than significant.

Table 17
Construction Vibration Impacts

Receptors	Equipment	PPVref	Distance (feet)*	PPV
1 – Single-Family Residence (E)	Vibratory Roller	0.21	82	0.0448
2 – Mulberry Ed. Center (N)	Vibratory Roller	0.21	205	0.0136
1 – Single-Family Residence (E)	Large Bulldozer	0.089	82	0.0190
2 – Mulberry Ed. Center (N)	Large Bulldozer	0.089	205	0.0058
1 – Single-Family Residence (E)	Small Bulldozer	0.003	82	0.0006
2 – Mulberry Ed. Center (N)	Small Bulldozer	0.003	205	0.0002
1 – Single-Family Residence (E)	Loaded Truck	0.076	82	0.0162
2 – Mulberry Ed. Center (N)	Loaded Truck	0.076	205	0.0049
1 – Single-Family Residence (E)	Jackhammer	0.035	82	0.0075
2 – Mulberry Ed. Center (N)	Jackhammer	0.035	205	0.0023
Source: MIG 2018. See Appendix E.				
* Actual distance from center of Project site to receptor.				

e,f) **No Impact.** There are no public airports, private airstrips, or heliports within two miles of the Project site.³⁹ The nearest airport is Ontario International Airport, located approximately 3.25-miles to the south. The Project will not exceed 24-feet in height. No impact related to airport operations would occur.

Cumulative Impacts

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to buildout of the Project and other projects in the vicinity. A project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level threshold. The combined effect compares the "cumulative with Project" condition to existing conditions. Although there may be a significant noise increase due to the Project in combination with other related projects (combined effects), it must also be demonstrated that the Project has an incremental effect. In other words, a significant portion of the noise increase must be due to the Project. The following criteria were utilized to evaluate the combined effect of the cumulative noise increase.

- **Combined Effect.** The cumulative with Project noise level "Future With Project" would cause a significant cumulative impact if a 3.0 dB increase over existing condition occurs AND the resulting noise level exceeds the applicable exterior standard at a sensitive use.
- **Incremental Effect.** The "Future With Project" causes a 1.0 dBA increase in noise over the "Future Without Project" noise level.
- A significant impact would result only if both the combined and incremental effects criteria have been exceeded.

As discussed in Section 4.12.a. above, the proposed Project would not exceed the applicable City exterior noise standard at nearby sensitive uses. Therefore, none of the roadway segments would exceed both the Combined Effect and Incremental Effect criteria because the Combined Effect criteria requires a project to result in noise levels that exceed the applicable exterior noise standard. Therefore, the Project in combination with cumulative background traffic noise levels would result in a less than significant cumulative impact.

4.13 – Population and Housing

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

a) **No Impact.** The Project would employ between three and six employees and would not induce population growth. No new expanded infrastructure is proposed that could accommodate additional growth in the area that is not already possible with existing infrastructure. No impact would occur.

b) **Less than Significant Impact.** The Project site consists of two parcels: one undeveloped parcel and one parcel containing a single-family home. The single-family residence is currently used as a rental property and would be demolished in order to develop the car wash. There is more than enough housing stock in the City to account for the loss of a single residence. The Project would not displace substantial numbers of residential units necessitating the construction of replacement housing elsewhere. Less than significant impact would occur.

c) **Less than Significant Impact.** Displacement, in the context of housing, can generally be defined as persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence.⁴⁰ There is a single-family home located on the site that is currently used as a rental property by one family. There is more than enough housing stock in the City to account for the loss of a single residence. The Project would not displace substantial numbers of people necessitating the construction of replacement housing elsewhere. Less than significant impact would occur.

Cumulative Impacts

The Project would not result in direct or indirect permanent or temporary impacts related to population or housing. Therefore, the Project would not result in incremental effects to population and housing that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. As a result, no cumulative impacts related to population and housing would occur.

4.14 – Public Services

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:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☒	☐

a) **Less than Significant Impact.** The Rancho Cucamonga Fire Protection District (RCFPD) provides fire protection services for the City. The RCFPD employs over 120 full time and part time employees that serve nearly 170,000 residents in a 50 square mile area. Fire, rescue, emergency medical and hazardous materials incidents are coordinated by an on-duty Battalion Chief supervising cross-trained firefighter/paramedics and firefighter/emergency medical technicians (EMTs) responding from seven fire stations. The RCFPD located closest to the Project site is Fire Station 172, located approximately 0.65 miles north of the Project site at 9612 San Bernardino Road. Development of the car wash as proposed by the Project may incrementally increase the demand for fire protection services. However, development would not increase to a substantial level considering the site's location and surrounding area of similar uses, and incremental impacts would be offset with payment of Development Impact Fees. Therefore, impacts would be less than significant and no mitigation is required.

b) **Less than Significant Impact.** Police protection services would be provided by the San Bernardino County Sheriff's Department. The closest sheriff's station is located at 10510 Civic Center Drive in the City of Rancho Cucamonga, approximately 1.00 miles east of the Project site. Although a new car wash development would be constructed and operated on the Project site, the Project is in a currently developed area currently served by the County Sheriff's Department. The Project is not anticipated to increase response times to the Project site or surrounding area. As required for a development of this type, the Project is subject to a law enforcement Development Impact Fee as imposed by the City of Rancho Cucamonga. The Project does not propose or require new or physically altered police protection facilities. Therefore, impacts would be less than significant, and no mitigation is required.

c) **No Impact.** The Project is a non-residential land use. The Cucamonga School District will require development impact fees be paid by the applicant. With payment of the required fees, no significant impact to school services or facilities would occur and no mitigation is required.

d) **No Impact.** The City has established park impact fees to offset the costs associated with increased maintenance and the addition of park facilities resulting from new development. The City's park impact fees are generated based on the number of residential units in either subdivision or non-subdivision developments. The Project includes development of a car wash and

does not have a residential component. As such, the Project would not create a significant increased demand or need for the construction of park facilities. Therefore, the impact would be less than significant, and no mitigation is required.

e) **Less than Significant Impact.** The City requires that certain types of development pay impact fees to compensate for additional services provided by public facilities as a result of implementation of their project. The City of Rancho Cucamonga requires development impact fees for libraries and animal centers; however, the Project would not be subject to these impact fees as they are based on the number of residential units proposed by the development. The Project does not include residential uses and would not result in a direct increase in population within the City or surrounding area. Therefore, no impacts to other public facilities would occur with Project implementation and no mitigation is required.

Cumulative Impacts

The Project would not result in a significant impact to any public services or facilities. Therefore, the Project would not result in incremental effects to public services or facilities that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. The Project would not result in cumulatively considerable impacts to public services or facilities.

4.15 – 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a) **No Impact.** The Project does not include development of any residences that could directly generate increased demand for parks and recreational facilities. Implementation of the Project would not generate an increase in demand on existing public or private parks or other recreational facilities that would either result in or increase physical deterioration of the facility. Furthermore, as the Project does not include residential uses, the Project would not be subject to a park impact fee. Therefore, no impact would result from the Project and no mitigation is required.

b) **No Impact.** As previously addressed, the Project does not include residential development and would not create a significant increased demand or need for the construction of park facilities. The Project does not include recreational facilities, nor would it require the construction or expansion of recreational facilities. Therefore, no impact would result from the Project and no mitigation is required.

Cumulative Impacts

The Project would not result in an increased use of recreational facilities or require construction or expansion of existing recreational facilities. Therefore, no cumulative impacts on recreational facilities would result from Project implementation.

4.16 – Transportation and Traffic

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

a) **No Determination.** A traffic impact study was prepared for the Project by Trames Solutions, dated March 20, 2019 (See Appendix G).⁴¹ According to the traffic impact study, the Project is estimated to generate 909 additional daily trips, with 50 AM peak hour trips and 89 PM peak hour trips. Based on the analysis conducted for the proposed Project, no study area intersections were determined to have a direct significant impact due to the proposed Project. However, the following intersection improvements were recommended to address cumulative impacts during the peak hours:

- **Archibald/Arrow Route** - Widen the de-facto westbound right turn lane at the intersection of Archibald Avenue / Arrow Route to provide an exclusive right turn lane with overlap phasing. The estimated cost for this improvement is approximately \$40,000 based on the San Bernardino County CMP Preliminary Construction Cost Estimates for Congestion Management Plan. It should be noted that this intersection is currently operating at an unacceptable level of service during the peak hour. Since the project does not directly cause a significant impact at this location, the project should contribute to the improvement on a fair share basis. Furthermore, the development on the northeast corner (DRC 2015-00682 (8477 Archibald) – Gas Station/C-Store/Car Wash – 8 Fueling Positions) is anticipated to construct the northside of Arrow Route to its ultimate width.
- **Malvern/Arrow Route** - Install a channelized median at the intersection of Malven Avenue / Arrow Route to restrict northbound left turns. The estimated cost for this improvement is approximately \$5,000. Since the project does not directly cause the need for this improvement, the project should contribute to the improvement on a fair share basis.

The traffic Study area was established in consultation with City of Rancho Cucamonga staff through the Scoping Letter Agreement process. The traffic study area includes four intersections as listed below:

1. Archibald Avenue/ Arrow Route
2. Malven Avenue/ Arrow Route
3. Hermosa Avenue/ Arrow Route
4. West Project Driveway (Car Wash)/ Arrow Route
5. East Project Driveway (Car Wash)/ Arrow Route

Morning and evening peak hour traffic conditions were analyzed for the following scenarios:

- Existing (2018) Traffic
- Opening Day + Ambient + Cumulative (ODAC 2019)
- Opening Day + Ambient + Cumulative + Project (ODACP 2019)
- Horizon Year (2040) Without Project
- Horizon Year (2040) With Project

Future traffic analysis is based on a background (ambient) growth of 2% per year, along with traffic generated by other future developments in the surrounding area.

Intersection Operations Analysis Methodology

The City of Rancho Cucamonga requires the use of the Transportation Research Board - Highway Capacity Manual (HCM), 2016 Update, or most recent release. The HCM defines level of service (LOS) as a qualitative measure, which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted. The HCM methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The LOS results in this study are determined using the HCM methodology. For signalized intersections, average total delay per vehicle for the overall intersection is used to determine LOS. The study area intersections which are stop sign controlled with stop control on the minor street only have been analyzed using the unsignalized intersection methodology of the HCM. For these intersections, the calculation of LOS is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at the study area locations; the LOS has been calculated.

The LOS criteria for this type of intersection analysis is based on average total delay per vehicle for the worst minor street movement(s).

For all way stop (AWS) controlled intersections, the ability of vehicles to enter the intersection is not controlled by the occurrence of gaps in the flow of the main street. The AWS controlled intersections have been evaluated using the HCM methodology for this type of multi-way stop controlled intersection configuration. The LOS criteria for this type of intersection analysis is based on average total delay per vehicle. Peak hour factors (PHF), where known from existing traffic counts, have been used to assess intersection operations. The LOS are defined for the various analysis methodologies as follows:

LEVEL OF SERVICE	AVERAGE TOTAL DELAY PER VEHICLE (SECONDS)	
	SIGNALIZED	UNSIGNALIZED
A	0 to 10.00	0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up

Significance Criteria

The City of Rancho Cucamonga General Plan has established LOS “D” as the target along all City maintained intersections, roads and conventional state highways. Therefore, LOS “E” or “F” is considered unacceptable and requires improvements measures if the project causes significant impacts. However, pursuant to recent CEQA court case rulings, LOS is no longer considered a significant impact. As such, no impact determination has been made, and the findings of the LOS based traffic impact study prepared by Trames Solutions have been included in this section of the Initial Study Checklist for informational purposes.

Existing Conditions (2018) Delay and Level of Service

As shown in Table 24, *Existing (2018) Conditions*, the study area intersections are currently operating at an acceptable level of service (LOS “D” or better) during the peak hours with the existing geometry and traffic controls.

Table 18
Existing (2018) Conditions

Intersection	Traffic Signal ¹	Delay (Seconds) ²		Level of Service	
		AM	PM	AM	PM
1. Archibald Ave./Arrow Route	TS	51.9	54.7	D	D
2. Malven Ave./Arrow Route	CSS	28.0	24.3	D	C
3. Hermosa Ave./Arrow Route	TS	37.4	27.5	D	D
4. Project Driveway/Arrow Route	--	--	--	--	--
Source: Trames Solutions, Inc., 2019					
¹ TS=Traffic Signal; CSS=Cross Street Stop					
² Delay and Level of Service Calculated using the following software: Synchro 10 HCM6					
BOLD=Unacceptable Level of Service					

Ambient Growth Rate

Some traffic volume increases on roadways can be attributed to vehicles originating outside of the study area. These types of trips either end up within the study area or pass-through onto an outside destination. Therefore, to account for these trips (termed “ambient growth”), a growth rate can be applied to existing traffic volumes. To account for traffic not attributed to the project or other planned developments within the study area, linear growth between 2018 traffic volumes and San Bernardino Traffic Analysis Model (SBTAM) 2040 forecast has been utilized to estimate ambient growth for opening year (2019) conditions. The City of Rancho Cucamonga Transportation Department staff has previously reviewed and approved this rate.

Project Trip Generation

Trip generation represents the amount of traffic which is attracted and produced by a development. The trip generation for the project is based upon the specific land use which has been planned for this development. The land use category for an automated car wash facility (7,293 sf) with a 140-foot long car wash tunnel was used. The number of vehicular trips generated by a project is typically determined from the trip rates included in the ITE Trip Generation manual. The latest version (10th edition) only provides the PM peak hour rate for one observation for a car wash facility. Therefore, due to the small data set collected by ITE for an automated car wash, empirical count data has been collected at a Fast 5 Xpress car wash in the City of Murrieta (Murrieta Hot Springs Road at Jackson Ave.) to determine the amount of peak hour and daily vehicles that occur at this facility. Trip generation rates for the proposed development are driven by the number of cars that can be washed during the peak hour. It is our understanding that a higher number of cars can be washed as the length of the service tunnel is increased. Therefore, the peak hour and daily trip rates shown in Table 4-1 of the Traffic Study were based on tunnel length. The daily and peak hour trip generations for the Project are shown in Table 25, *Project Trip Generation Summary*. The proposed Project is projected to generate a total of approximately 710 new trip-ends per day with 37 new vehicle trips per hour during the AM peak hour and 66 new vehicle trips per hour during the PM peak hour. It should be noted that a pass by reduction (AM-37%, PM-35%) and a 5% internal trip reduction (with the adjacent gas station) was assumed for the car wash. The pass-by reduction percentages were based on a survey conducted at the Lightning Express Car Wash (17111 Hawthorne Blvd., Lawndale, CA).

Project Trip Distribution and Assignment

Trip distribution represents the directional orientation of traffic to and from the project site. The Project’s trip distribution patterns are based on the proximity of the Project to the proposed driveway locations, the surrounding trip attractors, and the regional freeway interchanges. The trip distribution patterns for the Project are illustrated on Figures 4-A and 4-B of the Project Traffic Study.

Table 19
Project Trip Generation Summary

Project Trip Generation Summary								
Land Use	Quantity	Peak Hour						Daily
		AM			PM			
		In	Out	Total	In	Out	Total	
Express Car Wash	140 Feet	35	29	64	53	57	111	1,183
Pass-by Reduction (AM-37%,PM-35%) ¹	--	-13	-11	-24	-19	-20	-39	-414
Internal Trip Reduction (5%)	--	-2	-1	-3	-3	-3	-6	-59
Car Wash Subtotal		20	17	37	31	34	66	710
Total Project Trips		29	21	50	40	48	89	909
Source: Trames Solutions, Inc., 2018								
1 Pass-by reduction percentages were based on surveys at Lightning Express Car Wash. 1711 Hawthorne Blvd., Lawndale, CA								
TSF = thousand square feet								

Other Trip Generation Factors

The project land use is comprised of primary, pass-by and internal traffic. Primary traffic refers to trips that are intending to go to the project as their primary destination. Pass-by traffic consists of vehicles that stop at the site on their way to a primary destination. Internal traffic consists of trips that are anticipated to occur between the future gas station and those that go to the project. A 5% reduction in traffic has been assumed for these trips. Pass-by reductions have been based on the surveys conducted at the

Lightning Express Car Wash, 17111 Hawthorne Blvd, Lawndale, CA during the AM and PM peak hours. Based on the surveys, a pass-by rate of 37% and 35% were observed for the AM and PM peak hours, respectively.

Cumulative Traffic Trip Generation

To assess Opening Day Plus ambient plus cumulative plus Project traffic conditions, Project traffic was combined with existing traffic, area-wide growth and other future developments which are approved or being processed concurrently in the study area. Developments that are being processed concurrently in the study area have been provided by the City of Rancho Cucamonga staff. The location of the cumulative projects provided by the City are shown on Figure 4-D of the Traffic Study. According to the Project Traffic Study, cumulative developments are projected to generate a total of approximately 5,485 trips per day with 489 trip ends per hour during the AM peak hour and 518 trip ends per hour during the PM peak hour.

Method of Projection

To assess Opening Day Plus ambient plus cumulative plus project traffic conditions, project traffic is combined with existing traffic, area-wide growth and other future developments which are approved or being processed concurrently in the study area. Developments which are being processed concurrently in the study area have been provided by the City of Rancho Cucamonga staff.

Other Approved or Proposed Development Project

The locations of the cumulative projects provided by the City are shown on Figure 4-D of the Traffic Study and include the following projects:

- DRC 20118-000119 (9000 Hellman Ave.) – 174,745 sf Industrial Warehouse
- DRC 2013-00565 (NE of Archibald/7th) – 171,941 General Industrial
- DRC 2017-00654 (SW of Haven/26th) – 207 MFDU/14,300 sf Retail
- DRC 2016-00695 (8th/Industrial) – 150,003 sf General Industrial
- DRC 2015-00682 (8477 Archibald) – Gas Station/C-Store/Car Wash – 8 Fueling Positions

Other Approved Project Trip Generation

The cumulative developments are projected to generate a total of approximately 5,485 trips per day with 489 trip ends per hour during the AM peak hour and 518 trip ends per hour during the PM peak hour.

Other Approved Development Trip Distribution and Assignments

Figures 4-E through 4-I contains the directional distribution and assignment of the cumulative development traffic.

Opening Day Plus Ambient Plus Cumulative (ODAC 2019) Conditions

The results of the Opening Day Plus Ambient Plus Cumulative (ODAC 2019) conditions intersection analysis are summarized in Table 26, *Opening day (2019) Plus Ambient Growth Plus Cumulative Conditions*, below. As shown on Table 26, the study area intersections are projected to continue to operate at an acceptable level of service (LOS “D” or better) during the peak hours with existing geometry and traffic controls, except for the intersection of Archibald Ave./Arrow Route (#1). However, the improvement of widening the de-facto westbound right turn lane at the intersection with striping to provide an exclusive right turn lane with overlap phasing is anticipated to improve the intersection LOS to an acceptable level of service (LOS “D” or better).

Table 20
Opening Day Plus Ambient Plus Cumulative (ODAC 2019) Conditions

Intersection	Traffic Signal ¹	Delay (Seconds) ²		Level of Service	
		AM	PM	AM	PM
1. Archibald Ave./ Arrow Route - With Improvements	TS	55.9	62.7	E	E
	TS	53.7	51.3	D	D

2. Malven Ave./ Arrow Route	CSS	30.6	26.3	D	D
3. Hermosa Ave./ Arrow Route	TS	38.0	28.6	D	C
4. W. Project Driveway/ Arrow Route	CSS	13.7	13.4	B	B
5. E. Project Driveway/ Arrow Route	Future Intersection				
Source: Trames Solutions, Inc., 2018					
¹ TS=Traffic Signal; CSS=Cross Street Stop					
² Delay and Level of Service Calculated using the following software: Synchro 10 HCM6					
BOLD=Unacceptable Level of Service					

Opening Day Plus Ambient Plus Cumulative Plus Project (ODACP 2019) Conditions

The results of the Opening Day Plus Ambient Plus Cumulative Plus Project (ODACP 2019) conditions intersection analysis are summarized in Table 27, *Opening Day Plus Ambient Plus Cumulative Plus Project (ODACP 2019) Conditions*, below. As shown on Table 27, most study area intersections are anticipated to continue to operate at an acceptable level of service (LOS "D" or better) during peak hours with existing geometry and traffic controls. Archibald Ave./Arrow Route (#1) will continue to operate at an unacceptable level of service with existing geometry. However, the same improvement measure under ODAC conditions (widening the de-facto westbound right turn lane at the intersection with striping to provide an exclusive right turn lane with overlap phasing) is anticipated to improve the intersection LOS to an acceptable level of service (LOS "D" or better).

Table 21
Opening Day (2019) Plus Ambient Growth Plus Cumulative Plus Project Conditions

Intersection	Traffic Signal ¹	Delay (Seconds) ²		Level of Service	
		AM	PM	AM	PM
1. Archibald Ave./ Arrow Route	TS	57.7	65.9	E	E
- With Improvements	TS	54.5	54.3	D	D
2. Malven Ave./ Arrow Route	CSS	32.8	29.0	D	D
3. Hermosa Ave./ Arrow Route	TS	41.3	38.8	D	D
4. W. Project Driveway/ Arrow Route	CSS	14.6	15.1	B	C
5. E. Project Driveway/ Arrow Route	CSS	14.0	13.6	B	B
Source: Trames Solutions, Inc., 2018					
¹ TS=Traffic Signal; CSS=Cross Street Stop					
² Delay and Level of Service Calculated using the following software: Synchro 10 HCM6					
BOLD=Unacceptable Level of Service					

Horizon Year (2040) Without Project Conditions

The results of the Horizon Year (2040) Without Project conditions intersection analysis are summarized in Table 28, *Horizon Year (2040) Without Project Conditions*, below. As shown on Table 28, the following study intersections are projected to operate an unacceptable level of service (LOS "E" or worse) during the peak hours with the existing geometry and traffic controls:

- Archibald Avenue / Arrow Route (#1)
- Malven Avenue / Arrow Route (#2)

For the intersection of Archibald Avenue / Arrow Route (#1), the separate westbound right turn with overlap phasing improvement identified under ODAC conditions is anticipated to improve the intersection LOS to an acceptable level of service (LOS "D" or better).

For the intersection of Malven Avenue / Arrow Route (#2), restricting the northbound approach to right turns only is anticipated to improve the intersection to operate at an acceptable level of service (LOS "D" or better). However, this improvement will shift the northbound traffic heading west on Arrow to instead, turn right and make a U-turn at Ramona Avenue. The peak hour operations at Ramona Avenue/Arrow Route have been evaluated for 2040 conditions and are presented in Table 28.

It should be noted however that the intersection of Ramona Avenue/Arrow Route is anticipated to operate at an unacceptable level of service (LOS “E” or worse) during the peak hours even without and with the shifted northbound left turn volumes from Malven Avenue. As shown in Table 28, restricting northbound left turns at Malven Avenue/Arrow Route (#2) and northbound/southbound left turns at Ramona Avenue/Arrow Route (#3) during peak hours are anticipated improve both intersections to operate at an acceptable LOS.

Table 22
Horizon Year (2040) Without Project Conditions

Intersection	Traffic Signal ¹	Delay (Seconds) ²		Level of Service	
		AM	PM	AM	PM
1. Archibald Ave./ Arrow Route	TS	70.3	56.8	E	E
- With Improvements	TS	54.2	53.6	D	D
2. Malven Ave./ Arrow Route	CSS	53.8	35.2	F	E
- Without NB left turn during peak hours	CSS	17.6	17.1	C	C
3. Hermosa Ave./ Arrow Route	TS	46.6	45.5	D	D
4. W. Project Driveway/ Arrow Route	CSS	15.2	13.9	C	B
5. E. Project Driveway/ Arrow Route	Future Intersection				
6. Ramona Ave./ Arrow Route	CSS	>100	>100	F	F
- Without NB/SB left turns during peak hours	CSS	15.8	16.1	C	C
Source: Trames Solutions, Inc., 2018					
¹ TS=Traffic Signal; CSS=Cross Street Stop					
² Delay and Level of Service Calculated using the following software: Synchro 10 HCM6					
BOLD=Unacceptable Level of Service					

Horizon Year (2040) With Project Conditions

The results of the Horizon Year (2040) With Project conditions intersection analysis are summarized in Table 29, *Horizon Year (2040) With Project Conditions*, below. As shown on Table 29, the Project Driveway / Arrow Route (#4) intersection is anticipated to operate at an unacceptable level of service (LOS “E” or worse), in addition to the deficient intersections previously identified under Horizon Year (2040) Without Project conditions. As shown in Table 5-4, the improvements identified previously under Horizon Year (2040) Without Project conditions are anticipated to improve the deficient intersections to operate at an acceptable level of (LOS “D” or better).

Table 23
Horizon Year (2040) With Project Conditions

Intersection	Traffic Signal ¹	Delay (Seconds) ²		Level of Service	
		AM	PM	AM	PM
1. Archibald Ave./ Arrow Route	TS	72.5	58.9	E	E
- With Improvements	TS	54.4	54.8	D	D
2. Malven Ave./ Arrow Route	CSS	60.4	40.4	F	E
- Without NB left during peak hours	CSS	18.1	17.7	C	C
3. Hermosa Ave./ Arrow Route	TS	46.7	45.8	D	D
4. W. Project Driveway/ Arrow Route	CSS	16.3	15.7	C	C
5. E. Project Driveway/ Arrow Route	CSS	15.0	14.3	B	B
- With Improvements	CSS	15.7	14.6	C	B
6. Ramona Ave./ Arrow Route	CSS	>100	>100	F	F
- Without NB/SB left turns during peak hours	CSS	16.1	16.5	C	C
Source: Trames Solutions, Inc., 2018					
¹ TS=Traffic Signal; CSS=Cross Street Stop					
² Delay and Level of Service Calculated using the following software: Synchro 10 HCM6					
BOLD=Unacceptable Level of Service					

Findings

For Existing (2018) conditions the study area intersections are operating at an acceptable level of service (LOS “D” or better) during the peak hours with existing geometry and traffic controls.

For ODAC (2019) and ODACP (2019), the intersection of Archibald Avenue / Arrow Route (#1) is anticipated to operate at an unacceptable level of service (LOS “E” or worse) during the peak hours. Providing a separate westbound right turn with striping and overlap phasing is anticipated to improve the intersection LOS to acceptable conditions.

For Horizon Year (2040) Without Project conditions, the intersection of Archibald Avenue / Arrow Route (#1) and Malven Avenue / Arrow Route (#2) are anticipated to operate at an unacceptable level of service (LOS “E” or worse) during the peak hours. For the intersection of Archibald Avenue / Arrow Route (#1), providing a separate westbound right turn with striping and overlap phasing is anticipated to improve the intersection LOS to acceptable conditions. For the intersection of Malven Avenue / Arrow Route (#2), restricting the northbound approach to right turns only during the peak hours is anticipated to improve the intersection to acceptable LOS. This improvement will in turn affect Ramona Avenue at Arrow Route, and in order to mitigate the secondary effects, the same treatment will be required to be installed during the peak hours at the intersection of Ramona Avenue and Arrow Route.

Because LOS is no longer considered a significant impact pursuant to CEQA, the Project is not required to incorporate mitigation measures that would alleviate the above-described impacts. The Project traffic impact study provides the following recommendations, again provided for informational purposes only:

Recommendations

1. On-Site. Construction of on-site improvements shall occur in conjunction with adjacent project development activity or as needed for project access purposes. The recommended on-site roadway improvements are described below:
 - Provide stop sign control at the project driveways.
 - Provide signage to restrict access to right turns in/out only to/from the project driveways.
 - On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.
 - Verify that minimum sight distance is provided at the project driveways.
2. Off-Site. The recommended on-site roadway improvements are described below:
 - Widen the de-facto westbound right turn lane at the intersection of Archibald Avenue / Arrow Route with striping to provide an exclusive right turn lane with overlap phasing. The estimated cost for this improvement is approximately \$40,000 based on the San Bernardino County CMP Preliminary Construction Cost Estimates for Congestion Management Plan. It should be noted that this intersection is currently operating at an acceptable level of service during the peak hours. However, this location is projected to operate deficiently under ODAC and 2040 without and with project conditions. The improvements will be conditioned to be constructed by the project. Furthermore, the development on the northeast corner (DRC 2015-00682 (8477 Archibald) – Gas Station/CStore/ Car Wash – 8 Fueling Positions) is anticipated to construct the northside of Arrow Route to its ultimate width.
 - Install signs to restrict northbound left turns during peak hours at both Malven Avenue and Ramona Avenue along Arrow Route during peak hours (7:00 – 9:00 AM and 4:00 – 6:00 PM). This impact will only be present for 2040 conditions and the project should contribute to the improvement on a fair share basis. The estimated cost for this improvement is approximately \$500 per location. The project fair share percentages are as follows:

Malven Ave./ Arrow Route		
	AM	PM
Project Traffic	49	84
Existing Traffic	2,148	2,309
2040 Traffic	2,654	2,787
New Traffic	506	478
Project Percentage	9.7% (49/506)	17.6% (84/478)
Dollar Amount	\$88	
Ramona Ave./ Arrow Route		
	AM	PM
Project Traffic	54	79
Existing Traffic	2,171	2,280
2040 Traffic	2,621	2,770
New Traffic	450	490
Project Percentage	12.0% (54/450)	16.1% (79/490)
Dollar Amount	\$81	
Total for Project	\$169	

b) **Less than Significant Impact.** The Project could result in significant impacts if it conflicts with the San Bernardino County Congestion Management Program (CMP) through reducing the Level of Service of a non-exempt segment to fall to "F". If LOS for a non-exempt segment is reduced to "F", a deficiency plan outlining specific mitigation measure and a schedule for mitigating the deficiency will be required. The nearest affected CMP designated arterials within the Project vicinity are Arrow Route and Archibald Avenue. As shown above, the Project will not reduce the Level of Service for a non-exempt CMP segment to LOS "F". While the Project will add new vehicle trips to the local roadway system, impacts to CMP designated roadways would be less than significant. Impacts to CMP designated freeways will be less than significant.

c) **No Impact.** A significant impact would occur if the Project caused a change in air traffic patterns that would result in a substantial safety risk. The Project site is not located within an airport land use plan and does not include any structures that would change air traffic patterns or uses that would generate air traffic. Therefore, no impacts related to a change in air traffic patterns would occur.

d) **Less than Significant Impact.** A significant impact would occur if the Project substantially increased an existing hazardous design feature or introduced incompatible uses to the existing traffic pattern. Access to the Project site is proposed via a 50-foot shared driveway on Arrow Route. The design of the Project would comply with all applicable City regulations. Furthermore, the Project does not involve changes in the alignment of Arrow Route, other than to widen the westbound right-turn lane, and the proposed car wash is consistent with existing commercial uses adjacent to the Project site on the west and south. The Project would not result in a traffic safety hazard due to any design features. No impact would occur.

e) **Less than Significant Impact.** A significant impact would occur if the design of the Project would not satisfy emergency access requirements of the Rancho Cucamonga Fire Protection District or in any other way threaten the ability of emergency vehicles to access and serve the Project site or adjacent uses. The Project would not result in inadequate emergency access. As discussed above, access to the Project site is proposed via a shared driveway on Arrow Route. The driveway width, 50 feet, is sufficient to provide access to fire and emergency vehicles and is consistent with the California Fire Code requiring a minimum of 20 feet. All access features are subject to and must satisfy the City of Rancho Cucamonga design requirements, including the Fire Department's requirements. The Project would result in less than significant impacts with regard to emergency access.

f) **Less than Significant Impact.** Public bus transit service in the Project vicinity is currently provided by the OmniTrans Route 66. Route 66 stops along a route to include the following stops: Montclair Plaza, Central & Foothill, Upland High School, San

Antonio Hospital, Rancho Cucamonga Civic Center, Victoria Gardens, Juniper and Foothill, and Fontana Metrolink Transit Center.⁴² Pedestrian and bicycle facilities will also not be affected by the proposed Project. The Project would not conflict with or decrease the performance or safety of these services. Impacts would be less than significant.

Cumulative Impacts

The traffic study addresses both the Project-specific and the Project's contribution to cumulative impacts. The Project would have a significant impact to the intersections of Archibald Avenue and Arrow Route during Horizon Year (2040) conditions. However, this impact would occur without development of the Project and mitigation is not feasible given existing geometry and traffic conditions. Therefore, impacts from the Project are considered less than significant and no cumulatively considerable impact will occur.

4.17 – Tribal Cultural Resources

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 Cultural Native American tribe, and that is:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
b) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

a -b) **Less than Significant Impact with Mitigation Incorporated.** Assembly Bill (AB) 52 specifies that a project that may cause a substantial adverse change to a defined Tribal Cultural Resources (TCR) may result in a significant effect on the environment. AB 52 requires tribes interested in development Projects within a traditionally and culturally affiliated geographic area to notify a lead agency of such interest and to request notification of future Projects subject to CEQA prior to determining if a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The lead agency is then required to notify the tribe within 14 days of deeming a development application subject to CEQA complete to notify the requesting tribe as an invitation to consult on the Project. AB 52 identifies examples of mitigation measures that will avoid or minimize impacts to TCR. The bill makes the above provisions applicable to Projects that have a notice of preparation or a notice of intent to adopt a negative declaration/mitigated negative declaration circulated on or after July 1, 2015. AB 52 amends Sections 5097.94 and adds Sections 21073, 21074, 2108.3.1., 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to the California Public Resources Code (PRC), relating to Native Americans.

A cultural resources records search, additional research, intensive-level pedestrian field survey, Sacred Lands File search with the Native American Heritage Commission (NAHC), and vertebrate paleontological resources assessment were conducted for the project in partial fulfillment of the California Environmental Quality Act (CEQA). As part of the findings process, the City sent an email to the NAHC requesting a consultation list of tribes with traditional lands or cultural places located within San Bernardino County. A response from the NAHC was received on September 7, 2018. The following tribes were listed by the NAHC as having traditional lands or cultural places within the County: Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrieleno Band of Mission Indians-Kizh Nation, Gabrieleno/Tongva Nation, San Manuel Band of Mission Indians, Morongo Band of Mission Indians, and Serrano Nation of Mission Indians. Further, MIG sent a request to the NAHC on September 26, 2018 to search their SLF to ascertain whether their files contained any new information relating to the presence of Native American cultural resources within the Project area generally and on the Project site specifically. A response letter was received indicating the absence of documentation of tribal resources in the Project area or on the Project site. However, in accordance with Assembly Bill 52 (AB 52), which added various provisions to the California Public Resources

Code (PRC) that concern Tribal Cultural Resources, including Section 21080.3.1(d), the City contacted local tribes requesting to be notified of Projects. Responses were received from three local tribes: the Morongo Band of Mission Indians (MBMI), The San Manuel Band of Mission Indians (SMBMI), and the Gabrieleño Band of Mission Indians-Kizh Nation (GBMIKN). The Morongo Band of Mission Indians had no information to provide and did not request formal consultation or mitigation. The San Manuel Band of Mission Indians requested incorporation of Mitigation Measures SMBMI-4 and SMBMI-5 to reduce impacts to archaeological resources. As such, Mitigation Measures SMBMI-4 and SMBMI-5 have been incorporated herein. The Gabrieleño Band of Mission Indians-Kizh Nation requested inclusion of Mitigation Measures GBMIKN-1 through GBMIKN-3 to reduce impacts buried archaeological resources and Mitigation Measures GBMIKN- 4 through GBMIKN-8 to reduce impacts to buried human remains. These measures are incorporated into the Cultural Resources section of this document. In addition, Mitigation Measures TCR-1 through TCR-4 are incorporated herein to further address potential impacts related to TCR's encountered during Project implementation. Mitigation Measure TCR-1 requires that a qualified tribal representative conduct tribal cultural resources sensitivity training for construction personnel. Mitigation Measure TCR-2 requires that a qualified Native American monitor be present during all construction excavations into non-fill sediments. If tribal cultural resources are encountered, Mitigation Measure TCR-3 requires that all ground-disturbing activities must be halted or diverted away from the find and that a buffer of at least 50 feet be established around the find until an appropriate treatment plan is coordinated. Mitigation Measure TCR-4 requires that the Native American monitor prepare a final report at the conclusion of monitoring activities. With implementation of Mitigation Measures SMBMI-1 through SMBMI-5, GBMIKN-1 through GBMIKN-8, and TCR-1 through TCR-4, impacts to Tribal Cultural Resources will be less than significant.

Mitigation Measures

- SMBMI-4:** The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in SMBI-1, of any pre-contact resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBM and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.
- SMBMI-5:** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.
- TCR-1: Conduct Tribal Cultural Resources Sensitivity Training for Construction Personnel.** The Applicant shall retain a qualified professional Tribal monitor who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, to conduct Tribal Cultural Resources Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session shall be carried out by a Tribal monitor, under the direction of a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. The training session will include a handout and will focus on how to identify tribal cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of Tribal monitors, and, the general steps a qualified professional Tribal monitor would follow in conducting a salvage investigation if one is necessary.
- TCR-2: Conduct Periodic Tribal Cultural Resources Spot Checks During Grading and Earth-Moving Activities.** The Applicant shall retain a qualified professional who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct periodic Tribal Cultural Resource Spot Checks beginning at depths below two (2) feet to determine if construction excavations have exposed or have a high probability of exposing tribal cultural resources. After the initial Spot Check, further periodic checks will be conducted at the discretion of the qualified Tribal monitor. If the qualified Tribal monitor determines that construction excavations have exposed or have a high probability of exposing Tribal artifacts, construction monitoring for tribal cultural

resources will be required. The Applicant shall retain a qualified Tribal monitor, who will work under the guidance and direction of a professional archaeologist, who meets the qualifications set forth by the U.S. Secretary of the Interior's Professional Qualifications and Standards. The Tribal monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill sediments. Multiple earth-moving construction activities may require multiple Tribal monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known tribal cultural resources, the materials being excavated (native versus artificial fill soils), the depth of excavation, and if found, the abundance and type of tribal cultural resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the Project Tribal monitor.

TCR-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Tribal Cultural Resources Are Encountered. In the event that tribal cultural resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities will not be allowed to continue until a qualified Tribal monitor has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All tribal cultural resources unearthed by Project construction activities shall be evaluated by a qualified professional who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted, and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the Tribal monitor to develop an appropriate treatment plan for the resources. The plan may include implementation of Tribal data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.

TCR-4: Prepare Report Upon Completion of Monitoring Services. The Tribal monitor, under the direction of a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards, shall prepare a final report at the conclusion of Tribal monitoring (if required). The report shall be submitted to the Applicant, the South Central Costal Information Center, the City, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of the resources.

Cumulative Impacts

With mitigation the Project would result in less than significant impacts to tribal cultural resources. The chances of cumulative impacts occurring as a result of Project implementation plus implementation of other projects in the region is not likely since projects would be subject to individual project-level environmental review. Since there would be no Project-related impacts and due to existing laws and regulations in place to protect tribal cultural resources and prevent significant impact to such resources, the potential incremental effects of the Project would not be cumulatively considerable.

4.18 – Utilities and Service Systems

Would the Project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

a) **Less than Significant Impact.** The Project could affect Regional Water Quality Control Board treatment standards by increasing wastewater production such that expansion of existing facilities or construction of new facilities would be required. Exceeding the RWQCB treatment standards could result in contamination of surface or groundwater with pollutants such as pathogens and nitrates.

New development in the City is required to install wastewater infrastructure concurrent with Project development. Wastewater conveyance is handled by the City of Rancho Cucamonga and Cucamonga Valley Water District (CVWD). Wastewater is processed by CVWD and the Inland Empire Utilities Agency (IEUA). CVWD is one of eight member agencies that operate under the IEUA. IEUA operates 5 interconnected regional water-recycling facilities that treat approximately 60 million gallons per day (mgd) and have a combined permitted capacity of 84.4 mgd (IEUA NPDES No. CA8000409). Two of the five IEUA

treatment plants serve development within the City of Rancho Cucamonga: Regional Plant No. 1 (RP-1) and Regional Plant No. 4 (RP-4). At all IEUA treatment plants, wastewater is subject to tertiary-level water treatment, which produces effluent suitable for reuse (e.g. irrigation, wetlands/wildlife habitat, groundwater recharge).

Per the General Plan Update Draft Program Environmental Impact Report (2010), the treatment plant RP-1 currently has an average excess capacity of approximately 9 mgd (IEUA NPDES No. CA8000409) and the portion of the City served by RP-1 (the western half and southern third) are the more developed areas of the City; therefore, additional development and redevelopment sufficient to exceed the remaining capacity of RP-1 is not anticipated. Wastewater generation more than RP-1's capacity, though considered unlikely, would be diverted to RP-4. RP-4 provides a current excess capacity of 7.9 mgd and a potential excess capacity of 21.9 mgd.⁴³

All wastewater generated by the interior plumbing system of the car wash would be discharged into the local sewer main and conveyed for treatment at one of the above facilities. Wastewater flows associated with the car wash would consist of the same kinds of substances typically generated by commercial uses and no modifications to any existing wastewater treatment systems or construction of any new ones would be needed to treat this Project's wastewater. Water use for the car wash was conservatively estimated at 30 gallons per vehicle based on estimates provided by the Applicant. The number of vehicles washed was estimated at 350 per day. With a resulting total of 127,750 vehicles washed annually, total water demand for the car wash is estimated at 3,832,500 gallons per year (10,500 gpd). Outdoor water use for landscaping is estimated at 420,480 gallons per year (1,152 gpd), for a total water use of 2,336,730 gallons per year (6,402 gpd). Wastewater is typically estimated to be 80 percent of total water use. Therefore, estimated wastewater generation from interior demand and outdoor irrigation demand for the proposed car wash development is 1,869,530 (5,122 gpd). This volume is within the remaining capacity of the CVWD's 21.9 mgd total treatment capacity. This Project would thus have a less-than-significant impact on the ability of the CVWD to operate within its established wastewater treatment requirements, which are enforced via the facility's NPDES permit authorized by the Santa Ana Regional Water Quality Control Board (SARWQCB). Therefore, the proposed Project would have a less than significant impact related to wastewater treatment requirements of the SARWQCB.

b) Less than Significant Impact. The Cucamonga Valley Water District (CVWD) would supply water to the Project. CVWD's drinking water comes from two primary sources: local groundwater and imported water. CVWD manages its supply and demand with careful analysis regarding customer need and population estimates to ensure there will be an adequate supply of clean, reliable water into the future. CVWD, like most other agencies, creates a Water Supply Master Plan every few years that helps guide our operations and water supply investments. CVWD has a diverse water supply portfolio that helps decrease its dependence on imported water. Finding new sources of water is critical to ensuring water supply reliability for CVWD's customers. CVWD has been building a network of wells to take advantage of local groundwater supplies. The District's diversified supply ensures a reliable water supply during times of drought, regulatory constraints and other emergencies. CVWD maintains 34 reservoirs with a total capacity to store 95 million gallons of water in our service area. Water Code § 10910-10915 require the preparation of a water supply assessment (WSA) demonstrating sufficient water supplies for any subdivision that involves the construction of more than 500 dwelling units, or the equivalent thereof. As the Project is below the established thresholds, no WSA is required.

According to the 2015 Urban Water Management Plan for CVWD, approximately 48 percent of CVWD's overall supply comes from local groundwater wells in the Chino Groundwater Basin and the Cucamonga Basin. CVWD currently operates 20 groundwater wells throughout its service area. Three percent of the water delivered to CVWD consumers is local canyon and tunnel water that flows out of nearby canyons and foothills, often a combination of surface and groundwater. These sources include Cucamonga Canyon, Day Canyon, Deer Canyon, East Etiwanda Canyon, and a number of tunnels in the local mountains. This water is treated at CVWD's Arthur H. Bridge or Lloyd W. Michael Treatment Plants, flows into storage reservoirs, and then into the distribution system to consumers. CVWD purchases 46 percent of its water through the Inland Empire Utilities Agency, who purchases water from the Metropolitan Water District of Southern California (MWD), a regional water wholesaler that delivers imported water from the State Water Project. State Water Project water originates in Northern California in the Sacramento-San Joaquin Delta, and makes a 400 mile journey to the CVWD service area. This water is treated at CVWD's Lloyd W. Michael Water Treatment Plant, the largest conventional treatment plant in the region. The treated water is stored in reservoirs until it is needed by consumers. The water used within the CVWD service area as of 2015 was

approximately 41,451 AFY and is expected to increase to 63,700 AFY (during a normal year) by the year 2035, an increase of 22,249 AFY.⁴⁴ Based on the CalEEMod assumptions, the combined estimated water demand for the proposed Project is approximately 7.17 AFY, within the estimated increase in water demand. According to the 2015 Urban Water Management Plan for CVWD, there is sufficient supply to accommodate demand under normal and single- and multiple-dry year conditions utilizing imported water.⁴⁵ Local supplies would supplement imported supplies and provide additional supply reliability. Local supplies include groundwater pumped from the Cucamonga and Chino groundwater Basins, desalinated groundwater, and recycled water.

The UWMP is based on area population Projections as provided by SCAG. As discussed in Section 4.13, the Project is consistent with SCAG Projections for the service area. As the estimated increase in water use is within the anticipated increase in the UWMP and the Project is consistent with regional population Projections, impacts would be less than significant.

Regarding wastewater facilities, as discussed in the preceding response, wastewater generated at the Project site is treated at IEUA's Regional Plant No. 1 (RP-1) and Regional Plant No. 4 (RP-4) facilities. The proposed Project is estimated to have a combined wastewater generation of approximately 5,122 gpd. This generation is well within the existing remaining treatment capacity of RP-1 and RP-4. Therefore, the expansion of the existing facility would not be required.

Connections to local water and sewer mains would involve temporary and less than significant construction impacts that would occur in conjunction with other on-site improvements. The Project site is located within the existing service area of CVWD and is surrounded by existing development that is currently connected to existing CVWD water and wastewater lines. No additional improvements are needed to either water lines, sewer lines, or treatment facilities to serve the Project. Standard connection fees would address any incremental impacts of the Project. Therefore, the proposed Project would result in less than significant impacts as a result of new or expanded wastewater treatment facilities.

c) **Less than Significant Impact.** Potentially significant impacts could occur as a result of this Project if storm water runoff was increased to a level that would require construction of new storm drainage facilities. As discussed in the Hydrology section, the Project would not generate any increased runoff from the site that would require construction of new storm drainage facilities. A NPDES permit would be required for the Project and, pursuant to Municipal Code Section 19.20.190, all construction Projects shall prepare and submit a Storm Water Pollution Prevention Plan (SWPPP). Best Management Practices (BMPs) that include drainage controls such as detention ponds, dikes, filter berms, and down drains to prevent runoff, and utilizing plastic covering to prevent erosion shall also be applied pursuant to Municipal Code Section 19.20.110. Implementation of BMPs would reduce pollutants in stormwater and urban runoff from the Project site. The proposed storm drainage system and BMPs must be designed to the satisfaction of the City's Public Works Director and in conformance with all applicable permits and regulations. The Project applicant/developer would be required to provide all necessary on-site infrastructure. Impacts would be less than significant, and no mitigation beyond compliance with existing regulations is required. The proposed Project would have a less than significant impact on requiring the construction of new facilities or expansion of existing storm drainage facilities.

d) **Less than Significant Impact.** The Project could result in significant impacts if it required additional water supplies than are currently entitled. Water demand is provided by survey data utilized in the CalEEMod air quality model. Total water demand for the proposed Project is estimated at 2,336,610 gallons per year or 7.17 AFY. This number represents a conservative estimate because the proposed car wash would also utilize recycled water for car wash needs.

Water demand within the EMWD service area is anticipated to increase by 22,249 AFY between 2015 and 2035. The Project's conservative estimated water demand, 7.17 AFY, is well within anticipated increase in demand. Based on the CVWD 2015 UWMP, there are sufficient water supplies to meet the Project's estimated water demand and long-term demand. The proposed Project would not substantially deplete water supplies, and therefore would have a less than significant impact on entitled water supplies.

As summarized above, the 2015 UWMP indicates that there is adequate supply to serve the projected demand. The Project would comply with all water conservation and efficiency standards required by the Rancho Cucamonga Public Works

Department. Therefore, there are sufficient water supplies to meet the Project's estimated water demand and long-term demand. The proposed Project would not substantially deplete water supplies and would have a less than significant impact on entitled water supplies.

e) **Less than Significant Impact.** As detailed in Sections 4.17.a and 4.17.b, the Project would be adequately served by existing facilities. Therefore, a less than significant impact would occur.

f) **Less than Significant Impact.** Significant impacts could occur if the Project would exceed the existing permitted landfill capacity or violates federal, state, and local statutes and regulations. Solid Waste services are provided by the City of Rancho Cucamonga and County of San Bernardino Solid Waste Management Division (SWMD). Solid waste collection and transport in the City of Rancho Cucamonga is handled by contracted private firms that haul collected materials to regional landfills and materials recycling facilities. The County of San Bernardino contracted Burrtec to operate and maintain their solid waste disposal facilities located throughout the County. Solid waste generated in the City is transferred to Burrtec's West Valley Materials Recovery Facility (MRF). Solid waste that is not diverted is primarily disposed at Mid-Valley Landfill, a County Class III (i.e., municipal waste) landfill located at 2390 North Alder Avenue in Rialto (Ceballos 2009). According to the 2010 General Plan Update, Mid Valley Landfill has a daily permitted capacity of 7,500 tons per day (tons/day), a remaining capacity of 670,000 cubic yards (cy), and an anticipated close date of 2033.

Landfill capacity is expected to decrease over time with future growth and development throughout San Bernardino County and surrounding Inland Empire areas. Waste reduction and recycling programs and regulations are expected to reduce this demand and extend the life of existing landfills. Construction and operation of the proposed Project would result in an estimated net increase in solid waste disposal of 27.85 tons per year. This increase is well within the remaining capacity of Mid-Valley Landfill's daily permitted capacity. This nominal incremental increase in solid waste disposal, assuming that all solid waste in the City would be disposed at Mid-Valley Landfill, would not be considered cumulative considerable. Therefore, impacts related to the proposed Project would be less than significant and no mitigation is required. Compliance with County waste reduction programs and policies would reduce the volume of solid waste entering landfills. Individual development projects within the County would be required to comply with applicable state and local regulations, thus reducing the amount of landfill waste by at least 50 percent. The Project would increase the volume of solid waste generated in the County by 27.85 tons per year. According to CalRecycle, solid waste facilities serving San Bernardino County are projected to have a combined annual disposal limit of 3,633,512 tons and an annual remaining lifetime capacity surplus of 154,709,576 tons in the year 2025.⁴⁶ Combined remaining capacities at the landfills would be adequate to accommodate the proposed Project. Impacts related to sufficient landfill capacity are anticipated to be less than significant.

g) **No Impact.** The Project is required to comply with all applicable federal, state, County, and City statutes and regulations related to solid waste as a standard Project condition of approval. Therefore, no impact would occur.

Cumulative Impacts

The Project would have a less than significant impact with respect to utilities/service systems. The Project would require use of existing water and wastewater infrastructure, as well as existing, available solid waste disposal for building facility operation. Development of public utility infrastructure is part of an extensive planning process involving utility providers and jurisdictions with discretionary review authority. The coordination process associated with the preparation of development and infrastructure plans is intended to ensure that adequate resources are available to serve both individual projects and cumulative demand for resources and infrastructure as a result of cumulative growth and development in the area. Individual projects are subject to review for utility capacity to avoid unanticipated interruptions in service or inadequate supplies. Coordination with the utility companies would allow for the provision of utility service to the Project and other developments. The Project and other planned projects are subject to connection and service fees to assist in facility expansion and service improvements triggered by an increase in demand. Because of the utility planning and coordination activities described above, no significant cumulative utility impacts are anticipated.

4.19 – 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?	☐	☒	☐	☐
b) Does the Project have impacts that are individually limited, but cumulatively considerable?	☐	☒	☐	☐
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) **Less than Significant with Mitigation Incorporated.** The proposed Project would not substantially impact any scenic vistas, scenic resources, or the visual character of the area, as discussed in Section 4.1 and would not result in excessive light or glare. The Project site is located within a developed area with no natural habitat. The Project would not significantly impact any sensitive plants, plant communities, fish, wildlife or habitat for any sensitive species. There would be no impact to migratory birds. Adverse impacts to historic resources would not occur with mitigation incorporation. Construction-phase procedures would be implemented in the event any important cultural, archaeological, or paleontological resources are discovered during grading, consistent with Mitigation Measures CUL-1 through CUL-9. This site is not known to have any association with an important example of California's history or prehistory. Based on the preceding analysis of potential impacts in the responses to items 4.1 thru 4.17, no evidence is presented that this Project would degrade the quality of the environment. Impacts related to degradation of the environment, biological resources, and cultural resources would be less than significant with mitigation incorporated.

b) **Less than Significant with Mitigation Incorporated.** The Project would result in significant impacts in the following areas: cultural resources, noise, and traffic. A Mitigation Monitoring and Reporting Program has been prepared for each of these environmental issue areas in order to reduce impacts to less than significant levels. Standard conditions would also be imposed upon the Project. Other new development projects within the City would also be subject to these requirements. All other impacts of the Project were determined either to have no impact or to be less than significant, without the need for mitigation. Cumulatively, the Project would not result in any significant impacts that would substantially combine with impacts of other current or probable future impacts. Therefore, the Project, in conjunction with other future projects, would not result in any cumulatively considerable impacts.

c) **Less than Significant with Mitigation Incorporated.** Based on the analysis of the Project's impacts in the responses to items 4.1 thru 4.17, there is no indication that the proposed Project could result in substantial adverse effects on human beings. While there would be a variety of temporary adverse effects during construction related to noise these would be reduced to less than significant levels through mitigation. Long-term effects include increased vehicular traffic, traffic-related noise, use

of household hazardous materials, emissions of criteria pollutants and greenhouse gas emissions, and increased demand on emergency response services. The analysis herein concludes that direct and indirect environmental effects would at worst require mitigation to reduce to less than significant levels. Environmental effects would result in less than significant impacts. Based on the analysis in this Initial Study, the City finds that direct and indirect impacts to human beings would be less than significant with mitigation incorporated.

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5 Mitigation Summary

- BIO-1: Pre-Construction Nesting Bird Survey.** If vegetation removal is scheduled during the nesting season (typically February 1 to September 1), then a focused survey for active nests shall be conducted by a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) no more than five (5) days prior to the beginning of project-related activities (including but not limited to equipment mobilization and staging, clearing, grubbing, vegetation removal, and grading). Surveys shall be conducted in proposed work areas, staging and storage areas, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys shall be conducted within a 250-foot radius surrounding the work area (in areas where access is feasible). For larger raptors, such as those from the genus *Buteo*, the survey area shall encompass a 500-foot radius. Surveys shall be conducted during weather conditions suited to maximize the observation of possible nests and shall concentrate on areas of suitable habitat. If a lapse in project-related work of five (5) days or longer occurs, an additional nest survey shall be required before work can be reinitiated. If nests are encountered during any preconstruction survey, a qualified biologist shall determine if it may be feasible for construction to continue as planned without impacting the success of the nest, depending on conditions specific to each nest and the relative location and rate of construction activities. If the qualified biologist determines construction activities have potential to adversely affect a nest, the biologist shall immediately inform the construction manager to halt construction activities within minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on species and location. Active nest(s) within the Project Site shall be monitored by a qualified biologist during construction if work is occurring directly adjacent to the established no-work buffer. Construction activities within the no-work buffer may proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g. young have fledged, predation, or other non-anthropogenic nest failure).
- CUL-1: Conduct Paleontological Sensitivity Training for Construction Personnel.** The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and, the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.
- CUL-2: Conduct Periodic Paleontological Spot Checks During Grading and Earth-Moving Activities.** The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, shall conduct periodic Paleontological Spot Checks beginning at depths below six (6) feet to determine if construction excavations have extended into older Quaternary deposits. After the initial Paleontological Spot Check, further periodic checks will be conducted at the discretion of the qualified paleontologist. If the qualified paleontologist determines that construction excavations have extended into the older Quaternary deposits, construction monitoring for Paleontological Resources will be required. The Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into the older Pleistocene alluvial deposits. Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known paleontological resources and/or unique geological features, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of paleontological resources and/or unique geological features encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional paleontologist.

- CUL-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered.** In the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.
- CUL-4: Prepare Report Upon Completion of Monitoring Services.** Upon completion of the above activities, the professional paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to the Applicant, the City, the Natural History Museums of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.
- SMBMI-1:** In the event that pre-contact cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within SMBI-4, if any such find occurs and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.
- SMBMI-2:** If significant Native American historical resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within SMBI-4. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.
- SMBMI-3:** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.
- SMBMI-4:** The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in SMBI-1, of any pre-contact resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBM and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.
- SMBMI-5:** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

- GBMIKN-1: Retain a Native American Monitor/Consultant:** The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.
- GBMIKN-2: Unanticipated Discovery of Tribal Cultural and Archaeological Resources:** Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and archaeological resources.
- GBMIKN-3: Public Resources Code Sections 21083.2(b) for unique archaeological resources.** Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.
- GBMIKN-4: Unanticipated Discovery of Human Remains and Associated Funerary Objects:** Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.
- GBMIKN-5: Resource Assessment & Continuation of Work Protocol:** Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

GBMIKN-6: Kizh-Gabrieleno Procedures for burials and funerary remains: If the Gabrieleno Band of Mission Indians-Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

GBMIKN-7: Treatment Measures: Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

GBMIKN-8: Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

NOI-1 The following measures are required during construction to reduce noise impacts associated with construction:

- Temporary noise barriers will be constructed along the northern and eastern property lines. Temporary noise barriers must be constructed of material with a minimum weight of 3 pounds per square foot with no gaps or perforations. Noise barriers may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. These barriers will need to be a minimum of 8-feet in height.

The following measures are required of all construction projects implemented under the Proposed Plan to reduce noise associated with construction:

- Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating Project construction activities shall only occur between the hours of 7:00 a.m. to 8:00 p.m. on weekdays, including on Saturdays, with no activity allowed on Sundays and holidays.
- All internal combustion-engine-driven equipment will be equipped with mufflers that are in good operating condition and appropriate for the equipment.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the Project site (i.e., to the center) during construction.
- Unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes) will be prohibited.
- Construction activities, including the loading and unloading of materials and truck movements, will be limited to the hours specified in the City Noise Ordinance.
- The Project will designate a "construction liaison" that will be responsible for responding to any local complaints about construction noise. The liaison will determine the cause of the noise complaints (starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. A telephone number for the liaison will be conspicuously posted at the construction site.
- If a noise complaint(s) is registered, the liaison or project representative will retain a noise consultant to conduct noise measurements at the location where the complaint was registered. The noise measurements will be conducted for a minimum of 1 hour and will include 1-minute intervals. The consultant will prepare a letter report summarizing the measurements and potential measures to reduce noise levels to the maximum extent feasible. The letter report will include all measurement and calculation data used in determining impacts and resolutions.

NOI-2: The car wash dryer system shall not exceed 82.5 dBA at a distance of five (5) feet and shall be set back within the car wash tunnel approximately eight (8) feet from the exit allowing the tunnel structure to function as a sound attenuation barrier. All car wash supporting equipment including pumps, compressors, vacuum motors, and canister system shall be installed within a dedicated equipment room equipped with passive rooftop ventilation. The car wash shall cease daily operation activities no later than 10:00 p.m.

TCR-1: Conduct Tribal Cultural Resources Sensitivity Training for Construction Personnel. The Applicant shall retain a qualified professional Tribal monitor who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, to conduct Tribal Cultural Resources Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session shall be carried out by a Tribal monitor, under the direction of a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. The training session will include a handout and will focus on how to identify tribal cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of Tribal monitors, and, the general steps a qualified professional Tribal monitor would follow in conducting a salvage investigation if one is necessary.

TCR-2: Conduct Periodic Tribal Cultural Resources Spot Checks during grading and earth-moving activities. The Applicant shall retain a qualified professional who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct periodic Tribal Cultural Resource Spot Checks beginning at depths below two (2) feet to determine if construction excavations have exposed or have a high probability of exposing tribal cultural resources. After the initial Spot Check, further periodic checks will be conducted at the discretion of the qualified Tribal monitor. If the qualified Tribal monitor determines that construction excavations have exposed or have a high probability of exposing Tribal artifacts, construction monitoring for tribal cultural resources will be required. The Applicant shall retain a qualified Tribal monitor, who will work under the guidance and direction of a professional archaeologist, who meets the qualifications set forth by the U.S. Secretary of the Interior's Professional Qualifications and Standards. The Tribal monitor shall be present during all construction

excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill sediments. Multiple earth-moving construction activities may require multiple Tribal monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known tribal cultural resources, the materials being excavated (native versus artificial fill soils), the depth of excavation, and if found, the abundance and type of tribal cultural resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the Project Tribal monitor.

TCR-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Tribal Cultural Resources Are Encountered. In the event that tribal cultural resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities will not be allowed to continue until a qualified Tribal monitor has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All tribal cultural resources unearthed by Project construction activities shall be evaluated by a qualified professional who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted, and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the Tribal monitor to develop an appropriate treatment plan for the resources. The plan may include implementation of Tribal data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.

TCR-4: Prepare Report Upon Completion of Monitoring Services. The Tribal monitor, under the direction of a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards, shall prepare a final report at the conclusion of Tribal monitoring (if required). The report shall be submitted to the Applicant, the South Central Costal Information Center, the City, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of the resources.

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6.2 – Persons and Organizations Consulted

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