Initial Study &
Mitigated Negative Declaration

900 Meridian Avenue Gas Station Project

File No. C15-034

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

August 2015

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SECTION 1.0 INTRODUCTION AND PURPOSE

This Initial Study of environmental impacts was prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 *et.seq.*), and the regulations and policies of the City of San José (referred to as "the City" hereafter), California. The purpose of this Initial Study is to provide objective information regarding the environmental consequences of the proposed project to the decision makers who will be reviewing and considering the project.

The City of San José is the Lead Agency under CEQA and has prepared this Initial Study to evaluate the environmental impacts that might reasonably be anticipated to result from the demolition of an existing one-story structure containing a cashier/snack shop and two auto service bays to construct a new one-story structure housing a 1,909 square-foot convenience store and an 870 square-foot drive-through carwash with an associated 223 square-foot equipment room at an existing gasoline service station located at 900 Meridian Avenue in San Jose.

All documents referenced in this Initial Study are available for public review in the Office of Planning, Building, and Code Enforcement at San José City Hall, 200 East Santa Clara Street, during normal business hours.

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE AND FILE NUMBER

900 Meridian Avenue Gas Station (File No. C15-034)

2.2 PROJECT LOCATION

The project is located at 900 Median Avenue, which is situated on the southeast corner of Meridian Avenue and Fruitdale Avenue in the City of San José. Regional, vicinity, and aerial maps are shown on Figures 2.2-1 through 2.2-3.

2.3 ADDRESS AND ASSESSOR'S PARCEL NUMBERS

Address	**Assessor's Parcel Number**
900 Meridian Avenue, San Jose, CA 95126	264-02-051

2.4 GENERAL PLAN DESIGNATION, DEVELOPMENT POLICY, ZONING DESIGNATION, AND PRIOR DEVELOPMENT PERMIT

General Plan Designation: *Neighborhood/Community Commercial*

Existing Zoning Designation: *Commercial Pedestrian (CP)*

2.5 HABITAT PLAN DESIGNATIONS

Land Cover Designation: *Urban-Suburban*

Development Zone: *Private Development Covered*

Fee Zone: *Urban Areas (No Land Cover Fees)*

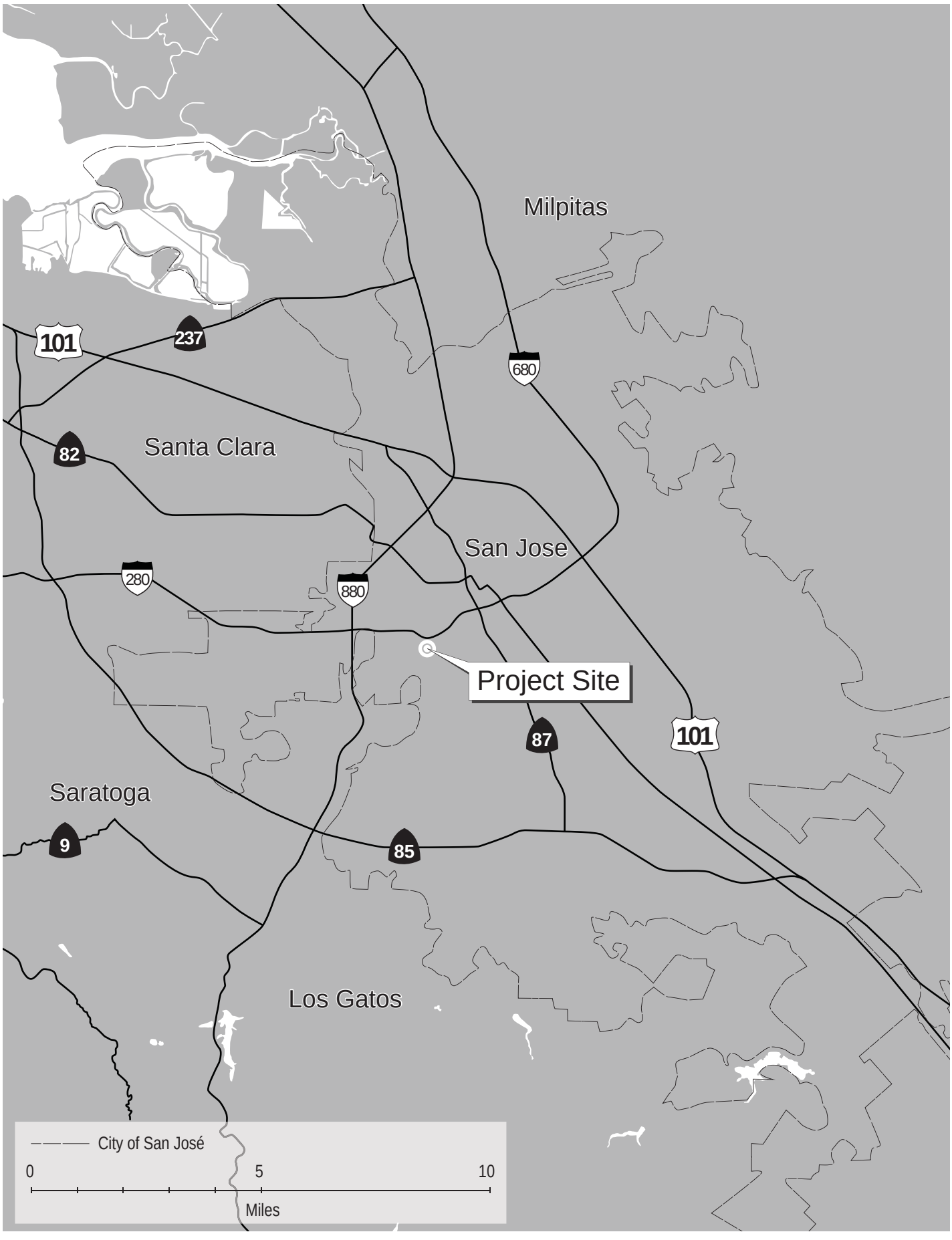
Wildlife Survey Area: *None*

Known Occurrences of Covered Plants: *None*

Category 1 Streams and Setback: *No*

2.6 PROJECT-RELATED APPROVALS

Rezoning



REGIONAL MAP FIGURE 2.2-1

VICINITY MAP

FIGURE 2.2-2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.2-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT DESCRIPTION

The approximately 0.47-acre project site is currently developed as a gasoline and service station consisting of one fuel canopy with four pumps (i.e., eight fueling stations), a small cashier/snack shop area, and two auto service bays. The project proposes to demolish the existing structure containing the one-story cashier/snack shop and auto bays and construct a new one-story structure housing a 1,909 square-foot convenience store and an 870 square-foot drive-through carwash with an associated 223 square-foot equipment room. A concrete masonry wall ranging from six to 10 feet in height would be constructed on the eastern boundary of the property to serve as a sound barrier for the proposed carwash.

The existing gas station, including the cashier/snack shop area, operates from 5:30 AM to 11:00 PM, while the auto service bays operate from 8:00 AM to 5:00 PM. Under project conditions, the carwash would operate from 6:00 AM to 9:30 PM, while the hours of operation for the gas station and convenience store would not change.

3.1.1 General Plan and Zoning Designations

The proposed project site has the General Plan Designation of *Neighborhood/Community Commercial,* and is zoned *Commercial Pedestrian (CP).* The project would be consistent with the General Plan designation on the site. The project proposes to rezone the site to *Neighborhood Commercial* (CN) with a Conditional Use Permit (CUP) to allow the development of the proposed carwash.

3.1.2 Site Access and Circulation

Currently, the project site has three vehicle access driveways, two on Meridian Avenue and one on Fruitdale Avenue. The northernmost driveway on Meridian Avenue would be removed, while the other two driveways would be improved as part of the development on the site, but their locations would remain the same. The site currently contains no marked parking spaces other than a handicap-accessible space located on the south side of the existing building, although vehicles utilize vacant areas on the perimeter of the site for parking. The project proposes to install 13 parking spaces, including one handicap-accessible space adjacent to the proposed structure.

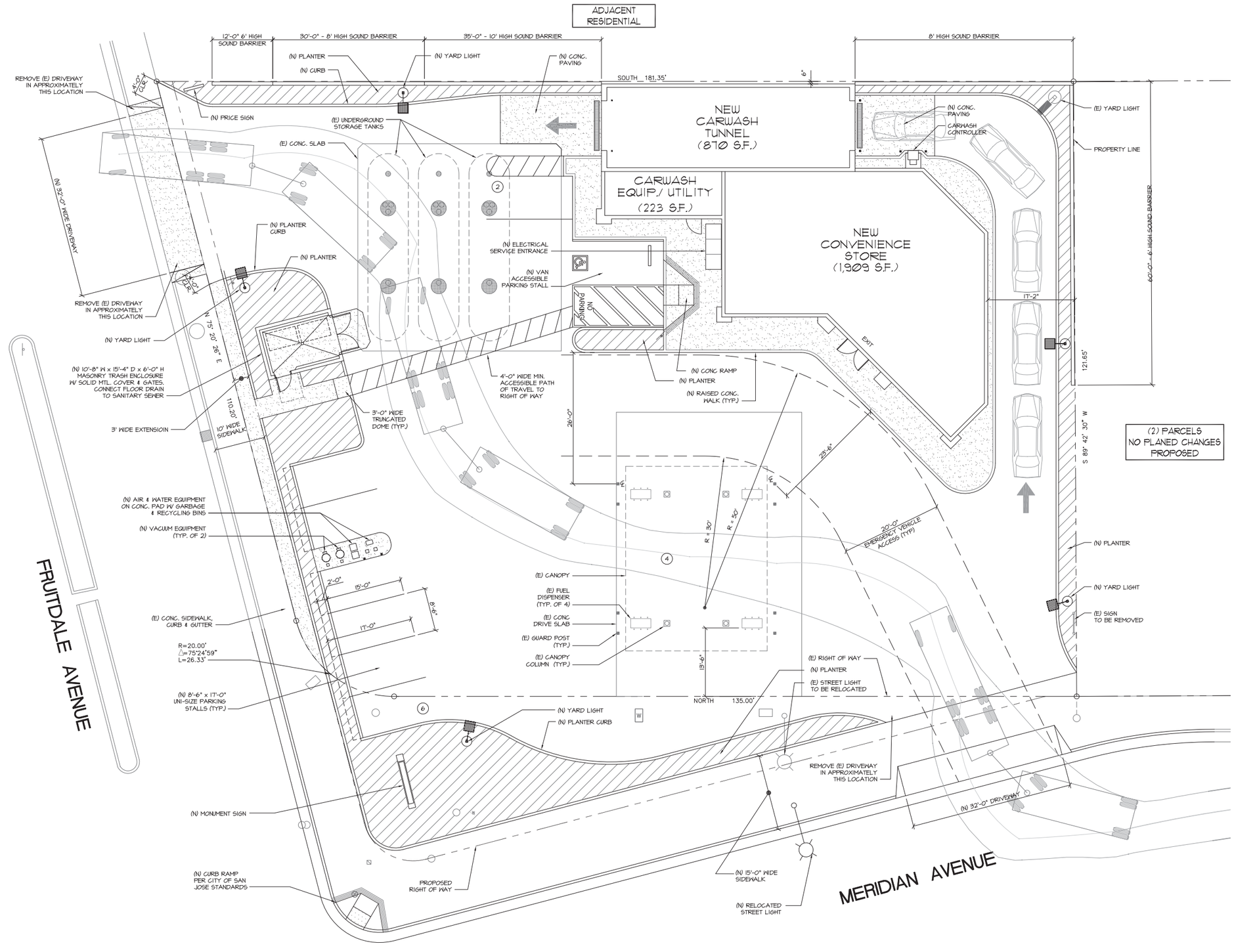
The proposed carwash would be located on the eastern boundary of the site and would be oriented north-south. Vehicles would queue on the southern boundary of the site before turning north and entering the carwash. Vehicles would exit the carwash facing north towards Fruitdale Avenue.

The project also includes offsite improvements to the Meridian Avenue corridor. Currently, a dedicated right turn lane allows vehicles travelling north on Meridian Avenue to make a free right turn onto Fruitdale Avenue. A wedge-shaped concrete island containing the base of an overhead traffic signal is located between the dedicated right turn lane and the through-lanes of traffic on Meridian Avenue. The project would vacate the dedicated right turn lane, as shown on Figure 3.1-5. The sidewalk on Meridian Avenue would be extended to the west so that it would be adjacent to the northbound through-lanes of traffic and the intersection crosswalks. The removal of the free right

turn is proposed to improve pedestrian safety at the intersection, by slowing down or stopping northbound vehicles before they make a right turn onto Fruitvale Avenue. The area between the project site and the new sidewalk would be improved with landscape features and would remain public right of way.

3.1.3 Landscaping and Other Improvements

Existing landscaping is limited to a landscaped island located on the site's frontage with Fruitdale Avenue. The project proposes to install landscaping along the majority of the site's perimeter, with the exception of areas utilized for driveway access and the proposed carwash structure (refer to Figure 3.1-4: Landscape Plan).



SITE INFORMATION

APN# 264-02-051

JURISDICTION: CITY OF SAN JOSE, CA

CURRENT ZONING: CP (PD) (PLANNED DEVELOPMENT DISTRICT),
PROPOSED ZONING: CN (COMMERCIAL NEIGHBORHOOD)

SITE COVERAGES:

SITE (NET & GROSS):	20,138 S.F. (0.50 ACRES)
EXISTING BUILDING (TO BE REMOVED):	1,075 S.F.
NEW BUILDINGS:	3,002 S.F. (14.9%)
CONVENIENCE STORE:	1,909 S.F. (85% = 1,623 S.F.)
CARWASH TUNNEL:	870 S.F.
CARWASH EQUIPMENT ROOM:	223 S.F.
PARKING & LOADING:	13,808 S.F. (68.6%)
LANDSCAPING:	2,256 S.F. (11.0%)

PARKING REQUIREMENTS:

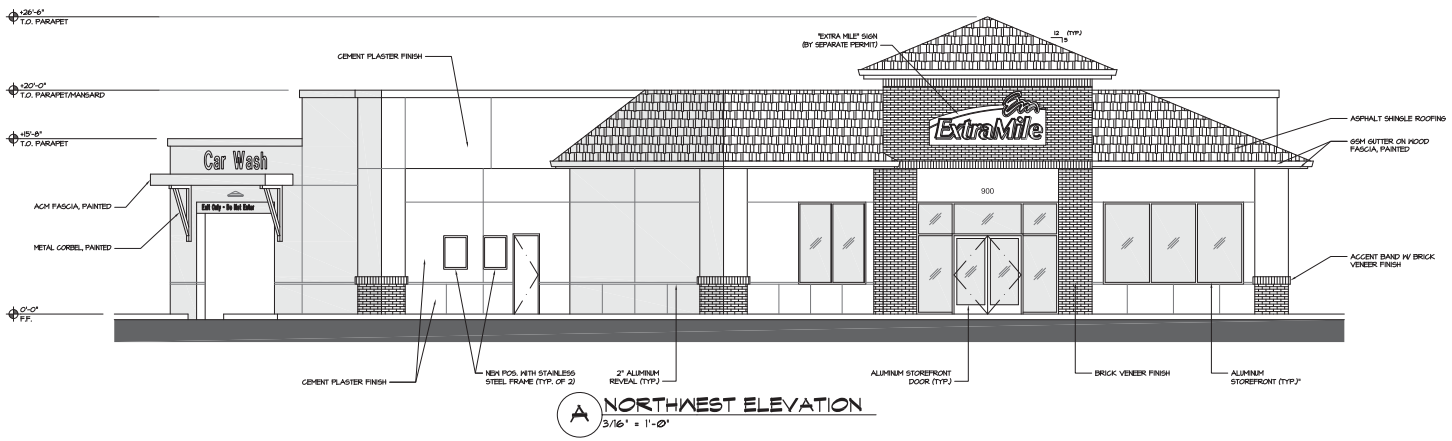
EXISTING PARKING:	1 SPACES
CONVENIENCE STORE- 1 SPACE PER 200 S.F. x 0.85	
1,909 S.F. x 0.85 = 1,623 / 200 =	8 SPACES
GAS STATION	
1 SPACE PER EMPLOYEE (1 EMPLOYEE) =	1 SPACE
1 SPACE PER AIR/WATER =	1 SPACE
1 SPACE FOR INFORMATION STOP = (OVERLAP W/ CONVENIENCE STORE)	1 SPACE
CARWASH	
VEHICLE STACKING FOR (5) CARS	
PARKING REQUIRED:	11 SPACES
PARKING PROVIDED:	12 SPACES
STANDARD PARKING STALLS (9' x 18'):	7 SPACES
VAN ACCESSIBLE PARKING STALL (11' x 18'):	1 SPACE
50% FUELING POSITION:	4 SPACES

SITE PLAN LEGEND

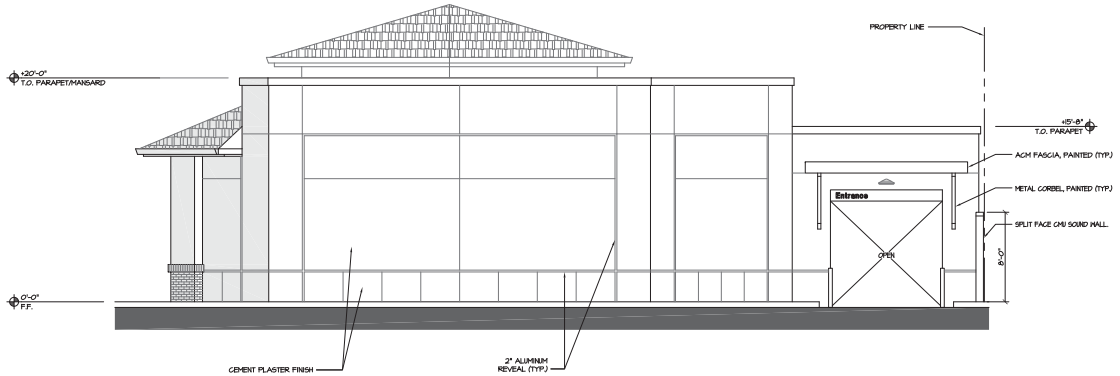
- NEW LANDSCAPING, SEE SHT. 10
- NEW CONCRETE PAVING
- 4 FT. WIDE (MIN.) ACCESSIBLE ROUTE OF TRAVEL, SHALL NOT EXCEED 5% SLOPE IN THE DIRECTION OF TRAVEL AND 2% CROSS SLOPE
- EXISTING TO REMAIN
- EXISTING CURB TO REMAIN
- NEW CONCRETE CURB

CONCEPTUAL SITE PLAN

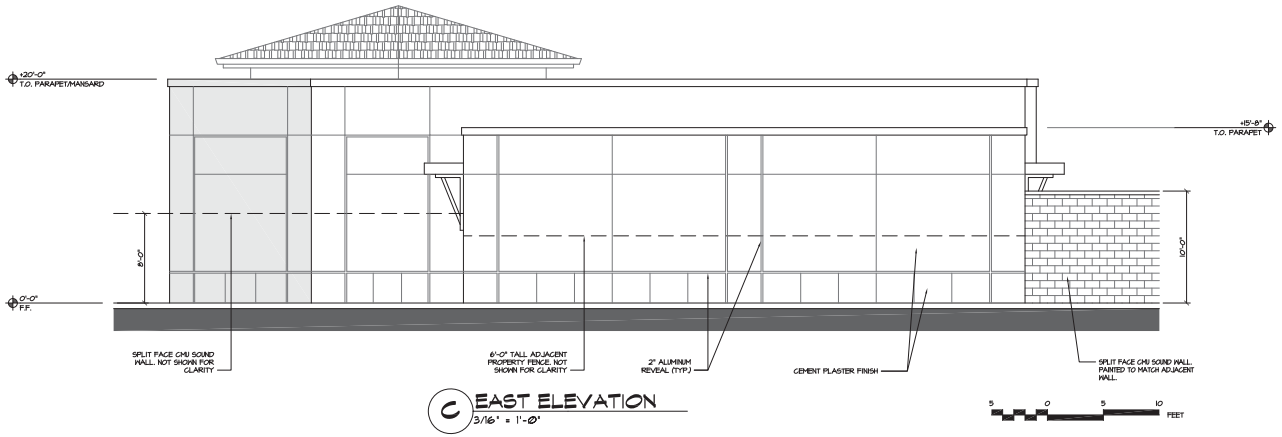
FIGURE 3.1-1



A NORTHWEST ELEVATION
3/16" = 1'-0"



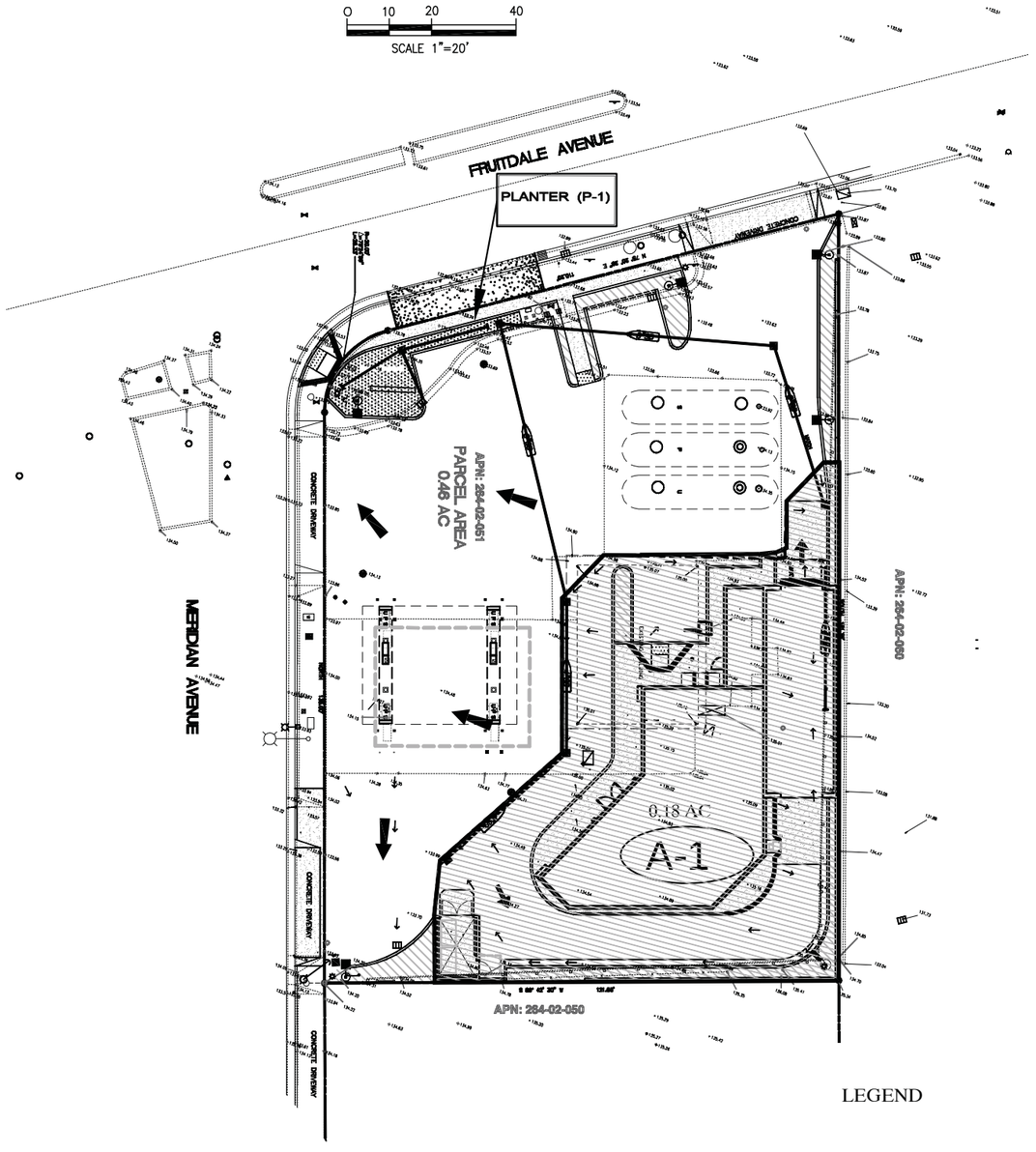
B SOUTH ELEVATION
3/16" = 1'-0"



C EAST ELEVATION
3/16" = 1'-0"

BUILDING ELEVATIONS

FIGURE 3.1-2



LEGEND

———	DRAINAGE AREA BOUNDARY
A-1	DRAINAGE AREA
→	DIRECTION OF FLOW
←	OVERLAND RELEASE
RD	ROOF DOWNSPOUT

PERVIOUS AND IMPERVIOUS SURFACES COMPARISON TABLE			
Project Phase Number: (N/A, 1, 2, 3, etc.)			
Total Site (acres):	0.46	Total Area Site Disturbed (acres):	0.46

Impervious Surface	Existing Condition of Site Area Disturbed (square Feet)	Existing Condition of Site Area Disturbed (square Feet)	
Roof Area(s)	2,095	2,849	
Parking			
Sidewalk patios, Paths, etc.	16,415	4,506	
Streets (public)			
Streets(private)			
Total Impervious Surfaces	18,510	7,355	
Pervious Surface			
Landscaped Area	1,628	2,301	2,301(post project)
Pervious Paving			
Other Pervious Surface			
Total Pervious Surfaces:	1,628	2,301	747

Total Proposed Replaced + New Impervious Surfaces:	7,355
Total Proposed Replaced + New Pervious Surfaces:	2,301

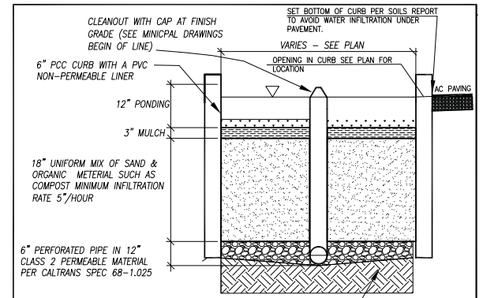
TREATMENT CONTROL TABLE

FLOW CALCULATIONS							BIOFILTRATION PLANTER SIZING				
						SOIL					
		Runoff	Effictive	Rainfall	Design	Infiltration	Area			Planter	Planter
TCM		Coefficient[2]	Impervious Area[3]	Intensity [4]	Flow	Rate [6]	Required [7]	Width	Length	Number	Area
AREA #	Area [1] (acres)		A SF	iwq (in/hr)	Qwq (cf/hr)	Vbf (in/hr)	Abf (SF)	(ft)	(ft)		Provided (SF)
A-1	0.18	0.8	8002	0.2	105.81	5	320.88	4	45	P-1	377

1- Areas correlate to watershed areas defined in Conceptual Hydrology Study
2- Composite runoff coefficient correlates to Appendix A1 for watershed
3- Effective Impervious Area = A * C/ 0.80 (c-value for pervious surface)
4- Water Quality rainfall intensity calculated per Santa Clara C.3 Stormwater Handbook and California Stormwater BMP Handbook (refer section 5.1)
5- Qwq = C x iwq x A (Sample Calculation = 0.14x.0.8x0.2x60x60=79.48 cf/hr)
6- Infiltration Rate assumed for typical biofiltration soil media
7- Abf = Q / Vbf (Abf must be at least 4 % of drainage area according to C.3 Stormwater Handbook prepared for Santa Clara Valley Urban Runoff Pollution Prevention Program)
bf = biofiltration

Table 1
Routine Maintenance Activities for Bioretention Areas

No.	Maintenance Task	Frequency of Task
1	Remove obstructions, debris and trash from bioretention area and dispose of properly.	Monthly, or as needed after storm events
2	Inspect bioretention area for ponded water. If ponded water does not drain within 2-3 days, till and replace the surface soil and replant.	Monthly, or as needed after storm events
3	Inspect inlets for channels, soil exposure or other evidence of erosion. Clear obstructions and remove sediment.	Monthly, or as needed after storm events
4	Remove and replace all dead and diseased vegetation.	Twice a year
5	Maintain vegetation and the irrigation system. Prune and weed to keep bioretention area neat and orderly in appearance. Remove and or replace any dead plants.	Twice a year
6	Check that mulch is at appropriate depth (2 inches per soil specifications) and replenish as necessary before wet season begins.	Monthly
7	Inspect the energy dissipation at the inlet to ensure it is functioning adequately, and that there is no scour of the surface mulch.	Annually, before the wet season begins
8	Inspect bioretention area using the attached inspection checklist.	Monthly, or after large storm events, and after removal of accumulated debris or material



NOTES:
* 6" PERFORATED PIPE SHALL BE SLOPED AT A MINIMUM 1.0% AND CONNECT TO PROPOSED STORM DRAIN PIPES AS SHOWN THESE PLANS.

BIORETENTION PLANTER
DETAIL FOR PLANTER P-2 AREA

NTS

Contractor to comply.

ALL DETAILS SHALL COMPLY WITH SCVURPP HANDBOOK DETAILS.

SIZING OF CURB OPENING FOR 2 YEAR

Q= AV = 1.486/N X R^⅔ X S^½ X A

A= CROSS SECTIONAL AREA (CFS)
V= FLOW VELOCITY (F/S)
R= HYDRAULIC RADIUS
S= SLOPE PER FT
n= MANNING COEFFICIENT
A = 0.28 AC)
Q = 0.0448 CFS
S = 0.01
R= a/p = 1.5 / 4 = 0.375ft
n = 0.13
Q= AV = 1.486/N X R^⅔ X S^½ X A
Q= 1.486/0.015 X (0.375)^⅔ X (0.1)^½ X 0.28
Q= 4.56 CFS

STORMWATER QUALITY FLOW CALCULATIONS FOR HYDRAULIC DESIGN

Q= CIA
C = 0.80 FOR COMMERCIAL/INDUSTRIAL PROPERTY
I = 0.20 INCHES PER HOUR
A = AREA, ACRES

AREA -1 0.28 AC)
Q: 0.80 x 0.20 x 0.18 = 0.0259 CFS

MINIMUM TCMS AND BMPS FOR LAND USE OF CONCERN:

GAS STATION OR EQUIPMENT FUELING FACILITIES:

ALL NEW FUELING STATIONS OR EXPANSION OF SUCH USES SHOULD INCLUDE THE FOLLOWING BMPS:

1. INSTALL AND MAINTAIN A TREATMENT CONTROL MEASURE

2. PAVE THE FUELING AREA FLOORS WITH AN IMPERMEABLE SURFACE (I.E., PORTLAND CEMENT CONCRETE OR EQUIVALENT SMOOTH IMPERVIOUS SURFACE).

3. COVER THE FUELING AREAS WITH A CANOPY OR COVER THAT EXTENDS A MINIMUM OF TEN FEET IN EACH DIRECTION FROM EACH PUMP. ALTERNATIVELY, COVER THE FUELING AREAS WITH A CANOPY OR COVER THAT HAS MINIMUM DIMENSIONS EQUAL TO OR GREATER THAN THE AREA WITH THE GRADE BREAK OR FUEL DISPENSING AREA. (THE FUEL DISPENSING AREA IS DEFINED AS THE AREA EXTENDING A MINIMUM OR 6.5 FEET FROM THE CORNER OF EACH FUEL DISPENSER OR THE LENGTH AT WHICH THE HOSE AND NOZZLE ASSEMBLY MAY BE OPERATED PLUS A MINIMUM OF ONE FOOT, WHICHEVER IS GREATER. IN NO CASE SHOULD THE CANOPY OR COVER DRAIN ONTO THE FUELING AREA.)

4. GRADE THE FUEL AREA TO PREVENT WATER DRAINING TOWARD THE FUELING AREA.

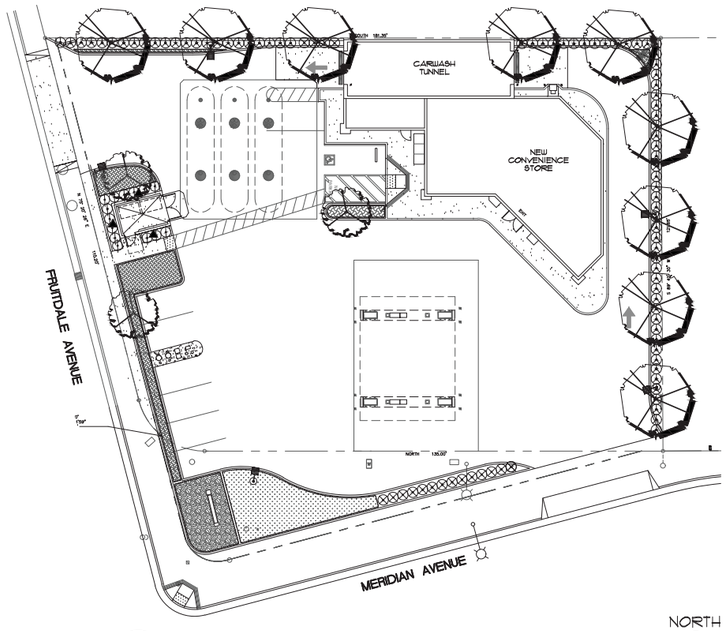
5. GRADE THE FUEL AREA WITH THE MINIMUM SLOPE NECESSARY TO PREVENT PONDING.

6. SEPARATE THE FUELING AREA FROM THE REST OF THE SITE BY A GRADE BREAK THAT PREVENTS RUN-ON OF STORM WATER TO THE MAXIMUM EXTENT PRACTICABLE.

7. DRY SWEEP THE FUELING AREA ROUTINELY.

8. STENCIL ALL ON-SITE STORM DRAINS IN CONFORMANCE WITH THE CITY'S REQUIREMENTS.

9. PREPARE A SPILL CLEANUP PLAN IN CONFORMANCE WITH THE CITY OF SAN JOSE FIRE CODE.

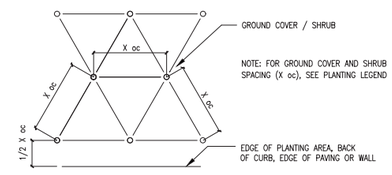


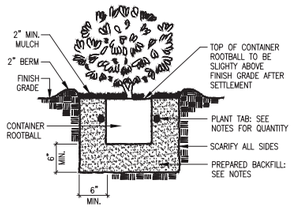
1 LANDSCAPE PLAN
1" = 20'-0"

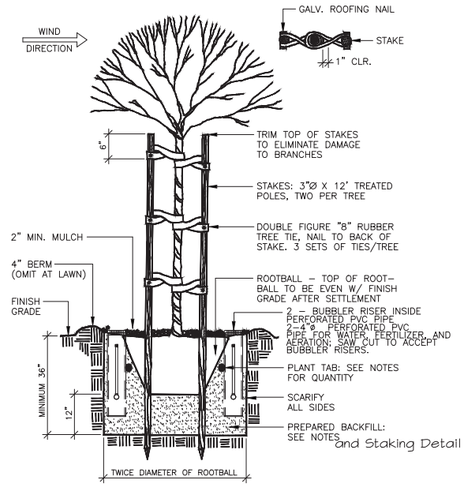
20 0 10 20 40 FEET
PRIG SCALE: 1" = 20'-0"

NORTH

Maximum Applied Water Allowance						Proposed Landscape Water Use			
						Plant			
Eto	X	.7	X	Pltg S X	Gal./SF	MAWA	Type	H2o Use	Pltg SF	Gallons
46.30		0.70		1,614	0.62	92,492	Low	0.40	1,461	29,628
							Medium	0.60	153	9,712
							High	0.90	0	0
								Totals	1,614	27,339







and Staking Detail

Planting Details
NOT TO SCALE

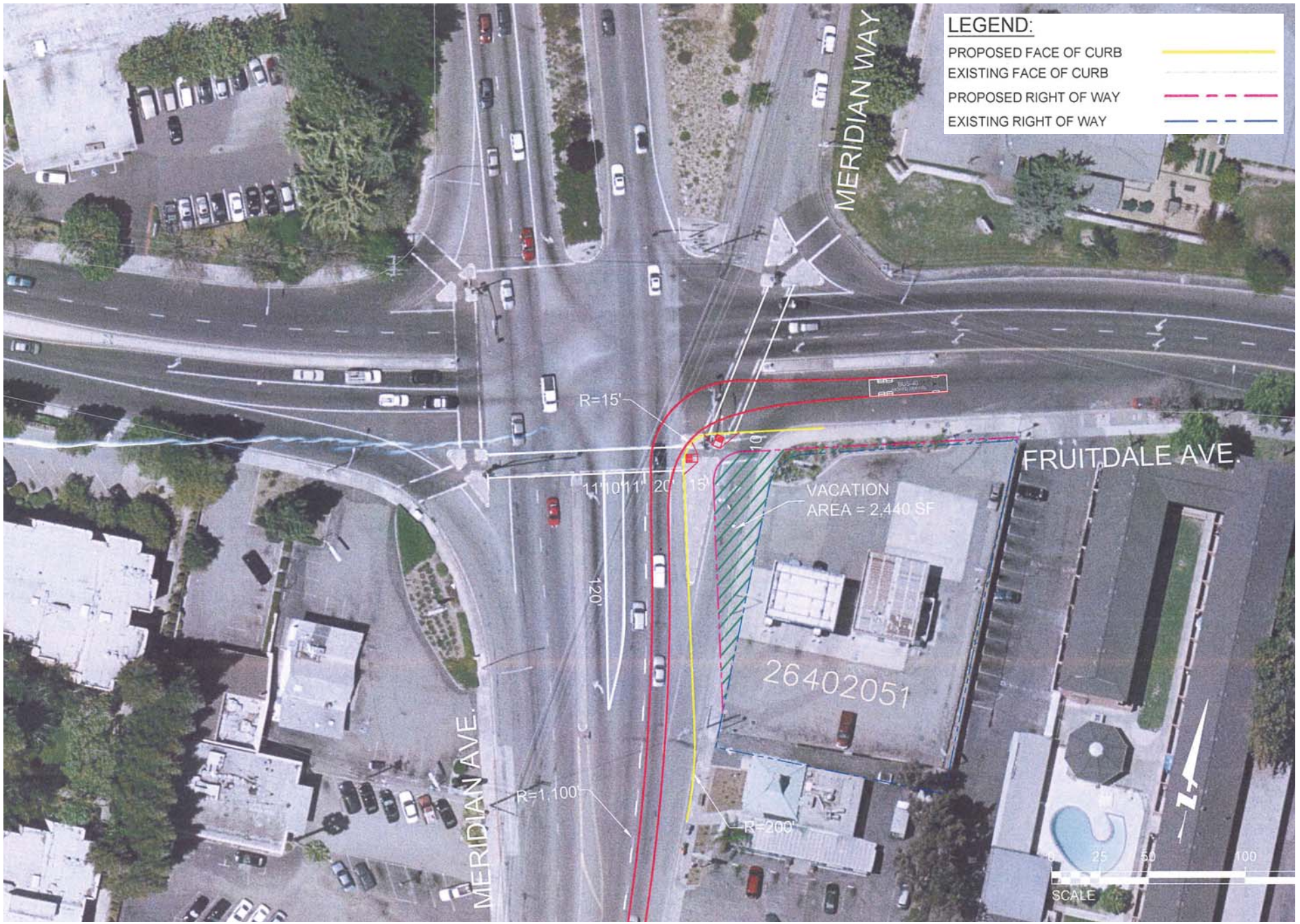
PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	H2O	SIZE
	Tree			
	Lagerstroemia Indica	Crape Myrtle	L	15 Gallon
	Quercus lobata	Valley Oak	L	15 Gallon (24" Box - see tree location)
	Shrubs and Vines			
	Myrica californica	Pacific Wax Myrtle	L	5 Gallon
	Stipa tennuissima	Mexican feather grass	L	5 Gallon
	Photinia fraseri	Photinia (Columar Form)	L	15 Gallon
	Macfadyena unguis-cati	Yellow Trumpit Vine	L	1 Gallon
	Ground Cover			
ROS	Rosmarinus officinalis 'Hunting't Carpet'	Roemary	L	1 Gallon @ 30"
HEM	Hemerocallis x 'Rosy Returns'	Hemerocallis	L	4" Pot @ 14" oc
SOD	Native Bentgrass	Delta Bluegrass	L	Sod

HEM ROS SOD

PLANTING NOTES

1. All trees are to be staked as shown in the staking diagram per city requirement.
2. Plant locations are to be adjusted as necessary to screen utilities but not block windows or impede access.
3. All ground cover and shrub areas shall be top-dressed with a 3" layer of bark mulch.
4. All ground cover planting will be placed no farther than 6" from edge of pavement, edge of header or back of curb. Spacing shall ensure full coverage in one year.
5. There shall be no storing of material or equipment, permitting of any burning or operating or parking of equipment under branches of any existing plants to remain. If existing plants to remain are damaged during construction, the plants shall be replaced with the same species an size as those damaged.
6. All plant material shall be nursery grown stock. All plant materials shall be tagged at the nursery at least 1 month prior to planting for the Landscape Architects review.
7. Review layout of all landscape elements with the Landscape Architect prior to installation. Field modifications may be necessary. Final layout to be reviewed by the Landscape Architect .
8. Written dimensions supersede scaled dimension Measurements are from the wall face, back of curb. edge of walk, building wall, property line or center line as graphically indicated.
9. All layout corners are at 90 degrees right angles unless otherwise indicated. All curves shown are segments of circles with noted radii or diameter if noted. Circles can be scaled and be connected by freeform curves.
10. HERBICIDE APPLICATION: Herbicide shall not be used until all plant material has been planted a minimum of 20-days. All planting areas shall be kept weed-free by non-herbicide methods during this time period. Herbicide shall not be applied to any areas which are or have been seeded. Contractor must be licensed by the State and County for fertilizer application, and must have current registration on file with the County.
11. Landscaping shall be maintained in a manner to prevent landscaping from growing above 3' in height in the areas indicated in the plans as being located within a safety visibility triangle area.
12. CERTIFICATION: Prior to occupancy, the Landscape Architect shall certify in writing in a manner acceptable to the Building Inspection Division, that the landscaping has been installed in accordance with all aspects of the approved landscape plans.



OFFSITE IMPROVEMENTS TO MERIDIAN AVENUE

FIGURE 3.1-5

SECTION 4.0 SETTING, ENVIRONMENTAL CHECKLIST AND IMPACTS

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

The right-hand column in the checklist cites the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. "Mitigation Measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines §15370). Measures that are standard and required by the City or law are categorized as "Standard Permit Conditions." All measures shall be printed on all documents, contracts, and project plans.

4.1 AESTHETICS

4.1.1 Setting

The 0.47 acre project site is located at the southeast corner of the intersection of Meridian Avenue and Fruitdale Avenue. The site is currently developed with one fuel canopy with four pumps (i.e., eight fueling stations), and a small cashier/snack shop area with an attached two bay auto service area. The cashier/snack shop area and auto bays are housed in a one-story concrete and glass building constructed in the 1960's, which is located in the eastern portion of the site. The four gasoline pumps, each consisting of two fueling stations, are located beneath the metal canopy structure adjacent to Meridian Avenue. Two driveways on Meridian Avenue and one driveway on Fruitdale Avenue provide vehicular access to the site. A small landscaped island is located at the northwest corner of the site. Signage indicating gasoline prices rests atop a white brick base within the landscaped island. Refer to photos 1-4 for views of the project site.

The site is bounded by Meridian Avenue to the west and Fruitdale Avenue to the north. A two-story apartment complex and associated ground-level paved parking area is separated from the project site by a five- to-seven foot tall wooden fence along the site's eastern boundary. A small one-story restaurant is located along the site's southern boundary and is separated by a decaying wooden fence. A one-story church with an incorporated daycare center is located north of the site across Fruitdale Avenue. A one-story restaurant and one-story medical office center are located across Meridian Avenue to the west and northwest of the site, respectively.

The project area is relatively flat with a slight downward slope from the center of the site towards Meridian Avenue and Fruitdale Avenue. The site is not located within a scenic view corridor, nor is it visible from a designated or eligible State scenic highway. No scenic vistas or scenic resources are located on site.

Photo 1: View of the project site from Meridian Avenue facing north

Photo 2: View of project site from Fruitdale Avenue facing south

Photo 3: View of project site with adjacent apartment complex and restaurant from Meridian Avenue facing east

Photo 4: View of project site from Fruitdale Avenue facing southwest

4.1.1.1 *Light and Glare*

The existing site has been developed with a gas station since the 1960's and faces the heavily used Meridian and Fruitdale Avenues. Streetlights and other lighting are found throughout the area in the vicinity of the project. Sources of light and glare in the surrounding area are those typical in developed urban areas, including headlights, streetlights, parking lot lights, security lights, and reflective surfaces such as windows.

4.1.2 Regulatory Background

Outdoor Lighting Policy

The City of San José's Outdoor Lighting Policy (City Council Policy 4-3) promotes energy efficient outdoor lighting on private development to provide adequate light for nighttime activities while benefiting the continued enjoyment of the night sky and continuing operation of the Lick Observatory by reducing light pollution and sky glow.

4.1.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	1, 2
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	1, 2
3. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	1, 2
4. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	☐	☐	☒	☐	1, 2

4.1.2.1 Aesthetic Impacts

Scenic Vistas and Other Scenic Resources (Checklist Questions 1 – 2)

The site is not located along a State scenic highway. There are no designated scenic vistas or scenic resources in the vicinity of the project site; therefore, the project will not have an adverse effect on these resources. **(No Impact)**

Visual Character (Checklist Question 3)

Although the land use on the site would not change, the project would slightly modify the appearance of the site when viewed from the surrounding area, particularly Meridian Avenue, Fruitdale Avenue, and adjacent commercial and residential uses. The existing structure containing the convenience store and auto service bays would be demolished and replaced by a new one-story structure housing a 1,909 square-foot convenience store and an 870 square-foot drive-through carwash with an associated 223 square-foot equipment room. The proposed structure would reach a maximum height of 26.5 feet. A concrete masonry wall ranging from six to 10 feet in height would be constructed on the eastern boundary of the property to serve as a sound barrier for the proposed carwash.

The existing landscaping on the site would be modified as part of the proposed project. The project proposes to install landscaping along the majority of the site's perimeter, with the exception of areas utilized for driveway access and the proposed carwash. As a result, the overall amount of landscaping on the site would be increased by the project.

The project would be in scale with existing development in the project area. The new building and landscaping could be considered a visual improvement over existing conditions. For these reasons, the proposed project would not substantially degrade the existing visual character of the site or the surrounding area. **(Less Than Significant Impact)**

Light and Glare (Checklist Question 4)

The existing gas station on the site includes lighting beneath the fueling canopies and near the convenience store. The project would replace light fixtures as part of the redevelopment of the site. San José City Council Policy 4-3 calls for private development to use energy-efficient outdoor lighting that is fully shielded and not directed skyward. All lighting installed by the project will be full cutoff lighting, designed in conformance with City Council Policy 4-3. Design and construction of the project in conformance with General Plan Community Design Policies and lighting policies would not create a new source of light or glare that would adversely affect views. **(Less Than Significant Impact)**

4.1.3 Conclusion

The proposed project would have a less than significant visual and aesthetic impact. **(Less Than Significant Impact)**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Setting

The project site is in an industrial area in the City of San José. According to the Santa Clara County Farmland Map 2012, the subject site is designated as *Urban and Built-up Land. Urban and Built-up Land* is defined as residential land with a density of at least six units per ten acre parcel, as well as land used for industrial and commercial purposes, golf courses, landfills, airports, sewage treatment, and water control structures. No forest land or timberland, as defined in Public Resources Code Section 12220(g), is located near the project site.

4.2.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. 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?	☐	☐	☐	☒	1, 4
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1, 5
3. 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))?	☐	☐	☐	☒	1, 2, 3
4. Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1
5. 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?	☐	☐	☐	☒	1

4.2.2.1 *Agricultural and Forest Resources Impacts* (Checklist Questions 1- 5)

Agricultural uses have not occurred on or adjacent to the project site for several decades. The property is not subject to a Williamson Act contract and is not mapped as farmland, timberland, or as a forest resource. The proposed project would not affect farmland or agricultural uses in any way.

The project site does not include forest land, nor has any timberland production taken place on the project site. The proposed project would not affect forest land or timberland uses in any way. **(No Impact)**

4.2.3 Conclusion

The proposed project would have no impact on agricultural land, forest land, timberland, or agricultural activities. **(No Impact)**

4.3 AIR QUALITY

4.3.1 Setting

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine.

The Bay Area typically has moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution. These factors give the Bay Area a relatively high atmospheric potential for pollution.

4.3.1.1 *Regulatory Setting*

National Ambient Air Quality Standards

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for six major air pollutants: carbon monoxide (CO), nitrogen oxides (NO_X), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), sulfur oxides, and lead. Pursuant to the California Clean Air Act, the state has also established the California Ambient Air Quality Standards (CAAQS), which are generally more stringent than the corresponding federal standards. The Bay Area Air Quality Management District (BAAQMD) is primarily responsible for assuring that the national and state ambient air quality standards are attained and maintained in the San Francisco Bay Air Basin.

Santa Clara County, and the Bay Area as a whole, is classified as a nonattainment area for ozone, PM_{10}, and $PM_{2.5}$ under federal law. The county is either in attainment or unclassified for other pollutants.

Ozone, often called photochemical smog, is classified as a secondary air pollutant, meaning it is not emitted directly into the air. It is created by the action of sunlight on ozone precursors, primarily reactive hydrocarbons and NO_X. The major sources of ozone precursors include combustion sources such as factories and automobiles and evaporation of solvents and fuels. The main public health concerns associated with ground level ozone pollution are eye irritation and impairment of respiratory functions.

PM_{10} consists of solid and liquid particles of dust, soot, aerosols, and other matter which are less than 10 microns in diameter. Major sources of PM_{10} are combustion (including automobile engines – particularly diesel, fires, and factories) and dust from paved and unpaved roads. Public health concerns associated with PM_{10} include aggravation of chronic disease and heart/lung disease symptoms.

$PM_{2.5}$, also known as Fine Particulate Matter, consists of the same type of matter as PM_{10}, but is less than 2.5 microns in diameter. The major source of $PM_{2.5}$ is combustion, but the particles can also be formed by chemical changes occurring in the air. $PM_{2.5}$ can cause respiratory problems and is of particular concern because the particles can penetrate deeper into the lungs.

The region is required to adopt clean air plans on a triennial basis that show progress towards meeting the state ozone standard. The latest regional plan was adopted in September 2010. This plan includes a comprehensive strategy to reduce emissions from stationary, area, and mobile sources through the expeditious implementation of all feasible measures, including transportation control measures (TCMs) and programs such as "Spare the Air."[1]

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer or serious illness) and include, but are not limited to, criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a highway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to that for criteria air pollutants that have established ambient air quality standards. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an ambient air quality standard or emission-based threshold.

Diesel Particulate Matter

Diesel exhaust, in the form of diesel particulate matter (DPM), is the predominant TAC in urban air with the potential to cause cancer. It is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the California Air Resource Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants programs. California has adopted a comprehensive diesel risk reduction program. The U.S. Environmental Protection Agency (EPA) and the CARB have adopted low-sulfur diesel fuel standards in 2006 that reduces diesel particulate matter substantially. The CARB recently adopted new regulations requiring the retrofit and/or replacement of construction equipment, on-highway diesel trucks, and diesel buses in order to lower fine particulate matter (PM2.5) emissions and reduce statewide cancer risk from diesel exhaust.

Fine Particulate Matter (PM2.5)

Particulate matter in excess of state and federal standards represents another challenge for the Bay Area. Elevated concentrations of $PM_{2.5}$ are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

[1] Bay Area Air Quality Management District, *2010 Clean Air Plan*, September 15, 2010.

Sensitive Receptors

BAAQMD defines sensitive receptors as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and the chronically ill are likely to be located. These facilities include residences, school playgrounds, child-care centers, retirement homes, convalescent homes, and people with illnesses. Examples include schools, hospitals and residential areas. The nearest sensitive receptors to the project site are the multi-family residences located approximately 45 feet east of the site on Fruitdale Avenue.

General Plan

The *Envision San José 2040 General Plan* includes the following air quality policies applicable to the proposed project:

Policy MS-10.1: Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards. Identify and implement air emissions reduction measures.

Policy MS-10.2: Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.

Policy MS-11.5: Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.

Policy MS-13.1: Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.

4.3.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	1, 6
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1, 6

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☒	☐	1, 6
4. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	1, 6
5. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	1, 6

4.3.2.1 *CEQA Thresholds*

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of San José, and other jurisdictions in the San Francisco Bay Area Air Basin, often utilize the thresholds and methodology for assessing air emissions and/or health effects adopted by the BAAQMD based upon the scientific and other factual data prepared by BAAQMD in developing those thresholds.

Thresholds prepared and adopted by BAAQMD in May 2011 were the subject of a lawsuit by the California Building Industry Association (BIA)[2] and a subsequent appeal by BAAQMD.[3] The Appellate Court decision on August 13, 2013 upheld the thresholds as valid. The Appellate Court's decision was subsequently appealed to the California Supreme Court, which granted limited review and before whom the matter is still pending as of January 2015.

The determination of whether a project may have a significant effect on the environment is subject to the discretion of each lead agency, based upon substantial evidence. The issues in the California Building Industry Association v. BAAQMD lawsuit are not relevant to the scientific basis of BAAQMD's analysis of what levels of pollutants should be deemed significant. The City has determined that the scientific information in BAAQMD's proposed thresholds of significance analysis provides substantial evidence to support the 2011 thresholds and, therefore, has determined the thresholds and methodologies from BAAQMD's May 2011 CEQA Air Quality Guidelines are appropriate for use in this analysis to determine whether there would be any project operational impacts in terms of criteria pollutants, toxic air contaminants and odors. Evidence supporting these thresholds has been presented in the following documents:

[2] *California Building Industry Association v. Bay Area Air Quality Management District*, Alameda County Superior Court Case No. RG10548693)

[3] *California Building Industry Association v. Bay Area Air Quality Management District*, Cal. Ct. App. 1st, Case No. A135335, August 13, 2013. The Appellate Court ruled that the BAAQMD CEQA thresholds were adopted using a valid public review process and were supported by substantial evidence.

- BAAQMD. *CEQA Air Quality Guidelines*. Updated May 2011.
- BAAQMD. *Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance.* October 2009.
- California Air Pollution Control Officers Association. *Health Risk Assessments for Proposed Land Use Projects*. July 2009.
- California Environmental Protection Agency, California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective.* 2005.

The analysis in the Initial Study is based upon the general methodologies in the most recent BAAQMD CEQA Air Quality Guidelines (dated May 2012) and numeric thresholds identified for the San Francisco Bay Area Air Basin in the May 2011 BAAQMD CEQA Air Quality Guidelines, as shown in Table 4.3-1.

Table 4.3-1 BAAQMD Thresholds of Significance Used in Air Quality Analyses

Pollutant	Construction	Operation-Related	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust (PM_{10}/$PM_{2.5}$)	Best Management Practices	None	None
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
Risk and Hazards for New Sources and Receptors (Project)	Same as Operational Threshold	• Increased cancer risk of >10.0 in one million • Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.3 μ/m^3 [Zone of influence: 1,000-foot radius from property line of source or receptor]	
Risk and Hazards for New Sources and Receptors (Cumulative)	Same as Operational Threshold	• Increased cancer risk of >100 in one million • Increased non-cancer risk of > 10.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.8 μ/m^3 [Zone of influence: 1,000-foot radius from property line of source or receptor]	

Sources: *Bay Area Air Quality Management District CEQA Guidelines (updated May 2011) and BAAQMD. Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance. October 2009.*

4.3.2.2 *Clean Air Plan Consistency (Checklist Question 1)*

For air quality plan consistency determinations, the BAAQMD recommends that agencies analyze the project with respect to the following questions: (1) does the project support the primary goals of the air quality plan; (2) does the project include applicable control measures from the air quality plan; and (3) does the project not disrupt or hinder implementation of any 2010 CAP control measures? If all the questions are concluded in the affirmative, BAAQMD considers the project consistent with air quality plans prepared for the Bay Area. If approval of the project would not result in significant and unavoidable air quality impacts after the application of mitigation, then the project would be considered consistent with the 2010 CAP.

As discussed below in Section 4.3.2.3, emissions from the proposed project would not exceed the identified guidelines or thresholds; therefore, the project would support the primary goals of the 2010 CAP. As mentioned above, projects that incorporate all feasible air quality plan control measures are considered consistent with the 2010 CAP. Because the project would not change the land use on the project site, or result in any additional employment, there appear to be no 2010 CAP control measures that would be directly applicable to the proposed project.

The project would support the primary goals of the 2010 CAP and it would not disrupt or hinder implementation of any 2010 CAP control measures. The project will not conflict with or obstruct implementation of the 2010 CAP. The project by itself, therefore, will not result in a significant impact related to consistency with the Bay Area 2010 Clean Air Plan. **(Less Than Significant Impact)**

4.3.2.3 *Construction and Operational Air Quality Impacts (Checklist Questions 2 through 4)*

Construction Air Quality Impacts

Construction activities would temporarily affect local air quality. Construction activities such as earthmoving, construction vehicle traffic, and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that affect local and regional air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-water based paints, thinners, some insulating materials, and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

In addition to the screening thresholds for criteria pollutants discussed above, the BAAQMD Guidelines also contain screening criteria for construction emissions. The BAAQMD screening threshold for construction emissions related to a convenience store with gas pumps is 277,000 square feet. The proposed development would be well below the screening criteria, and thus would result in a less than significant impact.

For all proposed projects, BAAQMD recommends the implementation of Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable thresholds of significance for construction emissions. The proposed project will include basic construction

mitigation measures, listed as best management practices (BMPs) for the purposes of this Initial Study, recommended by BAAQMD to reduce project construction dust impacts.

Standard Permit Conditions: The following BMPs shall be implemented during all phases of construction to prevent visible dust emissions from leaving the project site:

- Water all active construction areas at least twice daily or as often as needed to control dust emissions.
- Cover all trucks hauling soil, sand, and other loose materials and/or ensure that all trucks hauling such materials maintain at least two feet of freeboard.
- Pave, apply water twice daily, or as often as necessary, to control dust, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily, or as often as needed, with water sweepers all paved access roads, parking areas and staging areas at construction sites to control dust.
- Sweep adjacent public streets daily, or as often as needed, to keep streets free of visible soil material.
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- Replant vegetation in disturbed areas as quickly as possible.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

(Less Than Significant Impact)

Operational Air Quality Impacts

The project proposes to demolish the existing structure containing the one-story cashier/snack shop and auto bays and construct a new one-story structure housing a 1,909 square-foot convenience store and an 870 square-foot drive-through carwash with an associated 223 square-foot equipment room.

The BAAQMD Guidelines contain screening criteria that were developed to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in significant air quality impacts, based on the emissions thresholds listed in Table 4.3-1 above. If the screening criteria are met by a proposed project, a detailed assessment of emissions is not necessary and the emissions are assumed to be less than significant. The BAAQMD screening threshold for criteria pollutants related to a convenience store with gas pumps is 4,000 square feet. The proposed project would create a net addition of 1,966 square feet, which is below the screening criteria. The screening criteria, however, does not include a category for a convenience store with gas pumps and a carwash. According to the Institute of Transportation Engineers *Trip Generation (8th Edition)*, the *Gasoline/Service Station with Convenience Market and Carwash (946)* land use category generates an average of 152.84 weekday vehicle trips per fueling position, while the *Gasoline/Service Station with Convenience Market (945)* land use category generates 162.78 trips per fueling position. This data suggests that the proposed inclusion of a carwash would not result in additional vehicle trips compared to the screening threshold assumptions in the BAAQMD Guidelines. Therefore, since the proposed project would not exceed the BAAQMD screening threshold, a detailed analysis of the

project's criteria pollutant emissions is unnecessary, and the project is assumed to result in a less than significant air quality impact.[4] **(Less Than Significant Impact)**

Toxic Air Contaminants

Emissions of TACs associated with the project would primarily from two sources: diesel-fueled vehicles accessing the site, and the operation of diesel-fueled equipment during project construction.

As stated previously, according to trip rates published by the Institute of Traffic Engineers, the project would not result in an increase in vehicle trips associated with the site. Additionally, because the project would not increase the number of fueling stations on the site, there would be no additional diesel-fueled trucks accessing the site to deliver gasoline. As a result, TAC emissions associated with vehicle trips would not increase due to the project.

The BAAQMD has established screening criteria for the emission of TACs during construction activities. Construction projects below the screening criteria are assumed to result in less than significant emissions of TACs. The project proposes to construct a total of 3,002 square feet of commercial uses, which is below the lowest BAAQMD screening threshold 5,000 square feet. The project, therefore, would not result in significant emissions of TACs during construction. **(Less Than Significant Impact)**

4.3.2.3 *Odor Impacts (Checklist Question 5)*

The proposed project would not change the land use on the site, other than the addition of a carwash. Odors produced from carwashes generally consist of perfume-like scents from soaps and other chemicals used, and do not disperse far from the source. As a result, the project would not create objectionable odors affecting a substantial number of people. **(Less Than Significant Impact)**

4.3.3 Conclusion

The proposed project would not result in significant air quality impacts. **(Less Than Significant Impact)**

[4] Bay Area Air Quality Management District. *CEQA Air Quality Guidelines.* Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes. Updated May 2011. p. 3-2.

4.4 BIOLOGICAL RESOURCES

4.4.1 Setting

The project site is located in a fully developed area in central San Jose. Wildlife habitat on the project site is very limited, consisting of one landscaped island in the northwestern portion of the site, and is unlikely to be occupied by special status plant and/or animal species. There are no undisturbed areas or sensitive habitats on the site, and the site does not contain any streams, waterways, or wetlands. Because of its urban setting and isolation from areas of undeveloped lands, the site does not function as a movement corridor for local wildlife. No rare, threatened, endangered, or special status species of flora or fauna are known to inhabit the site.

4.4.1.1 *Regulatory Setting*

City of San José Tree Ordinance

The City of San José tree ordinance (Chapter 13.32 of the Municipal Code) regulates the removal of trees. An "ordinance-sized tree" is defined as any native or non-native tree with a circumference of 56 inches or diameter of 18 inches at 24 inches above the natural grade of slope. A tree removal permit is required by the City prior to the removal of any trees covered under the ordinance. No ordinance-sized trees will be removed as a result of the proposed project.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act of 1918 (MBTA) is one of the nation's oldest environmental laws. The MBTA prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbance during the breeding season that results in the incidental loss of fertile eggs or nestlings, or otherwise leads to nest abandonment, would violate the MBTA.[5]

General Plan

The *Envision San José 2040 General Plan* includes the following biological resource policies applicable to the proposed project:

Policy ER-2.1: Ensure that new public and private development adjacent to riparian corridors in San José are consistent with the provisions of the City's Riparian Corridor Policy Study and any adopted Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (VHP/NCCP).

Policy ER-5.1: Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance

[5] A complete list of bird species protected by the MBTA is available on the US Fish and Wildlife Service website: http://www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtandx.html

activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.

Policy ER-5.2: Require that development projects incorporate measures to avoid impacts to nesting migratory birds.

Policy MS-21.4: Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.

Policy MS-21.5: As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.

Policy MS-21.6: As a condition of new development, require, where appropriate, the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.

Policy MS-21.8: For Capital Improvement Plan or other public development projects, or through the entitlement process for private development projects, require landscaping including the selection and planting of new trees to achieve the following goals:

1. Avoid conflicts with nearby power lines.
2. Avoid potential conflicts between tree roots and developed areas.
3. Avoid use of invasive, non-native trees.
4. Remove existing invasive, non-native trees.
5. Incorporate native trees into urban plantings in order to provide food and cover for native wildlife species.
6. Plant native oak trees and native sycamores on sites which have adequately sized landscape areas and which historically supported these species.

4.4.1.2 *Santa Clara Valley Habitat Plan*

The Santa Clara Valley Habitat Conservation Plan (HCP) was developed through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (SCVWD), Santa Clara Valley Transportation Authority (VTA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW). The HCP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The HCP has been approved by the local partners, and has been effective since October 14, 2013.

The proposed project is a covered activity under the HCP. The project site is located within the Urban-Suburban land cover type. Urban-Suburban land is comprised of areas where native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational

structures, and is defined as one or more structures per 2.5 acres. Vegetation found in the Urban-Suburban land cover type is usually in the form of landscaped residences, planted street trees, and parklands.

4.4.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒	1
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒	1
3. 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?	☐	☐	☐	☒	1
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☐	☐	☒	1
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	1
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐	1

4.4.2.1 *Impacts to Special Status Species (Checklist Question 1)*

Special Status Plants

The site is fully developed and no special status plant species occur on or adjacent to the site due to a lack of suitable habitat.

Special Status Animals

The project site is fully developed and is located in an urban area. As a result, special-status animal species are unlikely to occur on the site. Although no trees are located on the project site, nesting birds may utilize the trees on adjacent properties. However, since the project does not propose any construction activities in the vicinity of these trees, the project would not be expected to have an adverse effect on nesting birds, if present. **(No Impact)**

4.4.2.2 *Impacts to Wetlands and Other Habitats (Checklist Questions 2 and 3)*

There are no undisturbed areas or sensitive habitats on the site, and the site does not contain any streams, waterways, or wetlands. **(No Impact)**

4.4.2.3 *Impacts to Wildlife Movement (Checklist Question 4)*

Because of its urban setting and isolation from areas of undeveloped lands, the site does not function as a movement corridor for local wildlife. **(No Impact)**

4.4.2.4 *Conflicts with Local Policies or Ordinances (Checklist Question 5)*

The project would not result in the removal of any trees. The project, therefore, would not conflict with the City's Tree Ordinance. **(No Impact)**

4.4.2.5 *Habitat Conservation Plan (Checklist Question 6)*

The project site is mapped as Urban-Suburban in the Santa Clara Valley HCP, and is not located within any fee or survey zones. The HCP requires payment for nitrogen deposition fees for all covered projects that generate new net vehicle trips. The project is subject to the HCP and required to pay all applicable HCP fees prior to issuance of permits. Nitrogen deposition fees are based on the number of new daily vehicle trips generated by a proposed project. Based on trip generation rates published by the Institute of Transportation Engineers, the project would not result in an increase in vehicles trips to the site and, therefore would not be required to pay nitrogen deposition fees. **(Less Than Significant Impact)**

4.4.3 Conclusion

The project would not result in significant impacts to biological resources. **(Less Than Significant Impact)**

4.5 CULTURAL RESOURCES

4.5.1 Setting

4.5.1.1 *Historic Resources*

The existing structures on the site were constructed in the 1960s. The structures are not associated with persons or events which are important to California history. There are no known historic resources located on or adjacent to the project site.

4.5.1.2 *Archaeological Resources*

The project site is within an area of archaeological sensitivity, as mapped for the *Envision San José 2040 General Plan*.

4.5.1.3 *Paleontological Resources*

The area is mapped in Appendix J of the Envision San José 2040 General Plan EIR as an area of high paleontological sensitivity at depth, but not at the surface.

4.5.1.4 *General Plan*

The *Envision San José 2040 General Plan* includes the following cultural resource policies applicable to the proposed project:

Policy ER-10.1: For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.

Policy ER-10.2: Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced

Policy ER-10.3: Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

4.5.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	☐	☐	☒	☐	1, 2
2. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☒	☐	1, 2
3. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☒	☐	1, 2
4. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐	1, 2

4.5.2.1 *Impact to Historic Resources (Checklist Question 1)*

The project would demolish the existing structure on the site containing the one-story cashier/snack shop and auto bays, which was constructed in the 1960s. Although the structure may be more than 50 years old, it has no important architectural features. It is not of a unique or important architectural style, but rather is a typical commercial-style building of the 1960s. The building is not associated with any notable person, period, or event in history. The building is not listed on the City of San José Historic Resources inventory, and would not be eligible for listing in the State or National Register of Historic Places. **(Less Than Significant Impact)**

4.5.2.2 *Impacts to Archaeological and Paleontological Resources (Checklist Questions 2-4)*

The project site is located in an area of archaeological sensitivity. Construction activities may result in the accidental destruction or disturbance of archaeological resources and could, therefore, result in a significant impact to archaeological resources, if encountered. Implementation of the standard permit conditions listed below would ensure impacts to archaeological resources remain at a less than significant level.

Standard Permit Conditions: In accordance with General Plan policies ER-10.1, ER-10.2 and ER-10.3 the following Standard Permit Conditions will be implemented to further reduce potential impacts to subsurface archaeological resources:

- In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Planning Department will be notified, and the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of

findings documenting any data recovery during monitoring shall be submitted to the Planning Department prior to issuance of building permits.

- In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. In the event that human remains are discovered, work should be halted in the immediate vicinity of the discovery (a zone established by the project archaeologist) until the County Coroner's Office has been contacted along with the Native American Heritage Commission (NAHC). The NAHC is responsible for naming a Most Likely Descendant (MLD) who can represent tribal interests by making recommendations regarding the method of exposure and removal of any human remains and associated grave goods along with making recommendations regarding the reburial of these materials. **(Less Than Significant Impact)**

The project site is located within an area with high sensitivity for paleontological resources at depth, but not at the surface. The site has been previously disturbed to support the existing development. The project site development has a low potential to impact undiscovered paleontological resources, based on the age and type of surface soils. It is possible, however, that deeper soils may contain older Pleistocene sediments, which have a higher sensitivity for paleontological materials. Activities that involve substantial excavation would have a higher potential for encountering paleontological deposits. Construction activities may, therefore, result in the accidental destruction or disturbance of paleontological sites, which could convey important information. Although not anticipated, construction activities associated with implementation of the project could result in a significant impact to paleontological resources, if encountered. Implementation of the standard permit conditions listed below would ensure impacts to paleontological resources remain at a less than significant level.

Standard Permit Conditions: In accordance with General Plan policy ER-10.3, the following standard permit conditions will be implemented by the project to reduce and avoid impacts paleontological resources:

- If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The project proponent will be responsible for implementing the recommendations of the paleontological monitor. **(Less Than Significant Impact)**

4.5.3 Conclusion

The proposed project would not result in significant impacts to cultural resources. **(Less Than Significant Impact)**

4.6 GEOLOGY AND SOILS

4.6.1 Setting

The project site is located in the Santa Clara Valley, an alluvial basin, bounded by the Santa Cruz Mountains to the west, the Hamilton/Diablo Range to the east, and the San Francisco Bay to the north. The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Hamilton/Diablo Range were exposed by the continued tectonic uplift and regression of the inland sea that had previously inundated this area. Bedrock in this area is made up of the Franciscan Complex, a diverse group of igneous, sedimentary, and metamorphic rocks of Upper Jurassic to Cretaceous age (70-140 million years old). Overlaying the bedrock at substantial depths are marine and terrestrial sedimentary rocks of Tertiary and Quaternary age.

4.6.1.2 *Seismicity and Seismic Hazards*

The project site is located within the seismically active San Francisco Bay region. The major earthquake faults in the region are the San Andreas Fault, the Hayward Fault, and the Calaveras Fault. These regional faults are capable of generating earthquakes of at least 7.0 in magnitude.

The Association of Bay Area Governments (ABAG) has reported that the Working Group on California Earthquake Probabilities (2003) has estimated there is a 62 percent probability that one or more major earthquakes would occur in the San Francisco Bay Area between 2002 and 2031. A moderate to major earthquake on the San Andreas Fault is most likely to generate the strongest ground shaking at the site.

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loose water-saturated soils from a solid state to a liquid state during ground shaking. During ground shaking, such as during earthquakes, cyclically induced stresses may cause increased pore water pressures within the soil voids, resulting in liquefaction. Liquefied soils may lose shear strength that may lead to large shear deformations and/or flow failure under moderate to high shear stresses, such as beneath foundations or sloping ground. The project site is not located in a Santa Clara County Liquefaction Hazard Zone.[6]

[6] USGS, *Northern Santa Clara County Liquefaction Hazard Maps*, http://earthquake.usgs.gov/regional/nca/liquefaction/. Accessed August 6, 2015.

4.6.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a. Rupture of a known earthquake fault, as described 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.)	☐	☐	☒	☐	1, 7
b. Strong seismic ground shaking?	☐	☐	☒	☐	1, 7
c. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	1, 7
d. Landslides?	☐	☐	☐	☒	1
2. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒	1
3. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	1, 7
4. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	☐	☐	☒	☐	1
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	1

4.6.2.1 *Seismicity and Seismic Hazards (Checklist Question 1 a – d and 3)*

The project site is located in a seismically active region of California and strong ground shaking would be expected during the lifetime of the proposed project. There are no known active faults traversing the project site and the site is not located in the Alquist-Priolo Earthquake Fault Zone.[7] Potential for surface rupture from displacement or fault movement directly beneath the proposed project is considered low. Depending upon the intensity and magnitude of a seismic event, new

[7] Association of Bay Area Governments, Resilience Program GIS Mapping Tool, http://gis.abag.ca.gov/. Accessed August 14, 2015.

buildings may experience shaking due to the site's proximity to the active Hayward and Calaveras Faults.
The project site is not located within a liquefaction hazard zone. The project site is located in a relatively flat area and would not be exposed to substantial slope instability, erosion, or landslide-related hazards. The project site is not located within an area susceptible to earthquake-induced landslides or Landslide Hazard Zone according to the Santa Clara County Geologic Hazard Zone Map.

Standard Permit Condition: To avoid or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. Building design and construction at the site will be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be reviewed and approved by the City Geologist. The structural designs for the proposed development will account for repeatable horizontal ground accelerations. The report shall be reviewed and approved of by the City of San José's Building Division as part of the building permit review and issuance process. The buildings shall meet the requirements of applicable Building and Fire Codes, including the 2013 California Building Code Chapter 16, *Section 1613*, as adopted or updated by the City. The project shall be designed to withstand soil hazards identified on the site and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

Implementation of the standard permit conditions listed above will reduce seismic hazards and impacts to a less than significant level. **(Less Than Significant Impact)**

4.6.2.2 *Soils Impacts (Checklist Question 2 and 4)*

Soils encountered at the project site are locally unconsolidated and generally have moderate expansion potential. Previously placed undocumented fill, and/or underlying soft clays may be subject to compressibility under the proposed loads. Therefore, remedial site preparation, stiffened foundations, deep foundation, and other recommendations included in the geotechnical investigation are proposed for the project.

Standard Permit Conditions: The project shall be constructed in accordance with the standard engineering practices in the California Building Code, as adopted by the City of San José. In addition, the City of San José Department of Public Works requires a grading permit to be obtained prior to the issuance of a Public Works Clearance. These standard practices, including the measures outlined below, would ensure that future buildings on the site are designed properly to account for the presence of locally compressible and potentially liquefiable soils on the site.

- The project shall conform to the recommendations in engineering reports for the project including the overexcavation and compaction of existing soils on the site and the design considerations for the proposed building foundations.

- The project shall prepare and implement an Erosion Control Plan in conformance with the requirements of the Department of Public Works.

The project, with the implementation of standard engineering practices as outlined above, would not result in significant soil impacts from erosion or expansive soils. **(Less Than Significant Impact)**

4.6.2.3 *Septic Systems (Checklist Question 5)*

The project site is located within an urbanized area of San José where sanitary sewer lines are available to dispose wastewater from the project site. No septic tanks will be utilized on the project site. As a result, the soil on-site will not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

4.6.3 Conclusion

The proposed project would result in less than significant geologic and soils impacts, and would not expose people or structures to new adverse seismic risks. **(Less Than Significant Impact)**

4.7 GREENHOUSE GAS EMISSIONS

The following discussion is based on the California Emissions Estimator Model (CalEEMod) estimates for greenhouse gas emissions from the proposed project. The CalEEMod output is attached to this report as Appendix A.

4.7.1 Existing Setting and Proposed Project

The 0.47-acre project site, located at 900 Meridian Avenue, is currently developed with a gas station consisting of eight fueling locations, a 1,036 square foot automobile service facility, and an 80 square-foot convenience store. The project proposes to demolish the existing automobile service station and convenience store to construct a 1,909 square-foot convenience store and an 870 square-foot drive-through car wash. The number of fueling stations on the site would remain the same.

4.7.1.1 *Background Information*

Unlike criteria air pollutant emissions, which have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere over time. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

4.7.1.2 *Existing On-Site GHG Emissions*

The project site is currently developed with a gas station, convenience store, and automobile service station. Existing uses generate GHG emissions from the combustion of fossil fuels (oil, natural gas, and coal) for energy production. The energy is used in various ways, directly and indirectly, ranging from electricity used to operate heating, ventilation, and air conditioning, to the fuel used to transport employees and customers to and from the site.

The CalEEMod model was used to calculate the GHG emissions generated by existing uses on the site. The site currently generates 409 metric tons of carbon dioxide equivalents (CO_2e) per year.

4.7.1.3 *Applicable Plans, Policies and Regulations*

California Assembly Bill 32 and Executive Order S-3-05

Assembly Bill 32 (AB 32), also known as the Global Warming Solutions Act, was passed in 2006 and established a goal to reduce GHG emissions to 1990 levels by 2020. Prior to the adoption of AB 32, the Governor of California also signed Executive Order S-3-05 into law, which set a long-term objective to reduce GHG emissions to 90 percent below 1990 levels by 2050. On May 29, 2015, Governor Brown issued Executive Order B-30-15, which furthers the goal of Executive Order S-3-05 by setting a mid-term target to reduce GHG emissions to 40 percent below 1990 levels by 2030. The

Order also directs the California Air Resources Board to update the Climate Change Scoping Plan to include the 2030 target. The California Environmental Protection Agency (CalEPA) is the state agency in charge of coordinating the GHG emissions reduction effort and establishing targets along the way.

In December 2008, CARB approved the *Climate Change Scoping Plan*, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals. Per AB 32, the Scoping Plan must be updated every five years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 GHG reduction goal. The First Update to the Scoping Plan was approved on May 22, 2014 and builds upon the Scoping Plan with new strategies and recommendations. The First Update defines CARB's priorities over the next five years and lays the groundwork to reach long-term goals set forth in Executive Order S-3-05.[8]

California Senate Bill 375

Senate Bill 375 (SB 375), known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. It builds on AB 32 by requiring CARB to develop regional GHG reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035 in comparison to 2005 emissions. The per capita reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.[9] The four major requirements of SB 375 are:

1. Metropolitan Planning Organizations (MPOs) must meet GHG emission reduction targets for automobiles and light trucks through land use and transportation strategies.
2. MPOs must create a Sustainable Communities Strategy (SCS), to provide an integrated land use/transportation plan for meeting regional targets, consistent with the Regional Transportation Plan (RTP).
3. Regional housing elements and transportation plans must be synchronized on eight-year schedules, with Regional Housing Needs Assessment (RHNA) allocation numbers conforming to the SCS.
4. MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC).

MTC and ABAG adopted *Plan Bay Area* in July 2013. The strategies in the plan are intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions.[10]

[8] California Environmental Protection Agency. Air Resources Board. *First Update to the AB 32 Scoping Plan*. Accessed 18 June 2014. Available at: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm

[9] The emission reduction targets are for those associated with land use and transportation strategies, only. Emission reductions due to the California Low Carbon Fuel Standards or Pavley emission control standards are not included in the targets.

[10] Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC). *Plan Bay Area*. 2013. Available at: http://files.mtc.ca.gov/pdf/Plan_Bay_Area_FINAL/0-Introduction.pdf. Accessed February 7, 2015.

BAAQMD CEQA Guidelines and the Bay Area 2010 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) identifies thresholds of significance for operational GHG emissions from land-use development projects in its 2011 CEQA Air Quality Guidelines. These guidelines include recommended significance thresholds, assessment methodologies, and mitigation strategies for GHG emissions. Under the BAAQMD CEQA Air Quality Guidelines, if a project would result in operational-related GHG emissions of 1,100 metric tons (MT) of CO_2e (also called the brightline threshold) and/or exceed 4.6 MT per service population of CO_2e per year or more, it would make a cumulatively considerable contribution to GHG emissions and result in a cumulatively significant impact to global climate change.

In jurisdictions where a qualified GHG Reduction Strategy has been reviewed under CEQA and adopted by the decision makers, compliance with the GHG Reduction Strategy would reduce a project's contribution to cumulative GHG emission impacts to a less than significant level. Alternatively, the BAAQMD CEQA Guidelines outline a methodology for estimating GHG emissions to identify, project-by-project, if a given project would exceed the brightline and/or service population thresholds (described above).

The 2010 CAP addresses air emissions in the San Francisco Bay Area Air Basin. One of the objectives in the 2010 CAP is climate protection. The 2010 CAP includes emission control measures and performance objectives, consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating greenhouse gas emissions impacts resulting from planned development within the City. All future development allowed by the proposed project shall be in conformance with adopted City plans and policies, including those listed below.

Policy MS-1.1: Continue to demonstrate leadership in the development and implementation of green building policies and practices. Ensure that all projects are consistent with and/or exceed the City's Green Building Ordinance and City Council Policies as well as State or regional policies which require that projects incorporate various green building principles into their design and construction.

Policy MS-1.2: Continually increase the number and proportion of buildings within San José that make use of green building practices by incorporating those practices into both new construction and retrofit of existing structures.

Policy MS-14.4: Implement the City's Green Building Policies so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.

Policy CD-2.5: Integrate Green Building Goals and Policies of this Plan into site design to create healthful environments. Consider factors such as shaded parking areas, pedestrian connections, minimization of impervious surfaces, incorporation of stormwater treatment measures, appropriate building orientations, etc.

City of San José Municipal Code

The City's Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- Green Building Ordinance (Chapter 17.84)
- Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10)
- Transportation Demand Programs for employers with more than 100 employees (Chapter 11.105)
- Construction and Demolition Diversion Deposit Program (Chapter 9.10)
- Wood Burning Ordinance (Chapter 9.10)

City of San José Private Sector Green Building Policy (6-32)

In October 2008, the City adopted the Private Sector Green Building Policy (6-32) that establishes baseline green building standards for private sector new construction and provides a framework for the implementation of these standards. This policy requires that applicable projects achieve minimum green building performance levels using the Council adopted standards. The proposed project would be subject to this policy and required to complete the LEED Checklist for New Construction, at a minimum.

4.7.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1, 2
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	1, 2

4.7.2.1 *CEQA Thresholds*

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the Lead Agency and must be based to the extent possible on scientific and factual data. The City of San José, and other jurisdictions in the San Francisco Bay Area Air Basin, often utilize the thresholds and

methodology for assessing air emissions and/or health effects adopted by the Bay Area Air Quality Management District (BAAQMD) based upon the scientific and other factual data prepared by BAAQMD in developing those thresholds.

Thresholds prepared and adopted by BAAQMD in May 2011 were the subject of a lawsuit by the California Building Industry Association (BIA)[11] and a subsequent appeal by BAAQMD.[12] The Appellate Court decision on August 13, 2013 upheld the threshold adoption process as valid.

The determination of whether a project may have a significant effect on the environment is subject to the discretion of each lead agency, based upon substantial evidence. The City has carefully considered the thresholds prepared by BAAQMD in May 2011 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin. Evidence supporting these thresholds has been presented in the following documents:

- BAAQMD. *CEQA Air Quality Guidelines*. Updated May 2011.
- BAAQMD. *Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance.* October 2009.
- California Air Pollution Control Officers Association. *Health Risk Assessments for Proposed Land Use Projects*. July 2009.
- California Environmental Protection Agency, California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective.* 2005.

This analysis is based upon the general methodologies in the most recent BAAQMD *CEQA Air Quality Guidelines* (dated May 2012) and numeric thresholds identified for the San Francisco Bay Area Air Basin in the May 2011 *BAAQMD CEQA Air Quality Guidelines*.

4.7.2.2 *Greenhouse Gas Emissions (Checklist Question 1)*

The City of San José does not have an adopted GHG Reduction Strategy at this time. Therefore, GHG emissions from the project were calculated using CalEEMod. The model calculated estimated emissions for transportation, area sources, electricity consumption, natural gas combustion, electricity usage associated with water usage and wastewater discharge, and solid waste landfilling and transport.

The gross operational GHG emissions from the proposed development on the site were calculated to be 813 metric tons of CO_2e per year. As described previously, the existing uses on the site generate 409 metric tons of CO_2e per year. Therefore, the project would result in a net increase of 404 metric tons of CO_2e per year, which is below the brightline threshold of 1,100 metric tons of CO2e per year. The project would be below the BAAQMD's brightline threshold and, therefore, would result in a less than significant impact.

[11] *California Building Industry Association v. Bay Area Air Quality Management District*, Alameda County Superior Court Case No. RG10548693)

[12] *California Building Industry Association v. Bay Area Air Quality Management District*, Cal. Ct. App. 1st, Case No. A135335, August 13, 2013. The Appellate Court ruled that the BAAQMD CEQA thresholds were adopted using a valid public review process and were supported by substantial evidence.

Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. Based on CalEEMod modeling, it is estimated that construction activities associated with the projects would result in GHG emissions totaling approximately 65 metric tons of CO_2e from construction equipment and construction workers' personal vehicles traveling to and from the construction sites.

Neither the City of San José nor BAAQMD have established a quantitative threshold or standard for determining whether a project's construction-related GHG emissions are significant. Project construction would be temporary and would not result in a permanent increase in emissions that would interfere with the implementation of AB32. The project's construction-related GHG emissions would be less than significant. **(Less Than Significant Impact)**

4.7.2.3 *Conformance with Applicable Plans (Checklist Question 2)*

The City of San José does not have an adopted GHG Reduction Strategy. However, the project would be subject to the City's Private Sector Green Building Policy, which requires commercial projects under 25,000 square feet to complete the LEED New Construction Checklist. The project would also be subject to the City's Municipal Code, which includes regulations that would reduce GHG emissions from future development.

With conformance to the City's Private Sector Green Building Policy, Municipal Code, and applicable General Plan policies, the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG emissions. **(Less Than Significant Impact)**

4.7.3 Conclusion

Development of the proposed project, in conformance with applicable plans and policies including the City's Private Sector Green Building Policy, Municipal, and General Plan policies would result in a less than significant GHG impact. **(Less Than Significant Impact)**

4.8 HAZARDS AND HAZARDOUS MATERIALS

4.8.1 Setting

The project site is currently developed with a gasoline service station which includes a canopy to cover fuel dispenser islands. Additional structures include a station building with a small cashier area and two auto service bays. With the exception of landscaping along the project frontage, the remaining open areas are covered by asphalt pavement, with concrete pads beneath the fuel dispenser canopy and covering the underground storage tanks (USTs) containing gasoline.

Two State Water Resources Control Board (SWRCB) leaking underground storage tank (LUST) cases are associated with the project site (Case #'s 07S1E19E01f and 07S1E19E02f). The first case was opened in 1986 when hydrocarbon contamination was discovered beneath a waste oil UST that was being removed from the site. Remedial actions were undertaken, and the SWRCB issued a case closure determination in 1991. In 1994, hydrocarbon contamination was discovered beneath the location where three gasoline USTs were being removed from the site. Remedial actions were undertaken, and the SWRCB issued a case closure determination in 1999.[13]

The project site is located in a developed urban area, and would not expose people or structures to wildland fires.

4.8.1.1 *Regulatory Setting*

Hazardous waste generators and users in the City are required to comply with regulations enforced by several Federal, State, and local agencies. The regulations are designed to reduce the risk associated with human exposure to hazardous materials and minimize adverse environmental effects. The San José Fire Department coordinates with the Santa Clara County Hazardous Materials Compliance Division to implement the Santa Clara County Hazardous Materials Management Plan and to ensure that commercial and residential activities involving classified hazardous substances are properly handled.

Government Code Section 65962.5 (Cortese List)

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code section 65962.5 requires the California Environmental Protection Agency (Cal/EPA) to develop at least annually an updated Cortese List. The Cortese List includes lists maintained by the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB).[14]

As described above, the project site is identified on the SWRCB Geotracker Database due to two LUST cases on the site.

[13] State Water Resources Control Board. Geotracker Database. http://geotracker.waterboards.ca.gov/. Accessed August 10, 2015.
[14] The DTSC and SWRCB hazardous material site lists are available online at http://www.calepa.ca.gov/sitecleanup/CorteseList/default.htm.

General Plan

The *Envision San José 2040 General Plan* includes the following hazardous material policies applicable to the proposed project:

Policy EC-6.1: Require all users and producers of hazardous materials and wastes to clearly identify and inventory the hazardous materials that they store, use, or transport in conformance with local, state, and federal laws, regulations, and guidelines.

Policy EC-6.2: Require proper storage and use of hazardous materials and wastes to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal by businesses and residences. Require proper disposal of hazardous materials and wastes at licensed facilities.

Policy EC-7.1: For development and redevelopment projects, require evaluation of the proposed site's historical and present uses to determine if any potential environmental conditions exist that could adversely impact the community or environment.

Policy EC-7.2: Identify existing soil, soil vapor, groundwater and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and groundwater contamination shall be designed to avoid adverse human health or environmental risk, in conformance with regional, state and federal laws, regulations, guidelines and standards.

4.8.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	1
2. 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?	☐	☒	☐	☐	1
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	1

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
4. 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, will it create a significant hazard to the public or the environment?	☐	☐	☒	☐	1
5. 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, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐	1
6. For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1
7. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	1
8. 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?	☐	☐	☐	☒	1

4.8.2.1 *Routine Transport, Use, or Disposal of Hazardous Materials (Checklist Question 1)*

Based on the proposed use on the site, a gas station and carwash, hazardous substances such as fuels, oils, and detergents would be present on the site. Materials such as solvents, paints, and fuels could also be utilized during project construction. Compliance with applicable federal, state, and local handling, storage, and disposal requirements would ensure that no significant hazards to the public or the environment are created by the routine transport, use, or disposal of these substances. **(Less Than Significant Impact)**

4.8.2.2 *Accidental Release of Hazardous Materials (Checklist Question 2)*

Contaminated Soil

The project site is equipped with two below-ground hydraulic lifts. The lifts were presumably installed in the 1960's, when the service station building was constructed. Based on the pre-1977 installation of the lifts, the potential exists that the hydraulic fluid within the lift systems previously contained polychlorinated biphenyls (PCBs). Due to the age of the equipment, the integrity of the equipment is unknown; therefore, the potential exists that a release of hydraulic fluid which may have contained PCBs has occurred onsite. No soil sampling in the vicinity of the current hoists or

other automotive service areas appears to have been conducted. Therefore, based on the lengthy presence of these operations, and the lack of soil sampling in the area, there is a potential for contaminated soils to be located in the vicinity of the auto service bays and hydraulic lifts.

Impact HAZ-1: Hazardous materials contamination on the site, if discovered in soil or groundwater, could pose a risk to construction workers and others on the site. **(Significant Impact)**

Mitigation Measures: The following mitigation measures will be implemented prior to grading and construction to reduce the potential for construction workers or others to encounter hazardous materials contamination:

MM HAZ-1.1: Prior to initiation of demolition and construction activities, soil samples shall be taken in the area of the existing auto service bays and hydraulic lifts to test for the presence of contaminated soil.

MM HAZ-1.2: In the event contaminated soil is detected during sampling, a site management plan (SMP) shall be developed to establish management practices for handling contaminated soil or other materials if encountered during demolition and construction activities. The SMP shall be reviewed and approved by the City of San Jose prior to commencing construction activities.

MM HAZ-1.3: Each contractor working at the site shall prepare a health and safety plan (HSP) that addresses the safety and health hazards of each phase of site operations and includes the requirements and procedures for employee protection.

MM HAZ-1.4: Excavated soils will be characterized prior to off-site disposal or reuse on-site. Appropriate soil characterization, storage, transportation, and disposal procedures shall be followed. Contaminated soils shall be disposed of at a licensed facility in accordance with all appropriate local, state, and federal regulations. **(Less Than Significant Impact With Mitigation)**

Asbestos-containing Materials

Based on the construction date of the structures on the site, there is a potential for asbestos-containing materials (ACMs) to be present in building materials. During demolition activities, these materials may create a health risk to construction workers if not properly handled.

Standard Permit Conditions: The following measures, based on BAAQMD and Cal-OSHA rules and regulations, are proposed by the project and would ensure that potential impacts to construction workers and others from asbestos-containing materials would be less than significant.

- To identify and quantify ACMs, a building survey, including sampling and testing, shall be completed prior to the commencement of demolition activities.

- ACMs shall be managed in place under an "Asbestos Operations and Maintenance Program" until the condition of the ACMs change or until the materials would be impacted by renovation or demolition activities.

- All potentially friable asbestos-containing materials shall be removed in accordance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to any building demolition that may disturb the materials.

- All demolition activities shall be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. Materials containing more than one percent asbestos are also subject to BAAQMD regulations. **(Less Than Significant Impact)**

Lead-based Paint

Based on the construction date of the structures on the site, the structures could contain lead-based paint, which could expose workers and others to potential health risks during demolition activities.

Standard Permit Conditions: The following measures, based on Cal-OSHA and other applicable regulations, are proposed by the project and would ensure that potential impacts to construction workers and others from lead-based paint are less than significant.

- To identify and quantify building materials containing lead-based paint, a building survey, including sampling and testing, shall be completed prior to the commencement of demolition activities.

- During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, CCR 1532.1, including employee training, employee air monitoring and dust control.

- Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the waste being disposed. **(Less Than Significant Impact)**

4.8.2.3 *Hazardous Emissions or Hazardous Materials near Schools (Checklist Question 3)*

There are no existing or proposed schools within one-quarter mile of the site. **(No Impact)**

4.8.2.4 *Hazardous Materials Sites (Checklist Question 4)*

As described previously, the project site is listed in the SWRCB Geotracker Database for two LUST cases that occurred on the site. The site has undergone remediation activities, and the SWRCB has issue case closed determinations for both cases. The project, therefore, would not create a significant hazard to the public or the environment as a result of being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 **(Less Than Significant Impact)**

4.8.2.5 *Other Hazards (Checklist Questions 5 - 8)*

The project site is not located within an airport land use plan or wildland fire area. The proposed project would not impair the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. **(Less Than Significant Impact)**

4.8.3 Conclusion

With implementation of the standard practices and mitigation measures listed above, as well as compliance with all applicable federal, state, and local hazardous materials laws and ordinances, the proposed project would not result in significant hazardous materials impacts. **(Less Than Significant Impact With Mitigation)**

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Setting

4.9.1.1 *Stormwater Drainage*

The City of San Jose Public Works Department operates and maintains the storm drainage system in the City. Currently, stormwater drains to inlets located within the interior of the site. These inlets connect to a 30-inch stormwater line in Meridian Avenue.

4.9.1.2 *Water Quality*

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

4.9.1.3 *Groundwater*

Groundwater levels typically fluctuate seasonally depending on the variations in rainfall, irrigation from landscaping, and other factors. The depth to groundwater under the site is unknown. The project site is mostly comprised of impervious surfaces and does not contribute to the recharging of the groundwater aquifer.

4.9.1.3 *Flooding*

The project site is not located within the 100-year floodplain.[15]

4.9.1.4 *Dam Failure*

The Association of Bay Area Governments compiled the dam failure inundation hazard maps submitted to the State Office of Emergency Services by dam owners throughout the Bay Area. The project site is located in a dam failure inundation hazard zone for the Lexington Reservoir.[16]

4.9.1.5 *Seiches, Tsunamis, and Mudflows*

A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. There are no landlocked bodies of water near the project site that in the event of a seiche will affect the site.

[15] Federal Emergency Management Agency, Community Panel Number 06085C0241H, May 18, 2009. https://msc.fema.gov

[16] City of San Jose. Envision 2040 General Plan Final EIR. September 2011.

A tsunami or tidal wave is a series of water waves caused by the displacement of a large volume of a body of water, such as an ocean or a large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. The project site does not lie within a tsunami inundation hazard area.[17]

A mudflow is the rapid movement of a large mass of mud formed from loose soil and water. The project site is not susceptible to mudflows.[18]

4.9.1.6 *Regulatory Setting*

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA's regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the water quality control boards, which for the San José area is the San Francisco Bay Regional Water Quality Control Board (RWQCB).

Municipal Regional Stormwater NPDES Permit (MRP)

The San Francisco Bay RWQCB also has issued a Municipal Regional Stormwater NPDES Permit (MRP) [Permit Number CAS612008]. In an effort to standardize stormwater management requirements throughout the region, this permit replaces the formerly separate countywide stormwater permits with a regional permit for 77 Bay Area municipalities including the City of San José. Under the provisions of the MRP, development projects that create or replace 10,000 square feet or more of impervious surfaces are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. As of December 1, 2011, provision C.3 of the MRP requires fuel service facilities that create or replace greater than 5,000 square feet of impervious surface to design and install Low Impact Development (LID) controls to treat post-construction stormwater runoff from the site. Examples of LID controls include rainwater harvesting/re-use, infiltration, and biotreatment. If the new/replaced impervious surface will be greater than 50 percent of the pre-project impervious surface area, stormwater treatment for the entire site will be required. If the new/replaced impervious surface for the project will be less than 50 percent of the pre-project impervious surface area, stormwater treatment for only the new/replaced area will be required.

[17] California Emergency Management Agency, *Tsunami Inundation Map for Emergency Planning San Francisco Bay Area*, December 9, 2009. http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/Documents/Tsunami_Inundation_SanFranciscoBayArea300.pdf

[18] County of Santa Clara, *Santa Clara County Geologic Hazard Zones*, Map 20, October 26, 2012.

City of San José Post-Construction Urban Runoff Management (Policy 6-29) and Hydromodification Management (Policy 8-14)

The MRP mandates the City of San José use its planning and development review authority to require that stormwater management measures such as Site Design, Pollutant Source Control, and Treatment measures are included in new and redevelopment projects to minimize and properly treat stormwater runoff.

The City has developed policies that implement Provision C.3 consistent with the Municipal Regional Permit. The City's Post-Construction Urban Runoff Management Policy (6-29) establishes specific requirements to minimize and treat stormwater runoff from new and redevelopment projects. Per the MRP and City Council Policy 6-29, gas stations and car washes are Land Uses of Concern. Source (Pollutant) Control Measures are required for Land Uses of Concern uses regardless of project size. This could include creating a 'treatment train' that includes mechanical filtration of urban runoff prior to release to a LID treatment measure.

The City's Post-Construction Hydromodification Management Policy (8-14) establishes an implementation framework for incorporating measures to control hydromodification impacts from development projects. Development projects that create and/or replace one acre or more of impervious surface and are located in a sub-watershed or catchment that is less than 65% impervious, must manage increases in runoff flow and volume so that post-project runoff shall not exceed estimated pre-project rates and durations.

General Plan

The *Envision San José 2040 General Plan* includes the following water quality policies applicable to the proposed project:

Policy ER-8.1: Manage stormwater runoff in compliance with the City's Post-Construction Urban Runoff (6-29) and Hydromodification Management (8-14) Policies.

Policy ER-8.3: Ensure that private development in San José includes adequate measures to treat stormwater runoff.

Policy ER-8.5: Ensure that all development projects in San José maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite.

Policy EC-5.16: Implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites.

4.9.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	1
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will 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 will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐	1
3. 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 will result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐	1
4. 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 will result in flooding on-or off-site?	☐	☐	☒	☐	1
5. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	1
6. Otherwise substantially degrade water quality?	☐	☐	☒	☐	1
7. 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?	☐	☐	☐	☒	1, 8
8. Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	☐	☐	☐	☒	1, 8
9. 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?	☐	☐	☐	☒	1, 8, 9
10. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	1, 8,10

4.9.2.1 *Water Quality Impacts (Checklist Questions 1, 5, 6)*

The proposed project would construct new structures on site, but would decrease the overall percentage of impervious surfaces due to the installation of additional landscaped areas. The project would replace more than 5,000 square feet of impervious surface area and, therefore, would be required to control post-construction stormwater through source control and treatment control Best Management Practices (BMPs) in compliance with the Municipal Regional Stormwater NPDES Permit (MRP). The project's compliance with the MRP is discussed in further detail below.

Under existing conditions, the nearby storm drainage system has sufficient capacity to convey runoff from the site. Runoff from the project site would be less than existing conditions, and would not exceed the capacity of the local drainage system, or contribute significantly to downstream flooding.

Construction Activities

Any construction or demolition activity that results in land disturbance equal to or greater than one acre must comply with the Construction General Permit (CGP), administered by the State Water Resources Control Board (SWRCB). The CGP requires the installation and maintenance of Best Management Practices (BMPs) to protect water quality until the site is stabilized.

The project site is 0.47 acres and, therefore, would not require CGP coverage based on area of land disturbed.

Construction activities would result in a temporary increase in stormwater pollutants during ground disturbing activities, but the level of pollutants would not be significant. Nevertheless, the project will implement the following RWQCB standard construction best management practices (BMPs) to further reduce stormwater pollutants during construction:

Standard Permit Conditions:

- Restrict grading to the dry season or meet City requirements for grading during the rainy season.
- Use effective, site-specific erosion and sediment control methods during the construction periods. Provide temporary cover of all disturbed surfaces to help control erosion during construction. Provide permanent cover as soon as is practical to stabilize the disturbed surfaces after construction has been completed.
- Cover soil, equipment, and supplies that could contribute non-visible pollution prior to rainfall events or perform monitoring of runoff. Cover stockpiles with secure plastic sheeting or tarp.
- Implement regular maintenance activities such as sweeping driveways between the construction area and public streets. Clean sediments from streets, driveways, and paved areas on-site using dry sweeping methods. Designate a concrete truck washdown area.
- Dispose of all wastes properly and keep site clear of trash and litter. Clean up leaks, drips, and other spills immediately so that they do not contact stormwater.

- Place fiber rolls or silt fences around the perimeter of the site. Protect existing storm and sewer inlets in the project area from sedimentation with filter fabric and sand or gravel bags.

Post-Construction

The NPDES MRP requires fuel service facilities that create or replace greater than 5,000 square feet of impervious surface to design and install Low Impact Development (LID) controls to treat post-construction stormwater runoff from the site.

As shown on Figure 3.1-3, the project is replacing existing impervious surfaces on a 0.18-acre portion of the 0.47-acre project site. The remainder of the site would not be disturbed, except for minor trenching to allow the installation of underground storm drain pipes, as well as installation of landscaping. Because the replaced impervious surface for the project will be less than 50 percent of the pre-project impervious surface area on the site, stormwater treatment for only the new/replaced area will be required.

Stormwater drainage from the portion of the site where the new development would occur would be conveyed via underground storm drain pipes to a proposed bioretention basin located in the landscaped island in the northwest corner of the site. With implementation of the proposed biofiltration system, the project would comply with the NPDES MRP and would not violate any water quality standards or waste discharge requirements, nor would it create substantial additional sources of polluted runoff.

Standard Permit Conditions: To ensure post-construction water quality impacts remain at a less than significant level, the project will implement the following measures:

- The project shall comply with applicable provisions of the following City Policies: City Council Policy 6-29 Post-Construction Urban Runoff Management and City Council Policy 8-14 Post-Construction Hydromodification Management.
- Details of specific Site Design, Pollutant Source Control, and Stormwater Treatment Control Measures demonstrating compliance with Provision C.3 of the Municipal Regional Stormwater Permit (NPDES Permit Number CAS612008), shall be included in the project design, to the satisfaction of the Director of Planning, Building and Code Enforcement.

Carwash Drainage

The project proposes to install a drive-through carwash on the site. The carwash would be in an enclosed structure, and would be designed to collect all water used in carwash operations and direct any flows not to be re-used to the sanitary sewer system.[19] As a result, no additional runoff will occur on the site as a result of the proposed carwash operations.

[19] Modern drive-through carwashes typically rely on the filtration and recycling of their own water for 80 percent of the water used during operation.

4.9.2.2 *Groundwater (Checklist Question 2)*

The proposed project would not increase the amount of impervious surfaces on the site, nor would it substantially increase water use. As a result, the project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level. **(Less Than Significant Impact)**

4.9.2.3 *Drainage Patterns (Checklist Questions 3 – 4)*

The project would not substantially alter the existing drainage pattern of the site. The rate of discharge would be similar to existing conditions and would not result in erosion, siltation or flooding on or off site. **(Less Than Significant Impact)**

4.9.2.4 *Flooding (Checklist Questions 7 - 9)*

The proposed project would not place structures in a 100-year floodplain or in a dam failure inundation hazard zone. Sites outside the 100-year floodplain are not considered prone to flooding. **(No Impact)**

4.9.2.5 *Seiches, Tsunamis, and Mudflows (Checklist Question 10)*

The project site is not subject to inundation by seiche, tsunami, or mudflow. **(No Impact)**

4.9.3 Conclusion

The proposed project would have a less than significant impact on hydrology and water quality. **(Less Than Significant Impact)**

4.10 LAND USE

4.10.1 Setting

The 0.47-acre project site has a General Plan Designation of *Neighborhood/Community Commercial* and is zoned *Commercial Pedestrian (CP).* According to City's General Plan, the *Neighborhood/Community Commercial* designation supports a broad range of commercial activity, including commercial uses that serve the communities in neighboring areas, such as neighborhood serving retail and services and commercial/professional office development. The *Commercial Pedestrian (CP)* zoning district is a district intended to support pedestrian-oriented retail activity at a scale compatible with surrounding residential neighborhoods. The type of development supported by this district includes Neighborhood Business Districts, neighborhood centers, multi-tenant commercial development along city connector and main streets as designated in the general plan, and small corner commercial establishments.

The site is bounded by Meridian Avenue to the west and Fruitdale Avenue to the north. A two-story multi-family residential development is adjacent to the eastern boundary and commercial uses are adjacent to the southern boundary of the site. Commercial uses are located across Meridian Avenue to the west and a church facility is located across Fruitdale Avenue to the north.

4.10.1.1 *Santa Clara Valley Habitat Conservation Plan*

The Santa Clara Valley Habitat Conservation Plan (HCP) was developed through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (SCVWD), Santa Clara Valley Transportation Authority (VTA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW). The HCP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The HCP has been approved by the local partners, and has been effective since October 14, 2013.

As discussed in *Section 4.4 Biology*, the proposed project is a covered activity under the plan and the project site is considered "Urban – Suburban" land cover.

4.10.1.3 *General Plan*

The *Envision San José 2040 General Plan* includes the following land use policies applicable to the proposed project:

Policy CD-4.4: In non-growth areas, design new development and subdivisions to reflect the character of predominant existing development of the same type in the surrounding area through the regulation of lot size, street frontage, height, building scale, siting/setbacks, and building orientation.

Policy CD-4.9: For development subject to design review, ensure the design of new or remodeled structures is consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).

Policy MS-5.5: Maximize recycling and composting from all residents, businesses, and institutions in the City.

Policy MS-5.6: Enhance the construction and demolition debris recycling program to increase diversion from the building sector.

Policy MS-6.2: Implement mixed-waste recycling of garbage and recycling processing residue to ensure that all recyclable and compostable materials are diverted from landfills.

Policy MS-6.5: Reduce the amount of waste disposed in landfills through waste prevention, reuse, and recycling of materials at venues, facilities, and special events.

Policy MS-6.8: Maximize reuse, recycling, and composting citywide.

4.10.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Physically divide an established community?	☐	☐	☐	☒	1
2. 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?	☐	☐	☒	☐	1, 2, 3
3. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐	1

4.10.2.1 *Established Communities (Checklist Question 1)*

The project would not change the land use on the site, and would not divide an established community. **(No Impact)**

4.10.2.2 *Consistency with Applicable Land Use Plans and Regulations (Checklist Question 2)*

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the person or development introduced onto the site by the new projects. Both of these circumstances are aspects of *land use compatibility*. Potential incompatibility may arise from placing a particular development or land use at an

inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impacts and their severity, land use compatibility conflicts can range from minor irritation and nuisance to potentially significant effects on human health and safety.

The project would add a drive-through carwash to an existing gasoline service station, but would not change the nature of the land use on the site. As described throughout the Initial Study, measures included in the project would prevent environmental impacts related to land use conflicts that could result from the proposed project. **(Less Than Significant Impact)**

Envision San José 2040 General Plan

The project site has a General Plan land use designation of *Neighborhood/Community Commercial.* The project would not change the existing land use designation on the site and the proposed project would be consistent with the General Plan land use designation. **(Less Than Significant Impact)**

City of San José Zoning District

The site is currently zoned *Commercial Pedestrian (CP).* The project proposes to rezone the site to *Neighborhood Commercial* (CN) with a Conditional Use Permit (CUP) to allow the development of the proposed carwash. **(Less Than Significant Impact)**

4.10.2.3 *Santa Clara Valley Habitat Plan (Checklist Question 3)*

As discussed in *Section 4.4.2.3*, the proposed project is a covered activity under the habitat plan. Paying the applicable plan fees would ensure the proposed project does not conflict with the habitat plan. **(Less Than Significant Impact)**

4.10.3 Conclusion

The project would not result in significant land use impacts. **(Less Than Significant Impact)**

4.11 MINERAL RESOURCES

4.11.1 Setting

Extractive resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, and limestone. Santa Clara County has also supplied a significant portion of the nation's mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Communications Hill Area, bounded generally by the Union Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue as containing mineral deposits which are of regional significance as a source of construction aggregate materials.

Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San José as containing mineral deposits which are either of statewide significance or the significance of which requires further evaluation. Therefore, other than the Communications Hill area cited above, San José does not have mineral deposits subject to SMARA.

The project site is outside of the Communications Hill area.

4.11.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒	1, 2
2. 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?	☐	☐	☐	☒	1, 2

4.11.2.1 *Impacts to Mineral Resources (Checklist Questions 1 -2)*

The project site is not located in the Communications Hill area and would not result in impacts to known mineral resources.

4.11.3 Conclusion

The project would have no impact to known mineral resources. **(No Impact)**

4.12 NOISE

The discussion in this section is based on a noise report prepared by *Extant Acoustical Consulting, LLC* in November 2014. This report is provided as Appendix B of this Initial Study.

4.12.1 Setting

4.12.1.1 *Background Information*

Acceptable levels of noise vary depending on the land use. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and federal standards have been established as guidelines for determining the compatibility of a particular use with its noise environment.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dBA.[20] This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable. Sound level meters can accurately measure environmental noise levels to within about plus or minus one dBA. Since the sensitivity to noise increases during the evening hours, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Day/Night Average Sound Level, DNL, is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 dB to noise levels measured between 10:00 P.M. and 7:00 A.M.

4.12.1.2 *City of San José Applicable Noise Requirements and Policies*

The City's General Plan and Municipal Code include criteria for land use compatibility and acceptable noise levels in the City. Noise levels resulting from non-residential land use adjacent to a property used or zoned for residential purposes are limited to 55 dBA. Additionally, the General Plan considers noise impacts to be significant if a project would increase noise level at adjacent land uses by five dBA or more where noise levels would remain normally acceptable or three dBA where noise levels would equal or exceed the normally acceptable level.

[20] The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. All sound levels in this discussion are A-weighted unless otherwise stated.

General Plan Policies

The *Envision San José 2040 General Plan* includes the following noise policies applicable to development in San Jose:

Policy EC-1.1: Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review. Applicable standards and guidelines for land uses in San José include:

Table EC-1: Land Use Compatibility Guidelines for Community Noise in San José

LAND USE CATEGORY	EXTERIOR NOISE EXPOSURE (DNL IN DECIBELS (DBA)) 55 60 65 70 75 80
1. Residential, Hotels and Motels, Hospitals and Residential Care[1]	
2. Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	
3. Schools, Libraries, Museums, Meeting Halls, Churches	
4. Office Buildings, Business Commercial, and Professional Offices	
5. Sports Arena, Outdoor Spectator Sports	
6. Public and Quasi-Public Auditoriums, Concert Halls, Amphitheaters	

[1]Noise mitigation to reduce interior noise levels pursuant to Policy EC-1.1 is required.

Normally Acceptable:

- Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable:

- Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.

Unacceptable:

- New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Policy EC-1.2: Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3 and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level.

- Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.

Policy EC-1.3: Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses

Policy EC-1.4: Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City's Municipal Code.

Policy EC-1.6: Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City's Municipal Code.

Policy EC-1.7: Construction operations within San José will be required to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:

- Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.

Policy EC-1.8: Commercial drive-thru uses will only be allowed when consistency with the City's exterior noise level guidelines and compatibility with adjacent land uses can be demonstrated.

Policy EC-2.3: Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction.

Construction Noise

Construction is a temporary source of noise impacting residences and businesses located near construction sites. Construction noise can be significant for short periods of time at any particular location and generates the highest noise levels during grading and excavation, with lower noise levels occurring during building construction.

Large pieces of earth-moving equipment, such as graders, scrapers, and bulldozers, generate maximum noise levels of 85 to 90 dBA at a distance of 50 feet. Typical hourly average construction-generated noise levels are approximately 80 to 85 dBA measured at a distance of 50 feet from the site during busy construction periods.

4.12.1.3 *Existing Noise Conditions*

The project site is an existing gasoline service station located in the south-western portion of the City of San Jose, bounded by Fruitvale Avenue to the north, Meridian Avenue to the west, multi-family residential uses to the east, and commercial uses to the south. The area surrounding the site includes a mix of single and multi-family residential, commercial, and public/quasi-public uses. The closest noise-sensitive use to the site is the Envoy Apartments, located along the Project's eastern property line.

The existing noise environment in the project vicinity results primarily from vehicular traffic along Fruitvale and Meridian Avenues, as well as the more distant Southwest Expressway and I-280, which are located 800 feet northwest and 1,400 feet north of the site, respectively. Commercial areas contribute to the ambient noise level to a lesser extent, as well as occasional aircraft overflights from San José Mineta International Airport, which is located approximately three miles to the north.

A noise monitoring survey was completed from September 30, 2014 through October 1, 2014 to quantify the existing noise environment in the vicinity of the site. One long-term unattended noise measurement and three short-term attended measurements were made at representative locations to complete the noise monitoring survey. Noise measurement locations are shown in Figure 4.12-2.

Long-term noise measurement LT-1 was made at the southeast corner of the project site, closest to an Envoy Apartment building. During the monitoring, the primary background noise source was vehicular traffic on the local roadways. Additional noise sources included sirens and activity at the apartment complex. The average day-night (DNL) noise level measured during the monitoring was 64 dBA DNL and maximum hourly noise levels (Lmax) ranged from 65 to 92 dBA Lmax, with average daytime and nighttime levels of approximately 87 and 71 dBA Lmax, respectively.

Short-term noise measurement ST-1 was made at the outdoor activity area (pool and gazebo) of the adjacent Envoy Apartment complex. Monitoring site ST-2 was located at the northeast corner of the site to reflect traffic noise levels in the area. Monitoring site ST-3 was located across Fruitvale Avenue from the project to reflect the existing noise exposure of the Onnuri Church, at the northeast corner of Fruitvale and Meridian Avenues. Noise experienced at the short-term monitoring locations was predominantly due to vehicular traffic on the local roadway network. Overall noise levels ranged from 59 to 63 dBA Leq. Maximum noise levels ranged from approximately 71 to 78 dBA Lmax.

Existing traffic noise levels were also modeled for roadway segments in the project vicinity and modeled traffic noise levels were generally consistent with the noise measurements. The modeled traffic noise exposures at noise-sensitive receivers in the project area ranged from approximately 60 to 67 dBA DNL.

4.12.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
1. 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?	☐	☐	☒	☐	1, 2, 11
2. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1, 2, 11
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1, 2, 11
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1, 2, 11
5. 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, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1, 2
6. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1, 2

4.12.2.1 *Operational Noise Impacts (Checklist Question 1 and 3)*

Municipal Code Requirements

The project proposes to demolish the existing cashier/snack shop and auto service bays and construct a new structure housing a cashier/convenience store and a drive-through car wash with a queuing lane and mechanical equipment room. A concrete masonry wall ranging from six to 10 feet in height would be constructed on the eastern boundary of the property to serve as a sound barrier for the proposed carwash. Noise sources associated with the operations of the project would include people accessing the site for fueling or shopping, and operations of the automated carwash. The existing gas station, including the cashier/snack shop area, operates from 5:30 AM to 11:00 PM, while the auto service bays operate from 8:00 AM to 5:00 PM. Under project conditions, the carwash would operate from 6:00 AM to 9:30 PM, while the hours of operation for the gas station and convenience store would not change.[21]

[21] The noise study report was based upon the car wash operating between 7:00 AM and 10:00 PM and the gas station and convenience store operating 24 hours per day.

Operations of the carwash would constitute the loudest noise generation associated with the project. Automated carwash equipment and facilities have several noise generating sources, including pumps, compressors, high-pressure applicators and spray nozzles, scrubbers, and dryers. The carwash mechanical equipment can also generate a substantial amount of noise; however, the majority of the equipment is proposed to be fully enclosed within a mechanical equipment room, inside the carwash tunnel. Dryers are the dominant noise source not enclosed within a mechanical equipment room and the modeled carwash operation noise levels include the proposed dryer system manufacturer sound level data (refer to Appendix B).

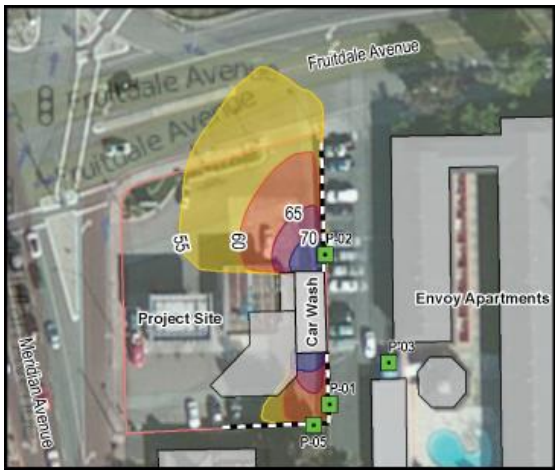


Figure 4.12-1: Noise from Carwash Operation

To predict future noise levels resulting from the project, *Extant Acoustical Consulting LLC* modeled noise levels generated by operation of the proposed car wash at representative receiver locations, shown on Figure 4.12-1. The resulting noise levels are shown in Table 4.12-1.

Table 4.12-1: Modeled Full-Service Carwash Noise Levels

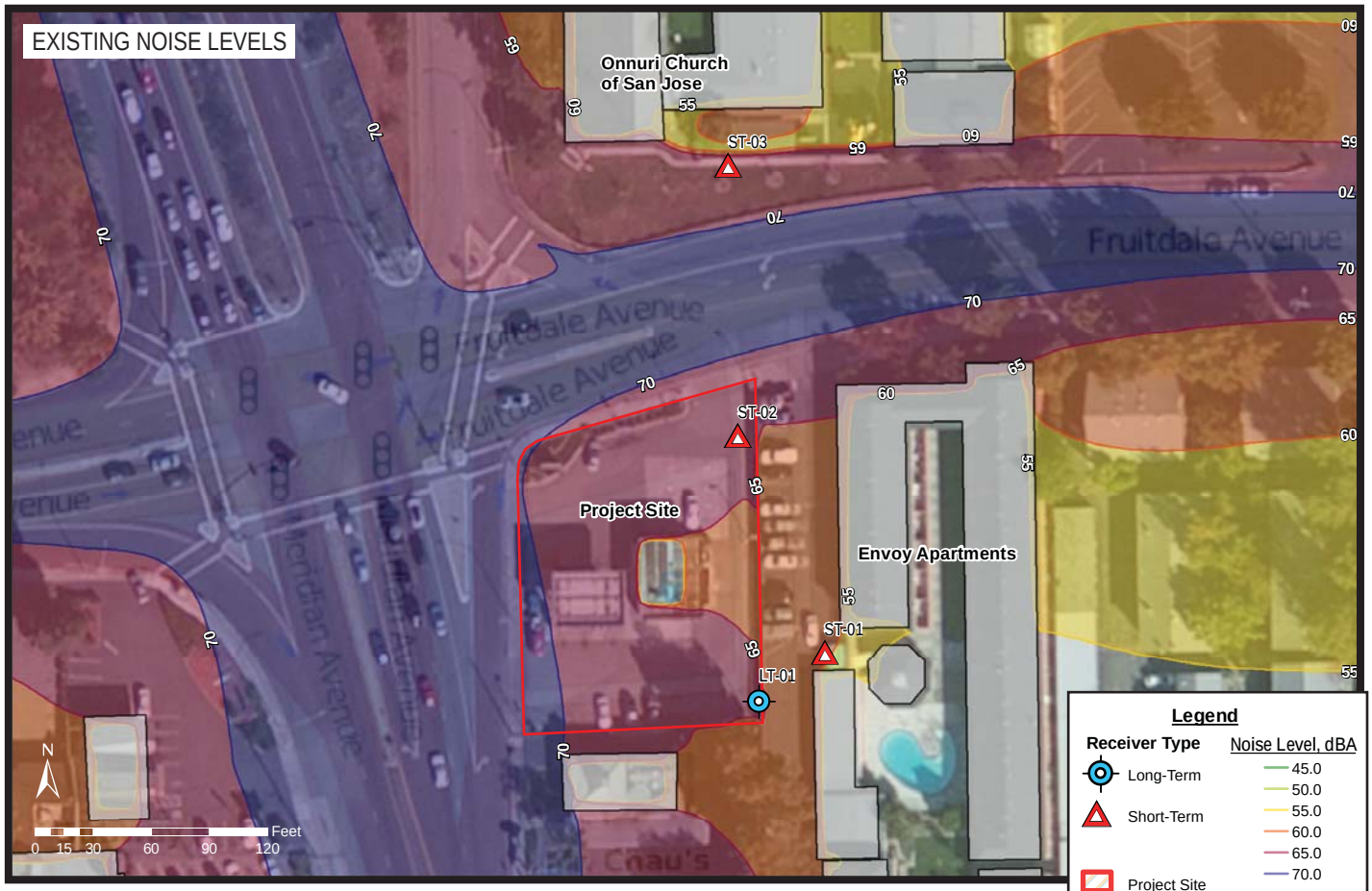
Site		Location	Noise Level (dBA)	
			Lmax	DNL
P-01	LT-01	SE project property line – Near carwash entrance	49	47
P-02		NE project property line – Near carwash exit	54	52
P-03	ST-01	Envoy Apartments outdoor activity area	48	46
P-04	ST-03	Onnuri Church landscape buffer – north of carwash exit	54	52
P-05		Southern project property line – south of carwash entrance	53	51

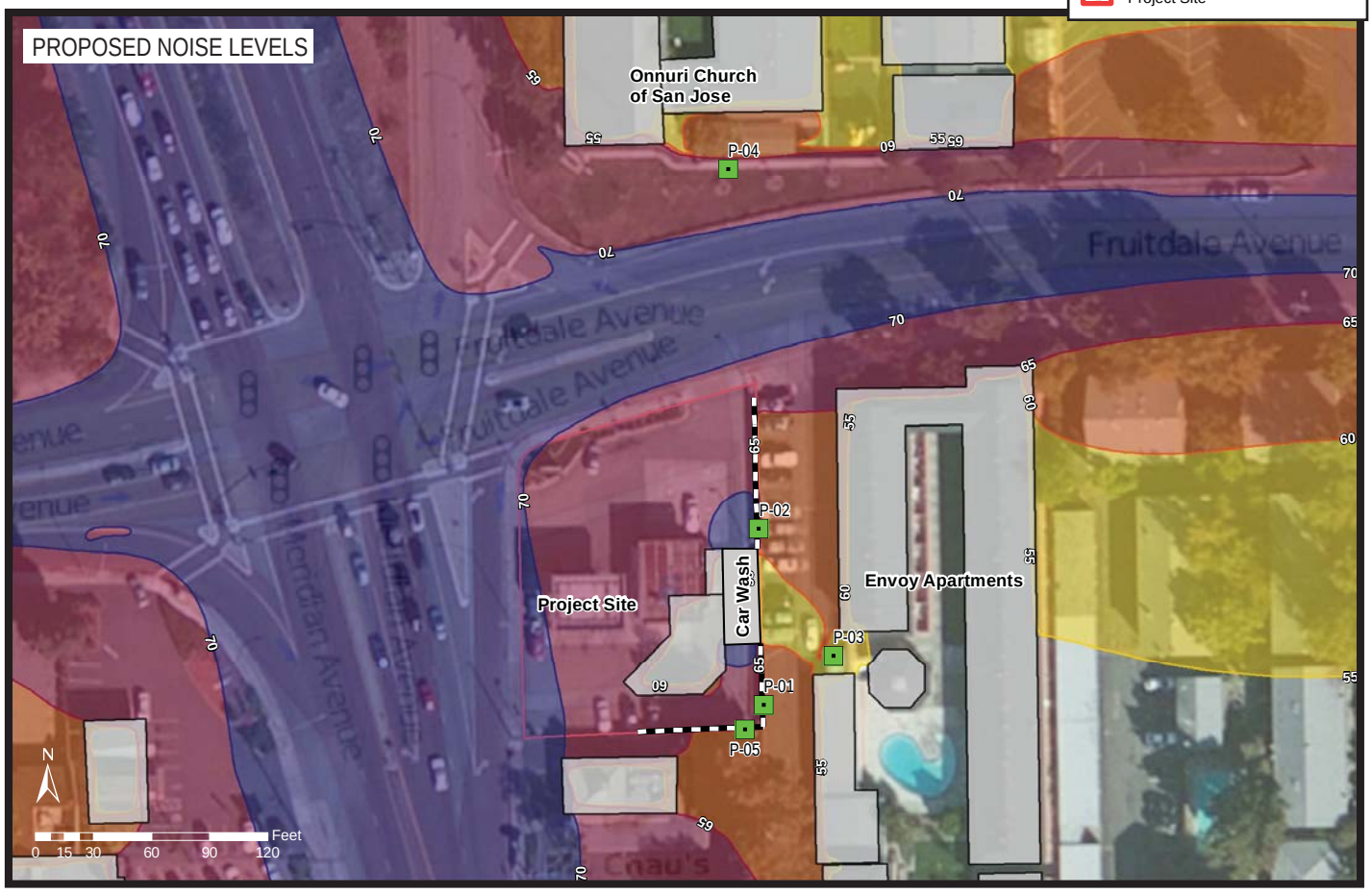
Notes: dBA = A-weighted decibels; DNL = Day Night noise level.
Locations of receivers shown on Figure 4.12-2.
Full-Service including automated carwash and interior service with vacuum.
Source: *Extant Acoustical Consulting LLC*, 2014

As shown in Table 4.12-1, noise levels generated by the proposed carwash are anticipated to range from approximately 47 to 52 dBA DNL at the nearest receivers, with maximum noise levels ranging from 48 to 54 dBA DNL. With the inclusion of the soundwall proposed as part of the project, future noise levels would be in conformance with the City of San Jose's General Plan and Municipal Code 60 dBA DNL and 55 dBA maximum noise level standards at the property line.

General Plan Requirements

Adding the project's modeled noise to existing ambient noise levels at the site result in noise level increases of less than one (1) dBA, compared to existing traffic noise levels at the evaluated noise receiver locations. In fact, noise receiver locations P-01, P-02, and P-03, representing the Envoy Apartments and the commercial uses to the south, are predicted to benefit from a reduction in traffic noise exposure, due to the project site design and the proposed eastern property-line sound wall. The future predicted noise levels with the project are shown on Figure 4.12-2. Project-generated noise levels are not predicted to result in an increase of 3 dBA or more in the existing noise environment.





EXISTING AND PROPOSED NOISE LEVELS FIGURE 4.12-1

Predicted noise levels from on-site project operations would be less than the 55 dBA L_{eq} noise limit for adjacent residential uses, and would not measurably contribute to existing or future DNL noise levels. Therefore, the operational noise from the project would result in a less-than-significant impact upon the nearest noise-sensitive receptors. **(Less Than Significant Impact)**

4.12.2.2 *Construction Noise and Vibration Impacts (Checklist Question 3 - 4)*

The project proposes to demolish the existing cashier/snack shop and auto service bays and construct a new structure housing a cashier/convenience store and a drive-through car wash with a mechanical equipment room. The overall duration of construction is anticipated to last less than one year and would not require extended periods of heavy equipment use. Given the small size of the project, and the relatively high ambient noise levels it is anticipated that the effects of construction noise levels would be reduced to a less-than-significant level through the implementation of standard permit conditions. **(Less Than Significant Impact)**

Standard Permit Conditions: The City's Municipal Code limits construction hours near residential land uses, and Policy EC-1.7 in the Envision San José 2040 General Plan addresses the types of construction equipment that are sources of significant noise. The following measures would be implemented to reduce construction noise and vibration levels consistent with the City of San José policy:

- Construction hours within 500 feet of residential uses will be limited to the hours of 7:00 a.m. and 7:00 p.m. weekdays, with no construction on weekends or holidays.
- Utilize 'quiet' models of air compressors and other stationary noise sources where technology exists.
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;
- Locate staging areas and construction material areas as far away as possible from adjacent land uses;
- Prohibit all unnecessary idling of internal combustion engines;
- The contractor shall identify a noise control 'disturbance coordinator' and procedure for coordination with the adjacent noise sensitive uses so that construction activities can be scheduled to minimize noise disturbance. This plan shall be made publicly available for interested community members.
- The disturbance coordinator will be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g. starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. The telephone number for the disturbance coordinator at the construction site will be posted and included in the notice sent to neighbors regarding the construction schedule.

Implementation of these measures, which are required by City policy and would be conditions of project approval, would avoid potentially significant construction-related noise and vibration

impacts. Therefore, the proposed project would have a less than significant construction noise impact. **(Less Than Significant Impact)**

4.12.2.3 *Areas within Airport Land Use Plan or Private Airstrip (Checklist Questions 5 – 6)*

The project site is located approximately three (3) miles south of the Norman Y. Mineta San José International Airport and is outside of the Airport Influence Area of the CLUP and outside of the airport's 65 dB CNEL noise contour. The project would not be exposed to excessive noise levels from aircraft overflights. **(No Impact)**

4.12.3 Conclusion

The proposed project would not result in significant noise impacts. **(Less Than Significant Impact)**

4.13 POPULATION AND HOUSING

4.13.1 Setting

According to the city, the population of San José is 984,299 as of 2013, which included 306,727 households.[22] The city's population is projected to reach 1,216,000 with 401,000 households by the year 2025.[23] The average number of persons per household in San José in 2013 was 3.16 and is projected to decrease slightly to 3.03 by the year 2025.

4.13.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. 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)?	☐	☐	☒	☐	2
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐	2
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐	2

4.13.2.1 *Impacts to Population and Housing (Checklist Questions 1 -3)*

The proposed project would not result in the displacement of people or housing. The proposed project would not directly induce substantial population growth through the provision of new housing or substantial job growth. As discussed further in *Section 4.17 Utilities and Service Systems*, the extension of new infrastructure is not proposed and, therefore, the project would not indirectly induce substantial population growth through the extension of roads or other infrastructure. **(Less Than Significant Impact)**

4.13.3 Conclusion

The proposed project would have a less than significant impact on population and housing. **(Less Than Significant Impact)**

[22] City of San José, *Fact Sheet: History & Geography, 2013*. http://www.sanjoseca.gov/DocumentCenter/View/780
[23] Center for the Continuing Study of the California Economy, *Projections of Jobs, Populations, and Households for the City of San José*, August 2008. http://www.sanjoseca.gov/DocumentCenter/View/3326

4.14 PUBLIC SERVICES

4.14.1 Setting

4.14.1.1 *Fire Service*

Fire protection to the site is provided by the San Jose Fire Department (SJFD), which serves a total area of 203 square miles. The SJFD responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents) in the project area. The SJFD currently has 33 fire stations located throughout the City.

The closest station to the project site is Station 30, approximately two miles northwest of the project site at 454 Auzerais Avenue.

4.14.1.2 *Police Service*

Police protection services for the site are provided by the San Jose Police Department (SJPD). Officers patrolling the project area are dispatched from police headquarters located approximately four miles to the northwest at 201 West Mission Street.

4.14.1.3 *Schools*

The closest schools to the project site are Willow Glen Elementary School (1.7 miles to the southeast), Hoover Middle School (1.8 miles to the northwest), and Del Mar High School (1.5 miles to the southwest).

4.14.1.4 *Parks*

The nearest park to the project is St. Elizabeth Park, located 0.4 miles to the southwest on St. Elizabeth Drive.

4.14.1.5 *General Plan*

The *Envision San José 2040 General Plan* includes the following public services policies applicable to the proposed project:

Policy CD-5.5: Include design elements during the development review process that address security, aesthetics, and safety. Safety issues include, but are not limited to, minimum clearances around buildings, fire protection measures such as peak load water requirements, construction techniques, and minimum standards for vehicular and pedestrian facilities and other standards set forth in local, state, and federal regulations.

Policy ES-3.9: Implement urban design techniques that promote public and property safety in new development through safe, durable construction and publically-visible and accessible spaces.

Policy ES-11: Ensure that adequate water supplies are available for fire-suppression throughout the City. Require development to construct and include all fire suppression infrastructure and equipment needed for their projects.

4.14.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	☐	☐	☒	☐	1
Police Protection?	☐	☐	☒	☐	1
Schools?	☐	☐	☐	☒	1
Parks?	☐	☐	☐	☒	1
Other Public Facilities?	☐	☐	☐	☒	1

4.14.2.2 *Impacts to Public Services and Facilities (Checklist Question 1.a – 1.e)*

Fire and Police Protection Services

The demand for fire and police services is not anticipated to change with implementation of the project, which would install a drive-through carwash at an existing gas station. As discussed in *Section 4.8 Hazards and Hazardous Materials*, project operations would adhere to applicable Federal, State, and local regulations. For these reasons, the proposed project would not result in significant impacts to fire and police protection services in the City. **(Less Than Significant Impact)**

Schools

The proposed project is not a student-generating use (i.e., housing) and, therefore, would not impact schools. **(No Impact)**

Parks

The proposed project would not increase the use of local parks. **(No Impact)**

Other Public Facilities

The proposed project would not increase the use or otherwise affect other public facilities (e.g., libraries) in the project area. **(No Impact)**

4.14.3 Conclusion

The proposed project would have a less than significant impact on public services in the City of San José. **(Less Than Significant Impact)**

4.15 RECREATION

4.15.1 Setting

The City of San Jose provides parklands, open space, and community facilities for public recreation and community services. Park and recreation facilities vary in size, use and type of service and provide for regional and neighborhood uses. The nearest park to the project site is St. Elizabeth Park, located roughly 0.4 miles to the southwest on St. Elizabeth Drive.

4.15.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☐	☒	1
2. 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?	☐	☐	☐	☒	1

4.15.2.1 *Impacts to Recreational Facilities (Checklist Questions 1 - 2)*

The proposed project would not increase usage of existing recreational facilities and would not require the construction or expansion of recreational facilities. **(No Impact)**

4.15.3 Conclusion

The proposed project would not adversely affect recreational facilities in the project area. **(No Impact)**

4.16 TRANSPORTATION

4.16.1 Setting

Local access to the site is provided by Meridian Avenue and Fruitdale Avenue. Regional access is provided by Interstate 280.

Pedestrian access to the site is provided by sidewalks on both Meridian Avenue and Fruitdale Avenue.

Currently, the project site has three vehicle access driveways, including two on Meridian Avenue and one on Fruitdale Avenue.

4.16.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. 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?	☐	☐	☒	☐	1
2. 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?	☐	☐	☒	☐	1
3. 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?	☐	☐	☐	☒	1
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐	1
5. Result in inadequate emergency access?	☐	☐	☐	☒	1

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒	1

4.16.2.1 *Project Transportation Impacts (Checklist Questions 1, 2 and 4)*

Trip Generation and Level of Service (LOS) Effects

The project proposes to demolish the existing structure containing the one-story cashier/snack shop and auto bays and construct a new one-story structure housing a 1,909 square-foot convenience store and an 870 square-foot drive-through carwash with an associated 223 square-foot equipment room.

According to the Institute of Transportation Engineers *Trip Generation (8th Edition)*, the *Gasoline/Service Station with Convenience Market and Carwash (946)* land use category generates an average of 152.84 weekday vehicle trips per fueling position, while the *Gasoline/Service Station with Convenience Market (945)* land use category generates 162.78 trips per fueling position. This data suggests that the proposed inclusion of a carwash would not result in additional vehicle trips compared to existing conditions. Local traffic patterns would not change with the proposed project, and the project would not result in any Level of Service (LOS) impacts on nearby roadways.

Vehicle Circulation and Parking

Currently, the project site has three vehicle access driveways, two on Meridian Avenue and one on Fruitdale Avenue. The northernmost driveway on Meridian Avenue would be removed, while the other two driveways would be improved as part of the development on the site, but their locations would remain the same. The site currently contains no marked parking spaces other than a handicap-accessible space located on the south side of the existing building, although vehicles utilize vacant areas on the perimeter of the site for parking. The project proposes to install 13 parking spaces, including one handicap-accessible space adjacent to the proposed structure.

The proposed carwash would be located on the eastern boundary of the site and would be oriented north-south. Vehicles would queue on the southern boundary of the site before turning north and entering the carwash. Vehicles would exit the carwash facing north towards Fruitdale Avenue. The proposed vehicle circulation patterns on the site are shown on Figure 3.1-1.

As described in Section 3.1-2, the project also includes offsite improvements to the Meridian Avenue corridor. The project would vacate the dedicated right turn lane on Meridian Avenue as shown on Figure 3.1-5. The sidewalk on Meridian Avenue would be extended to the west so that it would be adjacent to the northbound through-lanes of traffic and the intersection crosswalks. The removal of the free right turn is proposed to improve pedestrian safety at the intersection, by slowing down or stopping northbound vehicles before they make a right turn onto Fruitvale Avenue. The area between the project site and the new sidewalk would remain public right of way. Because vehicles

would still be able to make a right turn from northbound Meridian Avenue onto eastbound Fruitdale Avenue, the proposed vacation of the dedicated right turn lane would not substantially alter vehicle circulation or intersection operations in the project area. Additionally, the proposed improvements would increase pedestrian safety by eliminating the need to cross a free right turn lane in order to cross Meridian Avenue.

The project would not substantially increase hazards due to a design feature or incompatible land uses, nor would it result in inadequate emergency access. **(Less Than Significant Impact)**

Air Traffic Patterns (Checklist Question 3)

The project site is not located within the Norman Y. Mineta San José International Airport influence area or safety zones and does not require Federal Aviation Administration (FAA) airspace review. The project would not result in changes in air traffic patterns. **(No Impact)**

Emergency Response (Checklist Question 5)

The proposed project would not interfere with emergency response access on adjacent public roads. While equipment would be relocated within the site, the proposed project would have no effect on emergency access. The project would not result in inadequate emergency access. **(No Impact)**

Transit, Pedestrian, and Bicycle Facilities (Checklist Question 6)

The project would not alter or increase the use of transit, pedestrian, or bicycle facilities in the project area. The project, therefore, would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. **(No Impact)**

4.16.3 Conclusion

The proposed project would have a less than significant transportation impact. **(Less Than Significant Impact)**

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Setting

4.17.1.1 Water Service

The City of San José owns and maintains the water lines that serve the project site.

4.17.1.2 Sanitary Sewer/Wastewater Treatment

Wastewater from the City of San José is treated at the San Jose/Santa Clara Regional Wastewater Facility (RWF) located near Alviso. The RWF is a regional wastewater treatment facility serving eight tributary sewage collection agencies and is administered and operated by the City of San José's Department of Environmental Services. The RWF provides primary, secondary, and tertiary treatment of wastewater and has the capacity to treat 167 million gallons of wastewater a day (mgd).[24]

The RWF is currently operating under a 120 million gallon per day dry weather effluent flow constraint. This requirement is based upon the State Water Resources Control Board and the Regional Water Quality Control Board concerns over the effects of additional freshwater discharges from the RWF on the saltwater marsh habitat, and pollutant loading to the Bay from the RWF. Approximately ten percent of the plant's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.

The City of San José owns and maintains the sanitary sewer system which serves the project site. The project site is currently served by a 30-inch sewer line in Meridian Avenue.

4.17.1.3 Storm Drainage System

The City of San José owns and maintains the storm drainage system which serves the project site. The project site currently drains into a 30-inch stormdrain line in Meridian Avenue which flows into Los Gatos Creek.

4.17.1.4 Solid Waste

Waste collection and recycling services are available to most businesses from private companies franchised by the City of San José.

[24] City of San José Website. http://www.sanJoseca.gov/

4.17.1.5 *General Plan*

The *Envision San José 2040 General Plan* includes the following utility and service system policies applicable to the proposed project:

Policy MS-1.4: Foster awareness in San José's business and residential communities of the economic and environmental benefits of green building practices. Encourage design and construction of environmentally responsible commercial and residential buildings that are also operated and maintained to reduce waste, conserve water, and meet other environmental objectives.

Policy MS-3.2: Promote use of green building technology or techniques that can help to reduce the depletion of the City's potable water supply as building codes permit.

Policy MS-19.3: Expand the use of recycled water to benefit the community and the environment.

Policy MS-19.4: Require the use of recycled water wherever feasible and cost-effective to serve existing and new development.

Policy IN-3.10: Incorporate appropriate stormwater treatment measures in development projects to achieve stormwater quality and quantity standards and objectives in compliance with the City's National Pollutant Discharge Elimination System (NPDES) permit.

4.17.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	1
2. 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?	☐	☐	☒	☐	1, 13
3. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐	1, 13

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
5. 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?	☐	☐	☒	☐	1
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	1
7. Comply with federal, state and local statutes and regulations related to solid waste?	☐	☐	☒	☐	1

4.17.2.1 *Water Service Impacts (Checklist Question 4)*

The proposed project would increase the amount of irrigated landscaping on the site and would install a carwash. As a result, the project would intensify the demand for water use on the site over existing conditions, and slightly increase the overall water demand in San Jose. According to a report prepared for the International Carwash Association, carwashes similar to the type proposed by the project can require 22,444 gallons a week for washing operations, or 3,206 gallons per day (gpd).[25] Modern drive-through carwashes often utilize recirculation systems to reuse wash water. The project proposes a carwash that would rely on the filtration and recycling of its own water for 80 percent of the water used during operation, resulting in a potable water demand of 641 gpd. This is approximately the water demand of three single family homes.[26]

While the project would result in an increase in water demand/usage at the site, the proposed project would include sustainable and green building design features to reduce water use, as required by San Jose policies and regulations. Domestic water flow and pressure are adequate to serve the proposed project. The proposed project would not exceed available or projected water supplies, and would have a less than significant effect on water services. **(Less Than Significant Impact)**

4.17.2.2 *Wastewater Services Impacts (Checklist Question 1 - 2 and 5)*

Sanitary sewer services would be provided for the proposed project by connecting to an existing 10-inch sewer line in Camden Avenue. Wastewater from the carwash operation would be directed to the sanitary sewer system. As described above, the proposed carwash would rely on the filtration and recycling of its own water for 80 percent of the water used during operation, resulting in a potable water usage of 641 gpd. It can be assumed that this same amount of water will be directed to the sanitary sewer system as a result of carwash operations. Additional wastewater may be generated as a result of improvements to on-site restrooms, resulting in more frequent use by customers; however, this increase would be minimal. Based on this quantity of wastewater generated by the proposed

[25] International Carwash Association. *Water Use in the Professional Carwash Industry*. September 2002.
[26] City of San Jose. *Water Supply Assessment for Envision San José 2040 General Plan Update*. September, 2010.

project, and the capacity of the mains, there is sufficient sewer capacity for the project. **(Less Than Significant Impact)**

4.17.2.3 *Storm Drainage Impacts (Checklist Question 3)*

As discussed in *Section 4.9, Hydrology and Water Quality* of this Initial Study, the proposed project would decrease the quantity of impervious surfaces on the site, thereby decreasing overall stormwater flows. New on-site drainage facilities would be designed to meet the City of San Jose standards.

Based on the inclusion of stormwater collection and treatment facilities on site, and the implementation of C.3 post-construction measures, runoff on the site would not exceed the capacity of the City' existing storm water drainage system. **(Less Than Significant Impact)**

4.17.2.4 *Solid Waste Impacts (Checklist Question 6)*

The proposed project would not change the existing use on the site, and is not expected to result in increased solid waste generation. **(Less Than Significant Impact)**

4.17.3 Conclusion

The project would not result in a utility or service facility exceeding current capacity or require the construction of new infrastructure or service facilities. **(Less Than Significant Impact)**

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1. 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?	☐	☒	☐	☐	1-11
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐	1-11
3. Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☒	☐	☐	1-11
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	1-11

4.18.1 Project Impacts (Checklist Question 1)

The project could result in impacts to buried cultural resources, should they be discovered on site. The project could result in hazardous materials impacts related to asbestos, lead-based paint, and soil contamination. Additionally, the project could result in construction air quality, water quality, and noise impacts. With the implementation of the mitigation and avoidance measures included in the project and described in the specific sections (refer to *Section 4. Environmental Setting, Checklist, and Discussion of Impacts*) of this Initial Study, the proposed project would not result in significant environmental impacts.

4.18.2 Cumulative Impacts (Checklist Question 2)

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As

defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

The project would not impact agricultural, forestry, trees, mineral, population and housing, or recreational resources. Therefore, the project would not contribute to cumulative impacts to these resources.

There are no planned or proposed developments in the immediate project site vicinity that could contribute to cumulative aesthetic and noise and vibration impacts.

The project's geology and soils, hazardous materials, and hydrology and water quality impacts are specific to the project site and would not contribute to cumulative impacts elsewhere. Implementation of the project would marginally contribute to global GHG emissions, by definition. However, as discussed in Section 3.7 Greenhouse Gas Emissions, the project's individual GHG emissions would have a less than significant (cumulative) GHG impact.

The project would emit criteria air pollutants and GHG emissions and contribute to the overall regional and global emissions of such pollutants. By its very nature, air pollution is largely a cumulative impact. The project-level thresholds identified by BAAQMD (which the project's impacts were compared to in Section 3.3) are the basis for determining whether a project's individual impact is cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. As discussed in Section 3.3, the project would have a less than significant impact on air quality. For this reason, the project would have a less than significant cumulative impact on air quality. The project's cumulative impacts on GHG emissions is discussed in Section 3.7, and it was concluded that the project would have a less than significant (cumulative) greenhouse gas emissions impact.

The proposed project is consistent with the development assumptions in the General Plan. For these reasons, the project would not result in significant cumulative impacts.

4.18.3 Short-term vs Long-term Environmental Goals (Checklist Question 3)

The project will be designed in a manner that reduces both short- and long-term environmental impacts to the greatest extent feasible. Mitigation measures included in the project would not achieve short-term environmental goals to the disadvantage of long-term environmental goals.

4.18.4 Direct or Indirect Adverse Effects on Human Beings (Checklist Question 4)

With the implementation of standard measures and procedures described in this Initial Study, the proposed project would not result in substantial adverse effects on human beings.

4.18.5 Conclusion

The project could result in temporary air quality, noise, and water quality impacts during construction. The project could result in hazardous materials impacts, as well as impacts to cultural

resources, should they be discovered on site. The project could also result in post-construction hydrology and water quality impacts. With the implementation of the mitigation and avoidance measures included in the project and described in the specific sections of this Initial Study (refer to Section 4. Environmental Setting, Checklist, and Discussion of Impacts), the proposed project would not result in significant environmental impacts. **(Less Than Significant Impact With Mitigation)**

Checklist Sources

1. CEQA Guidelines – Environmental Thresholds (Professional judgment and expertise and review of project plans).

2. City of San José, *Envision San José 2040 General Plan*, 2011.

3. City of San José, *Municipal Code*.

4. California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, *Santa Clara County Important Farmlands Map*, 2012.

5. California Department of Conservation, Division of Land Resource Protection, Conservation Program Support, *Santa Clara County Williamson Act FY 2012/2013*, 2012.

6. Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2012.

7. Association of Bay Area Governments, Resilience Program GIS Mapping Tool, http://gis.abag.ca.gov/. Accessed August 14, 2015.

8. Federal Emergency Management Agency, Flood Insurance Rate Maps, Community Panel Number 06085C0241H, May 18, 2009.

9. City of San José, *Envision San José 2040 General Plan Environmental Impact Report*, June 2011.

10. California Emergency Management Agency, *Tsunami Inundation Map for Emergency Planning San Francisco Bay Area*, December 9, 2009. http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/Documents/Tsunami_Inundation_SanFranciscoBayArea300.pdf

11. Extant Acoustical Consulting, LLC, *Chevron Car Wash – 900 Meridian Ave. Noise Study Report*, November 21, 2014.

SECTION 5.0 REFERENCES

Association of Bay Area Governments, *Website* (www.abag.ca.gov).

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National Aeronautics and Space Administration, *Global Climate Change: Vital Signs of the Planet, Consensus*, March 5, 2013 (climate.nasa.gov/scientific-consensus).

State Water Resources Control Board. Geotracker Database. http://geotracker.waterboards.ca.gov/. Accessed August 10, 2015.

SECTION 6.0 AUTHORS AND CONSULTANTS

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Zach Dill, Graphic Artist

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Appendix A:

Greenhouse Gas Model Results

900 Meridian Avenue - Existing Conditions

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	1.04	1000sqft	0.02	1,036.00	0
Convenience Market With Gas Pumps	0.08	1000sqft	0.00	80.00	0
Gasoline/Service Station	8.00	Pump	0.03	1,129.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2015
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction calculated because no construction is associated with existing uses.

Vehicle Trips -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2015

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016																5.8384
Total																**5.8384**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016																5.8384
Total																**5.8384**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																1.7000e-004
Energy																9.1807
Mobile																395.2838
Waste																3.8759
Water																0.7239
Total																**409.0644**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																1.7000e-004
Energy																9.1807
Mobile																395.2838
Waste																3.8759
Water																0.7238
Total																**409.0643**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/14/2016	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																5.4369
Total																**5.4369**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.4016
Total																**0.4016**

3.2 Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																5.4369
Total																**5.4369**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.4016
Total																**0.4016**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated																395.2838
Unmitigated																395.2838

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	64.23	64.23	64.23	63,987	63,987
Convenience Market With Gas Pumps	67.65	115.87	94.57	42,044	42,044
Gasoline/Service Station	1,302.24	1,302.24	1302.24	750,309	750,309
Total	1,434.12	1,482.34	1,461.04	856,341	856,341

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.552608	0.057937	0.185322	0.124470	0.029726	0.004465	0.012479	0.021685	0.001768	0.001276	0.005971	0.000530	0.001762

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated																5.9834
Electricity Unmitigated																5.9834
NaturalGas Mitigated																3.1973
NaturalGas Unmitigated																3.1973

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	28396.8																1.5246
Convenience Market With Gas Pumps	199.2																0.0107
Gasoline/Service Station	30956.9																1.6620
Total																	**3.1973**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	28396.8																1.5246
Convenience Market With Gas Pumps	199.2																0.0107
Gasoline/Service Station	30956.9																1.6620
Total																	**3.1973**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	9355.08				2.7320
Convenience Market With Gas Pumps	935.2				0.2731
Gasoline/Service Station	10198.5				2.9783
Total					**5.9834**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	9355.08				2.7320
Convenience Market With Gas Pumps	935.2				0.2731
Gasoline/Service Station	10198.5				2.9783
Total					**5.9834**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated																1.7000e-004
Unmitigated																1.7000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Landscaping																1.7000e-004
Total																**1.7000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Landscaping																1.7000e-004
Total																**1.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				0.7238
Unmitigated				0.7239

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.0978444 / 0.0599691				0.3372
Convenience Market With Gas Pumps	0.0059258 / 0.0036319				0.0204
Gasoline/Service Station	0.106255 / 0.0651241				0.3662
Total					**0.7239**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.0978444 / 0.0599691				0.3372
Convenience Market With Gas Pumps	0.0059258 / 0.0036319				0.0204
Gasoline/Service Station	0.106255 / 0.0651241				0.3662
Total					**0.7238**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated				3.8759
Mitigated				3.8759

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	3.97				1.8060
Convenience Market With Gas Pumps	0.24				0.1092
Gasoline/Service Station	4.31				1.9607
Total					**3.8759**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	3.97				1.8060
Convenience Market With Gas Pumps	0.24				0.1092
Gasoline/Service Station	4.31				1.9607
Total					**3.8759**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Meridian Avenue Gas Station - Project Conditions

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market With Gas Pumps	1.91	1000sqft	0.04	1,909.00	0
Gasoline/Service Station	8.00	Pump	0.03	1,129.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2015
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Vehicle Trips - Trip Generation Rate based on ITE Trip Generation Manual Land Use 946, Gasoline/Service Station with Convenience Market and Car Wash.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblLandUse	LandUseSquareFeet	1,910.00	1,909.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	162.78	152.84
tblVehicleTrips	SU_TR	162.78	152.84
tblVehicleTrips	WD_TR	162.78	152.84

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016																65.1419
Total																**65.1419**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016																65.1418
Total																**65.1418**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																1.9000e-004
Energy																11.4125
Mobile																796.0444
Waste																4.5719
Water																0.8539
Total																**812.8829**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																1.9000e-004
Energy																11.4125
Mobile																796.0444
Waste																4.5719
Water																0.8537
Total																**812.8828**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/14/2016	5	10	
2	Site Preparation	Site Preparation	1/15/2016	1/15/2016	5	1	
3	Grading	Grading	1/16/2016	1/19/2016	5	2	
4	Building Construction	Building Construction	1/20/2016	6/7/2016	5	100	
5	Paving	Paving	6/8/2016	6/14/2016	5	5	
6	Architectural Coating	Architectural Coating	6/15/2016	6/21/2016	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,558; Non-Residential Outdoor: 1,519 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	1.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																5.4369
Total																**5.4369**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.4016
Total																**0.4016**

3.2 Demolition - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																5.4369
Total																**5.4369**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.4016
Total																**0.4016**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																0.4442
Total																**0.4442**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.0201
Total																**0.0201**

3.3 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																0.4442
Total																**0.4442**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.0201
Total																**0.0201**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																1.0874
Total																**1.0874**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.0803
Total																**0.0803**

3.4 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																1.0874
Total																**1.0874**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.0803
Total																**0.0803**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																53.7970
Total																**53.7970**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.4016
Total																**0.4016**

3.5 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																53.7969
Total																**53.7969**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.4016
Total																**0.4016**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																2.4717
Paving																0.0000
Total																**2.4717**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.3614
Total																**0.3614**

3.6 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																2.4717
Paving																0.0000
Total																**2.4717**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.3614
Total																**0.3614**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating																0.0000
Off-Road																0.6399
Total																**0.6399**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.0000
Total																**0.0000**

3.7 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating																0.0000
Off-Road																0.6399
Total																**0.6399**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																0.0000
Worker																0.0000
Total																**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated																796.0444
Unmitigated																796.0444

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	1,615.10	2,766.31	2257.77	1,003,809	1,003,809
Gasoline/Service Station	1,222.72	1,222.72	1222.72	704,493	704,493
Total	2,837.82	3,989.03	3,480.49	1,708,301	1,708,301

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.552608	0.057937	0.185322	0.124470	0.029726	0.004465	0.012479	0.021685	0.001768	0.001276	0.005971	0.000530	0.001762

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated																9.4953
Electricity Unmitigated																9.4953
NaturalGas Mitigated																1.9172
NaturalGas Unmitigated																1.9172

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Convenience Market With Gas Pumps	4753.41																0.2552
Gasoline/Service Station	30956.9																1.6620
Total																	**1.9172**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Gasoline/Service Station	30956.9																1.6620
Convenience Market With Gas Pumps	4753.41																0.2552
Total																	**1.9172**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	22316.2				6.5170
Gasoline/Service Station	10198.5				2.9783
Total					**9.4953**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	22316.2				6.5170
Gasoline/Service Station	10198.5				2.9783
Total					**9.4953**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated																1.9000e-004
Unmitigated																1.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Landscaping																1.9000e-004
Total																**1.9000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Landscaping																1.9000e-004
Total																**1.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				0.8537
Unmitigated				0.8539

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.141479 / 0.0867126				0.4876
Gasoline/Service Station	0.106255 / 0.0651241				0.3662
Total					**0.8539**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.141479 / 0.0867126				0.4876
Gasoline/Service Station	0.106255 / 0.0651241				0.3662
Total					**0.8537**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				4.5719
Unmitigated				4.5719

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	5.74				2.6112
Gasoline/Service Station	4.31				1.9607
Total					**4.5719**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	5.74				2.6112
Gasoline/Service Station	4.31				1.9607
Total					**4.5719**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Appendix B:

Noise Report

Chevron Car Wash – 900 Meridian Ave.

San Jose, CA

Noise Study Report

Extant Project No. 140925.02

November 21, 2014

Prepared for:

Jim Rubnitz
17610 Blanchard Drive
Monte Sereno, CA 95030

Chevron Car Wash – 900 Meridian Ave.

Noise Study Report

Extant Report No. 140925.02

November 21, 2014

Prepared for:

Jim Rubnitz

17610 Blanchard Drive
Monte Sereno, CA 95030

Prepared by:

Michael Carr, INCE, CTS
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Executive Summary

Jim Rubnitz, with the assistance of MI Architects, Inc., is proposing the reconstruction of an existing Chevron gasoline station with additional ancillary uses in San Jose, CA. The project site is located on the south-eastern corner of the Meridian Avenue and Fruitdale Avenue intersection, in the City of San Jose, California. The project site address is 900 Meridian Ave. and is bounded by multi-family residential use along the eastern property line. The location of the project site is shown in Figure 1. The proposed site plan and configuration of the proposed project is presented in Figure 2.

The project proposes to construct a new convenience store, full-service automated car wash with queuing lane, and an air/water station. The hours of operation for the proposed full-service car wash would be 7:00 AM to 10:00 PM. The hours of operation for the proposed gas station and convenience store were assumed to be 24 hours per day.

Extant Acoustical Consulting LLC (Extant) was retained by the project applicant to perform a noise analysis for the proposed project. In this report, Extant reviews applicable noise standards and criteria, presents the noise monitoring program, evaluates the existing noise environment, and describes modeling assumptions and methodologies used to predict noise emissions due to the proposed project. Findings of the study were evaluated and analyzed against applicable City of San Jose noise standards.

The existing noise levels and observations from the noise monitoring program were used as the basis for modeling of the existing noise environment and evaluation of the potential for project noise levels to effect the existing noise environment. Modeled traffic noise level exposures at noise-sensitive receivers in the project area were predicted to range from approximately 60 to 67 dBA Ldn.

Noise levels from the operation of the proposed car wash are anticipated to range approximately 47 to 52 dBA Ldn at the noise prediction receivers. Based on existing noise levels experienced in the vicinity of the project site, project-generated average day-night noise levels are predicted to be at or below ambient noise levels in the majority of the project study area. Moreover, project-generated noise levels are not anticipated to cause a significant increase in the existing noise environment in the project study area.

Based on the assumptions and analysis presented in this report, we conclude the following:

- The predicted average day-night noise levels (Ldn) generated from operation of the proposed project are predicted to comply with the City of San Jose exterior noise level standards at noise sensitive receptors in the project vicinity.
- The predicted average maximum noise levels (Lmax) generated from operation of the proposed project are predicted to comply with the City of San Jose exterior property-line noise level standards at noise sensitive receptors in the project vicinity.
- Due to the elevated ambient noise environment in the general vicinity of the project, average day-night noise levels associated with car wash operations are predicted to be below ambient noise levels currently experienced in the project study area.
- Development of the proposed car wash is anticipated to comply with the City of San Jose significant increase criteria as outlined in General Plan Policy EC-1.2.
- Activities associated with the development and operation of the proposed project is predicted to comply with City of San Jose standards for protection of the existing noise environment.

Contents

Tables

Figures

1 Introduction

Mr. Jim Rubnitz, with the assistance of MI Architects, Inc. is proposing the demolition and reconstruction of the existing Chevron gasoline station with ancillary uses. The project site is located on the south-eastern corner of the Meridian Ave. and Fruitdale Ave. intersection, in the City of San Jose, California. The project site is located at 900 Meridian Ave. and is bounded by multi-family residential along the east property line, Fruitdale Ave. on the north, Meridian Ave. on the west, and commercial use on the south. The location of the project site is shown in Figure 1. The proposed site plan and configuration of the proposed project is presented in Figure 2.

Extant Acoustical Consulting LLC (Extant) was retained by the project applicant to perform a noise analysis for the car wash included within the proposed project. This report reviews applicable noise standards and criteria, evaluates the existing noise environment, and describes modeling assumptions and methodologies used to predict noise emissions from gas station and car wash operations. Furthermore the report assesses the potential for project-generated noise levels to result in noise impacts on nearby noise-sensitive receptors and land uses. Appendix A provides a description of the various noise metrics and terminology used in this report.

2 Project Description

The Project being considered proposes to demolish the existing service station building, and construct a new convenience store and automated car wash. The project would incorporate a queuing lane and mechanical room for the car wash, signage, and landscaping; lastly, the proposed project includes an air and water station at the northern property boundary adjacent to Fruitdale Ave. Parking for the project would be located adjacent to Fruitdale Ave., on the northern portion of the property, with an additional handicap spot adjacent to the convenience store.

The proposed demolition and reconstruction of the Chevron Gas Station and Car Wash facility and the proximity of nearby noise-sensitive receptors has prompted the City of San Jose to request an acoustical analysis be prepared to analyze potential noise impacts associated with the proposed project, and more specifically the car wash operations.

3 Environmental Setting

The Project site is generally located in the south-western portion of the City of San Jose, bounded on the north by Fruitdale Ave.; on the west by Meridian Ave.; on the east by multiple-family residential land uses; and on the south by commercial uses. The area surrounding the project site includes a mix of single and multifamily residential, professional, commercial and neighborhood retail uses.

The project area has a number of noise influences, the most dominant being traffic noise. Commercial areas in the general area contribute to the ambient noise level to a lesser extent. The project area experiences occasional aircraft overflights largely associated with the aviation operations of San Jose International Airport; which is located approximately 3 nautical miles north.

3.1 Existing Noise Sensitive Land Uses

Noise-sensitive land uses are generally described as those uses where exposure to excessive noise would result in adverse effects, as well as uses where quiet is an essential element of the intended purpose. Residential dwellings are of primary concern due to the potential for increased and prolonged exposure of individuals to excessive interior and exterior noise levels.

Noise-sensitive residential receptors within closest proximity to the project study area include the Envoy Apartments, located along the Project's eastern property line.

3.2 Existing Ambient Noise Survey

An ambient noise survey was conducted by Extant from September 30, 2014 through October 1, 2014 to document the ambient noise in the vicinity of the Chevron at 900 Meridian Ave. Long-term unattended ambient noise monitoring was performed at one (1) location in the vicinity. Short-term source noise level monitoring was performed at three (3) locations in the vicinity of the Chevron station. Locations of the noise monitoring sites are presented on an aerial photograph of the area on Figure 1. On Figure 1, the long-term noise measurement site is represented as LT-1; short-term measurement locations are shown as ST-1 through ST-3.

Noise measurements were performed using Larson Davis Laboratories (LDL) Model 831 precision integrating sound level meters (SLMs). Field calibrations were performed on the SLM with an acoustic calibrator before and after the measurements. Equipment meets all pertinent specifications of ANSI S1.4-1983 (R2006) for Type 1 SLMs. All instrumentation components, including microphones, preamplifiers and field calibrators have laboratory certified calibrations traceable to the National Institute of Standards and Technology (NIST). The microphones were located at a minimum height of 5-6 ft. above the ground, an average height for a person standing, and located a sufficient distance away from reflective surfaces in the monitoring area. Noise measurements were performed in accordance with American National Standards Institute (ANSI) and American Standards for Testing and Measurement (ASTM) guidelines.

The noise monitoring equipment was configured to catalog all noise metrics pertinent to identification and evaluation of noise levels (i.e., Leq, Lmax, Ln, etc.) in the study area. Monitoring data was collected for the overall measurement period and each hourly period.

The following sections discuss the overall monitoring results for the long-term and short-term measurements.

3.2.1 Long-Term Monitoring

Long-term noise monitoring data collected during the noise monitoring program serves to establish a baseline for ambient noise levels in the project vicinity. Additionally, the noise levels cataloged illustrate the dinural pattern experienced at the site; and allow for correlation of hourly noise levels collected at the short-term monitoring locations with the 24-hour day-night noise levels. Long-term noise monitoring was conducted from September 30, 2014 through October 01, 2014, at one location on the Project site.

During the long-term monitoring, the primary background noise source affecting the monitoring location was vehicular traffic on the local roadway network (Meridian Ave. and Fruitdale Ave.). Additional noise sources experienced during the long-term noise monitoring period included sirens and activity at the nearby apartment complex. Ambient noise level exposure at the monitoring location was fairly dependent on the relative distance from nearby

transportation noise sources to the noise measurement location, and shielding provided by existing structures and topography.

Noise monitoring data is summarized below Table 1 for the long-term noise monitoring location in; with detailed noise level data provided in tabular and graph form in 6Appendix B. The average day-night (DNL) noise level measured during the long-term ambient noise monitoring survey was 64 dBA DNL. Maximum hourly noise levels (Lmax) documented during the long-term monitoring ranged from approximately 65 to 92 dBA Lmax, with average daytime and nighttime levels of approximately 87 and 71 dBA Lmax, respectively.

Table 1 – Summary of Long-Term Noise Monitoring

				Average Hourly Noise Levels (dBA)							
				Daytime				Nighttime			
Site	Description[1]	Date	DNL	Leq	Lmax	L50	L90	Leq	Lmax	L50	L90
LT-1	Eastern Boundary of Chevron station, 900 Meridian Ave.	September 30 to October 1	64.0	62.9	81.6	58.2	54.8	55.4	70.7	49.5	46.5

Notes: dBA = A-weighted decibels; DNL = 24-hour day-night noise level; Leq = equivalent average noise level; Lmax = maximum noise level; L50 = sound level exceeded 50% of the hour; L90 = sound level exceeded 90% of the hour, typically represents the background noise level.
1 – Measurement locations are provided in Figure 1 as an overlay on an aerial photograph.
Source: Extant Acoustical Consulting LLC, 2014

3.2.2 Short-Term Noise Monitoring

Short-term attended monitoring was performed by Extant staff at three (3) locations in the vicinity of the Chevron station on September 30, 2014. Detailed observations about the measurement environment, existing noise sources, and other elements with the potential to effect the measurement or the Project were documented throughout the monitoring program.

Short-term monitoring locations are depicted on Figure 1. Monitoring site ST-1 was positioned at the outdoor activity area (pool and gazebo) of the Envoy Apartments complex located at 1380 Fruitdale Ave., which adjoins the eastern property line of the Chevron Gas Station. ST-1 provides information about existing noise levels at the nearest outdoor activity area, and allows for correlation of project noise level exposure at the adjacent residential use. Monitoring site ST-2 provides information on traffic noise levels within the study area. Monitoring site ST-3 provides a representation of existing noise level exposure at the Onnuri Church of San Jose, on the north-eastern corner of Meridian Ave. and Fruitdale Ave.

Noise experienced at the short-term monitoring locations was predominately due to vehicular traffic on the local roadway network. Overall noise levels measured during the short-term monitoring survey ranged from approximately 59 to 63 dBA Leq. Maximum noise levels documented during the monitoring survey ranged from approximately 71 to 78 dBA Lmax. Table 2 presents the overall monitoring results for each of the short-term monitoring locations, along with some general observations from each site.

Table 2 – Summary of Short-Term Noise Monitoring

Site	Description[1]	Start Time (Duration)	Average Noise Levels (dBA) DNL[2]	Leq	Lmax	L50	L90	Notes/Sources
ST-1	Recreation area at the adjacent apartment complex, at 1380 Fruitdale Ave.	4:00 PM (10 min.)	61.5	58.7	75.2	55.8	53.7	Hammering at car shop, car horn, motorcycle
ST-2	Northern Boundary of the Chevron Station, along Fruitdale Ave.	4:23 PM (10 min.)	67.0	62.5	71.0	61.2	58.3	Cars idling at light, car horn, squeaky brakes, crosswalk signal chirping
ST-3	Nearest receiver to Northern Boundary, at 890 Meridian Way	4:47 PM (10 min.)	65.8	61.3	77.7	58.3	53.3	Crosswalk signal chirping, Motorcycle

Notes: dB = A-weighted decibels; DNL = 24-hour day-night noise level; Leq = equivalent average noise level; Lmax = maximum noise level; L50 = sound level exceeded 50% of the period; L90 = sound level exceeded 90% of the hour, typically represents the background noise level.
1 – Measurement locations are provided in Figure 1 as an overlay on an aerial photograph.
2 – DNL for short-term monitoring locations is interpolated based on long-term monitoring data.
Source: Extant Acoustical Consulting LLC, 2014

3.2.3 Existing Traffic Noise

Existing traffic noise levels were modeled for roadway segments in the project vicinity based on the Federal Highway Administration (FHWA) Highway Traffic Noise Model (TNM) Version 2.5® prediction methodologies, and traffic data for project area roadways from the City of San Jose 2005 traffic counts (City of San Jose 2006). The FHWA TNM incorporates state-of-the-art sound emissions and sound propagation algorithms, based on well-established theory and accepted international standards. The acoustical algorithms contained within the FHWA TNM have been validated with respect to carefully conducted noise measurement programs, and show excellent agreement in most cases for sites with and without noise barriers (FHWA 1998).

Noise modeling for the project was performed through the application of established assessment methodologies and algorithms to propagate noise levels into the surrounding community (e.g., traffic noise via FHWA TNM 2.5) within the SoundPLAN noise modeling program. The model incorporated a three-dimensional geometric model of the study area developed from digital terrain information, available GIS information, aerial photography and information provided by the project team. The noise modeling accounted for factors as vehicle volume, speed, vehicle type, roadway configuration, distance to the receiver, and propagation over different types of ground (acoustically soft and hard ground). In order to ensure that modeled existing traffic noise levels correlate with measured traffic noise levels, observations and data collected during short-term noise monitoring was used to calibrate the traffic model.

Modeled traffic noise levels were found to be reasonably consistent with traffic noise measurements conducted at the project site, under-predicting traffic noise levels by approximately 1-2.5 dB. This would result in an over-estimation of the effect of the Project on the existing environment. As this would result in a conservative analysis, calibration offsets were not applied to the model.

Noise prediction receivers were placed within the noise model, representing noise-sensitive receptors (i.e., single family residences, multi-family residential, outdoor activity areas, schools, etc.), locations of key interest, and the locations of the noise monitoring sites used during the field survey. Modeled traffic noise exposure levels at nearby noise-sensitive receivers in the

immediate project vicinity are shown in Table 3. Equal level noise contours for the modeled existing traffic conditions in the project area are presented graphically in Figure 1. As shown in Table 3, modeled traffic noise level exposures at noise-sensitive receivers in the project area range from approximately 60 to 67 dBA Ldn.

Table 3 – Modeled Existing Traffic Noise Levels

Site	Location	Noise Level Exposure (Ldn, dBA)
P-01 | LT-01	Southeastern project property line. Near car wash entrance.	64
P-02	Northeastern project property line. Near car wash exit.	63
P-03 | ST-01	Envoy Apartments outdoor activity area.	60
P-04 | ST-03	Onnuri Church landscape buffer. North of car wash exit.	67
P-04	Southern project property line. South of car wash entrance.	65

Notes: dBA = A-weighted decibels; Ldn = Day Night noise level.
Locations of noise monitoring sites and noise prediction receivers with modeled existing traffic noise level contours are shown on Figure 1.
Source: Extant Acoustical Consulting LLC, 2014

4 Regulatory Criteria

Standards and guidelines for addressing noise exposure within the City of San Jose are contained primarily in the City of San Jose General Plan, with additional guidelines found in the City of San Jose Municipal Code.

4.1 City of San Jose General Plan

The General Plan Noise Element establishes objectives, policies, and actions to protect its inhabitants against exposure of noise-sensitive uses to loud noise and to prevent encroachment of noise-sensitive uses on existing noise producing facilities.

The General Plan establishes exterior noise level standards and maximum allowable noise exposure levels at noise-sensitive land uses, which are considered "normally acceptable", and represented below in Table 4 (Section EC-1.1 and Table EC-1 of the City of San Jose General Plan). The noise level guidelines are presented in terms of the 24-hour CNEL or DNL noise level in dBA. The intent of these guidelines is to affect new project development through the discretionary review process to reduce potential noise exposure and excessive noise within the community.

As outlined in policy EC-1.2, the General Plan seeks to minimize noise impacts of new development on existing noise-sensitive receptors by limiting the effect a project may have on the existing ambient noise environment. A project is considered to cause a significant noise impact if the DNL at noise-sensitive receptors would increase by 5 dBA or more, where ambient noise levels would remain "Normally Acceptable" (60 dBA DNL); or if a project would result in an increase of 3 dBA or more, where noise levels would equal or exceed the "Normally Acceptable" level (60 dBA DNL).

Policy EC-1.3 of the General Plan limits noise generation for new non-residential land uses which are adjacent to residential land uses, to 55 dBA DNL at the residential property line.

The effects of operational noise are discussed briefly in General Plan Policy EC-1.6, which prescribes regulation of commercial and industrial operational noise levels through application of the City's Municipal Code. The Municipal Code standards are discussed in the following section.

The General Plan provides guidelines for construction operations within Policy EC-1.7, requiring construction operations within San Jose to use best available noise suppression devices and techniques; and limit construction hours near residential uses per the City's Municipal Code.

Policy EC-1.8 of the General Plan states that commercial drive-thru uses will only be allowed "when consistency with the City's exterior noise level guidelines and compatibility with adjacent land uses can be demonstrated."

Table 4 – Land Use Compatibility Guidelines in San Jose
(City of San Jose General Plan Noise Element, Table EC-1)

Land Use Category	Exterior Noise Exposure (DNL in Decibels (dBA)) 55 60 65 70 75 80
1. Residential, Hotels and Motels, Hospitals and Residential Care[1]	
2. Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	
3. Schools, Libraries, Churches, Hospitals, Nursing Homes	
4. Office Buildings – Business, Commercial & Professional	
5. Sports Area, Outdoor Spectator Sports	
6. Public and Quasi-Public Auditoriums, Concert Halls, Amphitheaters	

[1] Noise mitigation to reduce interior noise levels pursuant to Policy EC-1.1 is required.

Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable	Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.
Unacceptable	New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Source: City of San Jose General Plan

4.2 City of San Jose Municipal Code

The City of San Jose Municipal Code addresses and provides a means for protection of the citizens of San Jose through both qualitative and quantitative provisions and prohibitions. The primary purpose of the Code is intended to promote and secure the public health, comfort, safety, welfare and prosperity, and the peace and quiet of the city and its inhabitants. The Code serves as an implementation method for the General Plan and enforcement element for establishing the desired character of the City.

The Municipal Code establishes in Section 20.40.600 that for Commercial Zoning Districts "*The sound pressure level generated by any use or combination of uses on a property shall not exceed the decibel levels indicated in Table 20-105 at any property line, except upon issuance and in compliance with a conditional use permit as provided in Chapter 20.100.*" Table 20-105 establishes a maximum noise level of 55 dB for commercial use adjacent to a property used or

zoned for residential purposes; and 60 dB for commercial use adjacent to a property used or zoned for commercial or other non-residential purposes.

The City of San Jose Zoning Maps designates the parcel where the existing Chevron station is located as Commercial Pedestrian (CP). The adjacent parcel is occupied by the Envoy Apartments complex and is zoned as Multi-Family Residential (R-M). The project must therefore abide by the more restrictive 55 dB maximum noise level at the property line as outlined in section 20.40.600, or pursue the issuance of a special use permit establishing project specific criteria.

5 Project Noise Analysis

As stated in the introduction, the project under consideration proposes to demolish the existing buildings on the project site and construct a new convenience store, and an automated car wash with queuing lane. Noise sources associated with the operation of the proposed project would include people accessing the site for fueling or shopping, and operations of the automated car wash. Operations of the car wash, discussed further below, would constitute the loudest noise level generation associated with the Project. Because of this and the proximity of the car wash to the nearby noise-sensitive land uses, the car wash is the focus of this analysis. The hours of operation for the automated car wash are assumed to be limited to daytime hours, 7:00 AM to 10:00 PM.

5.1 Car Wash Operation Noise Levels

Automated car wash equipment and facilities have several potential noise generating sources associated with their general operation; including pumps, compressors, high-pressure applicators and spray nozzles, scrubbers, and dryers. The car wash mechanical equipment (pumps, compressors, etc.) can generate a substantial amount of noise; however, the majority of the mechanical equipment is proposed to be fully enclosed within a mechanical equipment room, inside the car wash tunnel. Potential noise sources not enclosed within the equipment room would include the high-pressure applicators and spray nozzle manifolds; noise from the friction of the scrubber, wrap and brush wash systems; and noise generated from the dryer system. The dryers however, are the dominate noise source associated with car wash systems; therefore, this analysis will examine car wash-generated noise levels through evaluation of sound levels generated by the dominant noise source, the dryer system. Additional noise generated from ancillary support equipment is included in the analysis of overall project noise levels.

The proposed full-service car wash will include the use of a Proto-Vest Windshear II Dryer system with incorporated Proto-Vest silencer. The Proto-Vest Windshear II is a stationary, stand-alone drying system, using one (1) 30 horse-power Magnum blower feeding an air plenum arch and three (3) Proto-Duck air delivery bags. The car wash dryer manufacturer (Proto-Vest) provided reference sound level data for the dryer in the form of sound pressure levels at varying distances. The manufacturer sound level data is provided as a reference in Appendix C. The supplied reference sound level data and operational characteristics for the equipment were used to calculate sound power levels (LwA)[1] for the dryer.

The manufacturer reference source noise levels are based upon continuous operation of the dryers; which is capable of processing cars at conveyor/line speeds up to 70 cars per hour. It

[1] The Sound Power Level represents the total sound energy produced by the source under the specified operating conditions. Sound Power Levels cannot be measured directly; instead they are computed from reference sound pressure level measurements, such as those conducted by the manufacturer.

should be noted, that the assumption of continuous operation of up to 70 cars per hour, as incorporated into the SoundPLAN noise prediction model, is expected to be conservative based on trip generation rates for similar facilities. The Institute of Transportation Engineers (ITE) Trip Generation, 8th Edition (2008), and the SANDAG Trip Generation Manual, would suggest overall trip rates between 25 and 50 during a peak hour.

Operational and temporal assumptions outlined above along with the calculated sound power levels were used as inputs to the SoundPLAN noise prediction model. Modeled noise levels generated from the operation of the proposed car wash at the representative noise prediction receiver locations are presented in Table 5.

Table 5 – Modeled Full-Service Car Wash Noise Levels

Site	Location	Noise Level, dBA	
		Lmax	Ldn
P-01 | LT-01	Southeastern project property line. Near car wash entrance.	49	47
P-02	Northeastern project property line. Near car wash exit.	54	52
P-03 | ST-01	Envoy Apartments outdoor activity area.	48	46
P-04 | ST-03	Onnuri Church landscape buffer. North of car wash exit.	54	52
P-05	Southern project property line. South of car wash entrance.	53	51

Notes: dBA = A-weighted decibels; Ldn = Day Night noise level.
Locations of receivers and full-service car wash noise level contours are shown on Figure 3.
1. Full-Service including automated car wash and interior service with vacuum.
Source: Extant Acoustical Consulting LLC, 2014

P-02 represents the property boundary of multifamily residential, adjacent to the exit of the car wash. The portion of the multifamily residential property adjacent to the project property line, represented by prediction receivers P-01 and P-02, is used as parking for the Envoy Apartment community. The common outdoor activity area and building façades for the adjacent condominium community are located in additional 45 feet inside the property, represented by receiver sites P-03. P-04 represents the southern exposure of the Onnuri Church of San Jose.

As shown in Table 5, noise levels generated from the proposed car wash dryers are anticipated to range from approximately 47 to 52 dBA Ldn, at the prediction receivers, with maximum noise levels ranging from 48 to 54 dBA Lmax. The highest noise level exposure due to car wash operation would occur at the noise prediction sites P-02 and P-04. With the inclusion of the sound wall that is proposed as part of the project, Project noise levels are predicted to be in compliance with the City of San Jose 60 dBA Ldn and 55 dBA maximum noise level standards.

5.1.1 Effect on Existing Environment

As outlined, the City of San Jose General Plan establishes policy to limit the effect of new projects on the existing ambient noise environment. Existing traffic noise exposure levels, as previously presented, serve as the basis for evaluating the potential for the proposed car wash to result in increased noise levels. Incorporating existing traffic volumes on the local and regional roadway network into the noise simulation model for the overall project operations and comparing the resulting noise levels to those of the existing environment, the project-related effect on the existing noise environment was determined. Modeled noise levels for the existing condition, project noise levels, and combined existing plus project noise levels are presented in Table 6.

Existing noise levels in the project area are illustrated on Figure 1, Figure 3 and Figure 4 depict hourly and Ldn car wash noise levels. The existing noise environment, with the implementation of the proposed project is shown in Figure 5. The relative change caused by implementation of the proposed project is shown as a difference map in Figure 6.

As shown Table 6, the project-related effects on the existing ambient noise environment were predicted to result in less than 1 dBA change, compared to existing traffic noise levels at all noise prediction receiver locations. Additionally, noise prediction receivers P-01, P-02, and P-03, representing the Envoy Apartment community and the commercial use to the south, are predicted to benefit from the reduction of traffic noise level exposures. This traffic noise level reduction is due to the project site design and the inclusion of a property-line sound wall. Project-generated noise levels are not predicted to result in an increase of 3 dBA or more in the existing noise environment, as set forth in Policy EC-1.2 of the City of San Jose General Plan.

Table 6 – Modeled Project Noise Level Effect

Site	Location	Modeled Noise Level Exposure (Ldn, dBA)				
		Car Wash[1]	Existing Traffic[2]	Existing Plus Project	Effect on Ambient[3]	Impact
P-01	Southeastern project property line. Near car wash entrance.	47	64	61	-3	No
P-02	Northeastern project property line. Near car wash exit.	52	63	61	-2	No
P-03	Envoy Apartments outdoor activity area.	46	60	58	-2	No
P-04	Onnuri Church landscape buffer. North of car wash exit.	52	67	67	<1	No
P-05	Southern project property line. South of car wash entrance.	51	65	65	<1	No

Notes: dBA = A-weighted decibels; Ldn = Day Night noise level.
1. Existing traffic noise level contours are shown on Figure 1.
2. Ldn project noise level contours are shown on Figure 4.
3. Existing traffic noise level Plus project noise levels are shown on Figure 5.
4. The effects project on the existing ambient noise environment are shown on Figure 6.
Source: Extant Acoustical Consulting LLC, 2014

6 Conclusion

Extant Acoustical Consulting (Extant) has completed a noise assessment for the proposed Chevron Gas Station and Car Wash project. The Chevron Gas Station and Car Wash project is proposed to be located at the site of an existing Chevron Gas Station at the intersection of Meridian Ave. and Fruitdale Ave. in the City of San Jose, California. The project site is located at 900 Meridian Ave. and is bounded by multi-family residential along the east property line, Fruitdale Ave. on the north, Meridian Ave. on the west, and commercial use on the south. The project proposes to construct a new convenience store, and automated car wash with queuing lane. The hours of operation for the proposed full-service car wash would be 7:00 AM to 10:00 PM.

The analysis summarized the existing noise environment, presented calculated noise levels anticipated to be generated by car wash operations at the proposed project site, and compared the resultant noise levels with applicable City of San Jose noise standards.

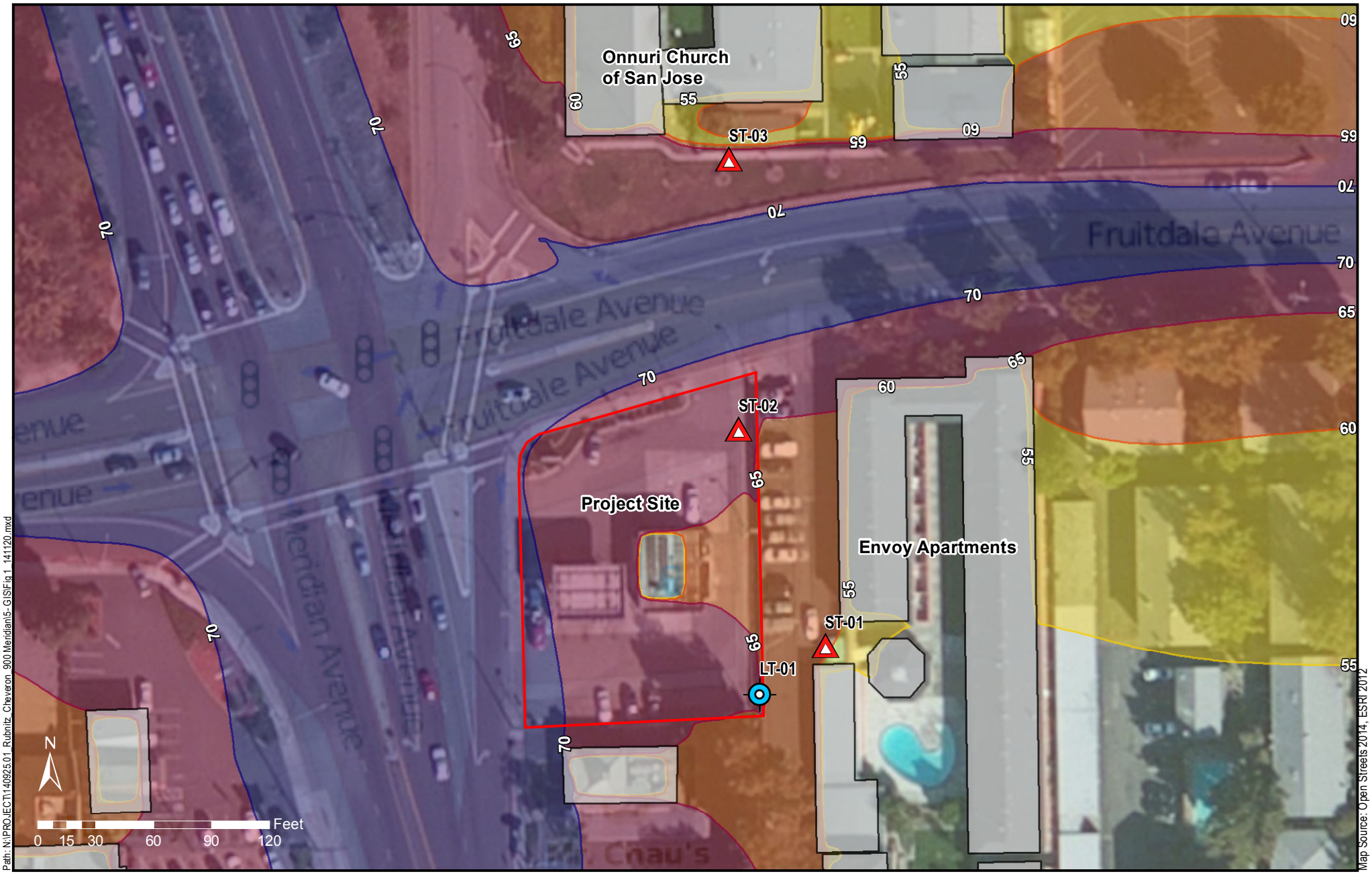
The existing noise environment in the vicinity of the project site was characterized at four locations representing noise-sensitive receptors and areas of potential concern in closest proximity to the proposed project. The existing noise levels and observations from the noise monitoring program were used as the basis for modeling of the existing noise environment and evaluation of the potential for project noise levels to effect the existing noise environment. Modeled traffic noise level exposures at key locations in the project area were predicted to range from approximately 60 to 67 dBA Ldn.

Noise levels from the operation of the proposed car wash are anticipated to range approximately 47 to 52 dBA Ldn, at the prediction receivers, with maximum noise levels ranging from 48 to 54 dBA Lmax. Based on the analysis presented, the predicted average day-night noise levels (Ldn) generated from the operation of the proposed project are not predicted to exceed the City of San Jose 60 dBA Ldn exterior noise level standards set forth in Table EC-1 of the City of San Jose General Plan (normally acceptable criteria for residences).

Project noise levels are not predicted to exceed the 55 dB maximum noise level standard for commercial uses affecting residential land uses as established in the City of San Jose Municipal Code.

Based on existing noise levels experienced in the vicinity of the project site, project-generated average day-night noise levels are predicted to be at or below ambient noise levels in the majority of the project study area. Noise levels generated from the proposed project were predicted to result in less than a 1 dBA increase in the existing noise environment at noise-sensitive receivers in the project study area. Additionally, portions of the study area in the immediate vicinity of the project are predicted to benefit from reduced traffic noise levels due to the property-line sound wall incorporated into the project design. Project-generated noise levels are not predicted to exceed the existing noise environment protection criteria; causing an increase of 3 dBA or more in the existing noise environment, as set forth in Policy EC-1.2 of the City of San Jose General Plan.

Development and operation of the proposed Chevron car wash is anticipated to comply with the applicable City of San Jose noise standards.



Legend

Receiver Type

- Long-Term
- Short-Term
- Project Site

Noise Level, dBA

- 45.0
- 50.0
- 55.0
- 60.0
- 65.0
- 70.0

Figure 1

Existing Project Area

Existing Traffic Noise Contours - dBA, Ldn/DNL

Noise Monitoring Locations

Chervron Car Wash
900 Meridian Ave.
San Jose, CA

Date: 11/20/2014 Author: MJC

EXTANT ACOUSTICAL CONSULTING LLC

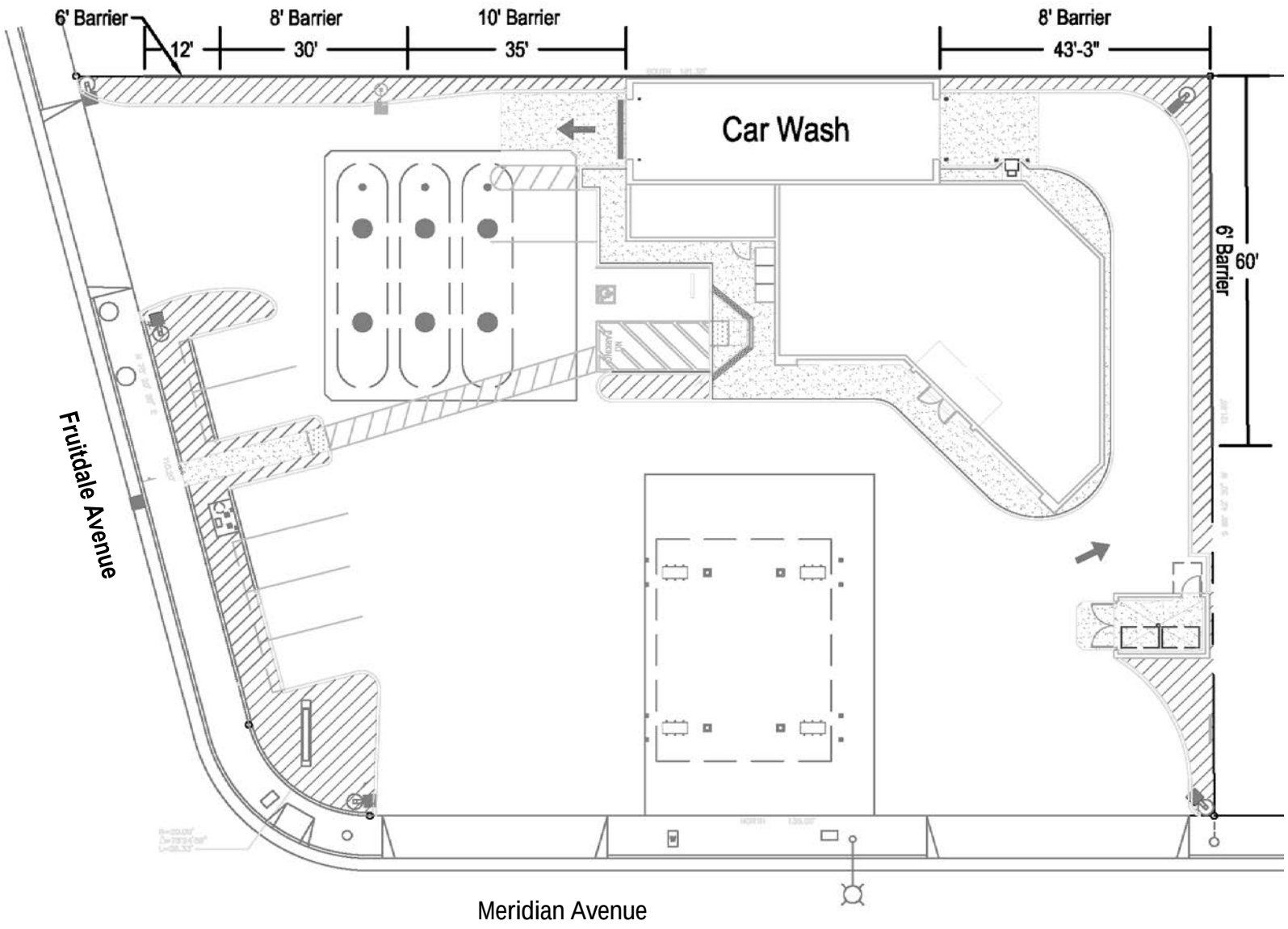
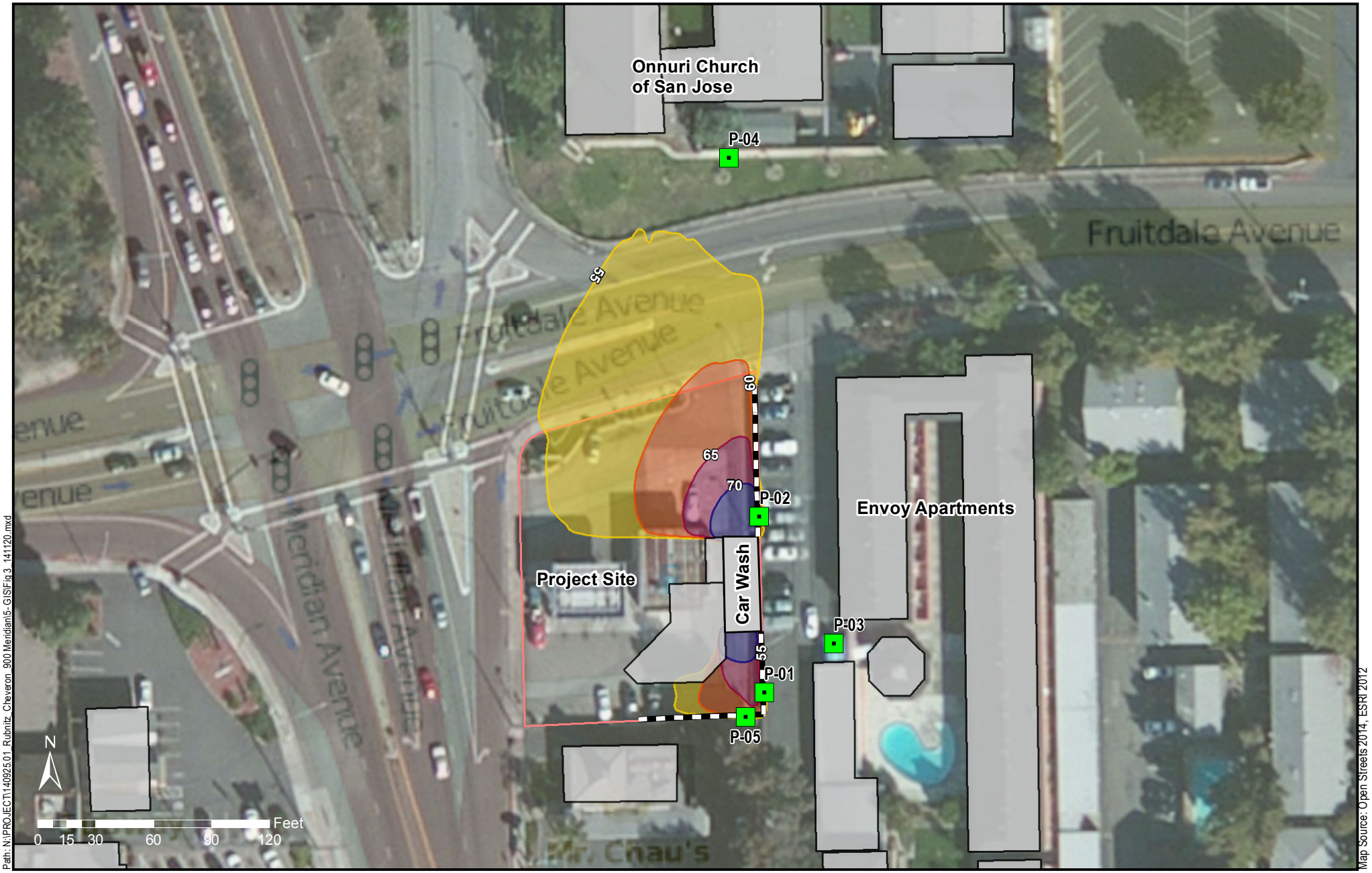


Figure 2 – Proposed Project Site Plan



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Receiver Type	Noise Level, dBA
Long-Term	45.0
Short-Term	50.0
Prediction	55.0
Project Site	60.0
	65.0
	70.0

Figure 3

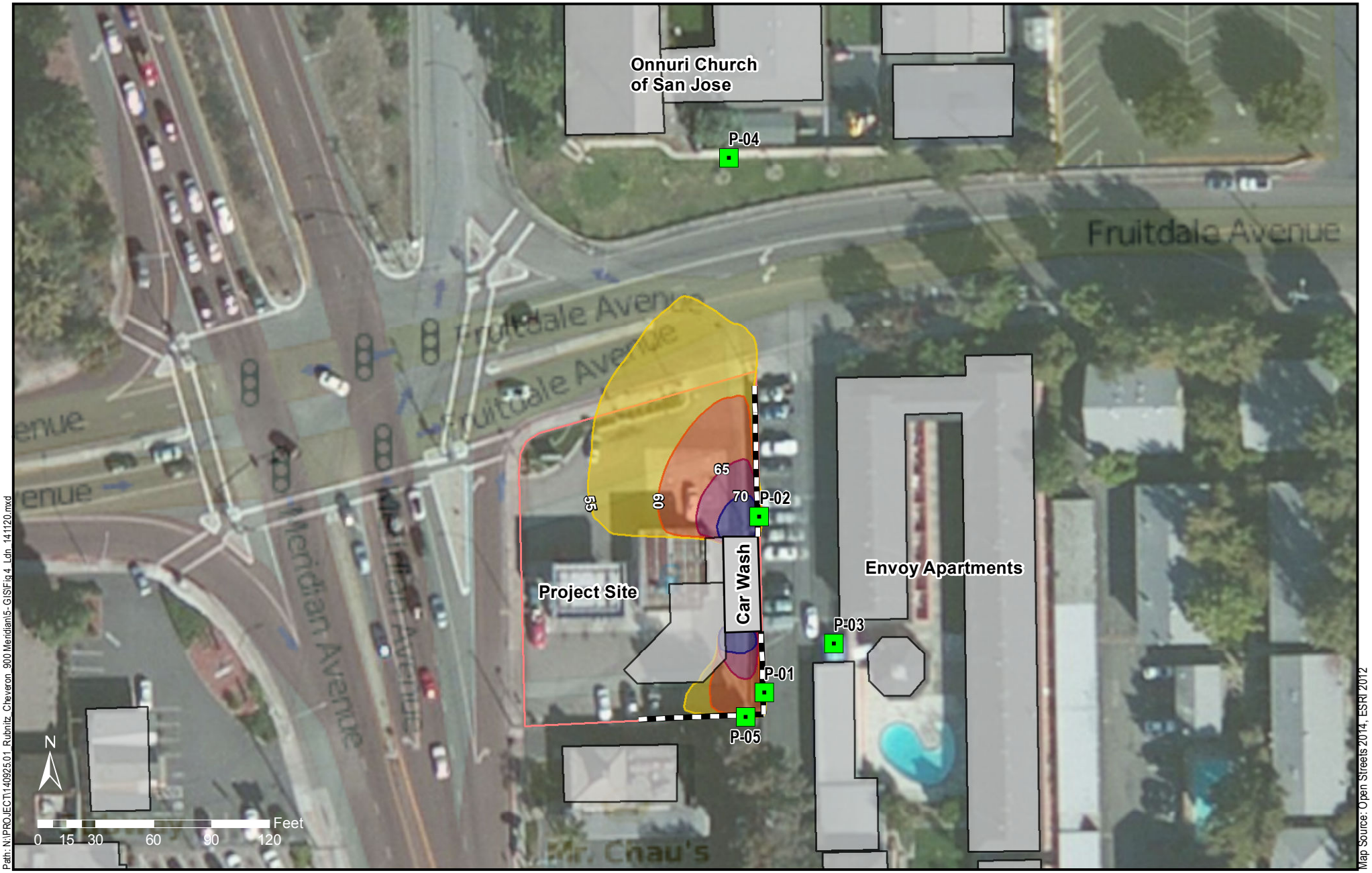
Modeled Car Wash Noise Levels

Hourly - dBA, Lmax

Chervron Car Wash
900 Meridian Ave.
San Jose, CA

Date: 11/20/2014 Author: MJC

EXTANT ACOUSTICAL CONSULTING LLC



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Map Source: Open Streets 2014, ESRI 2012

Legend

Receiver Type	Noise Level, dBA
Long-Term	45.0
Short-Term	50.0
Prediction	55.0
Project Site	60.0
	65.0
	70.0

Figure 4

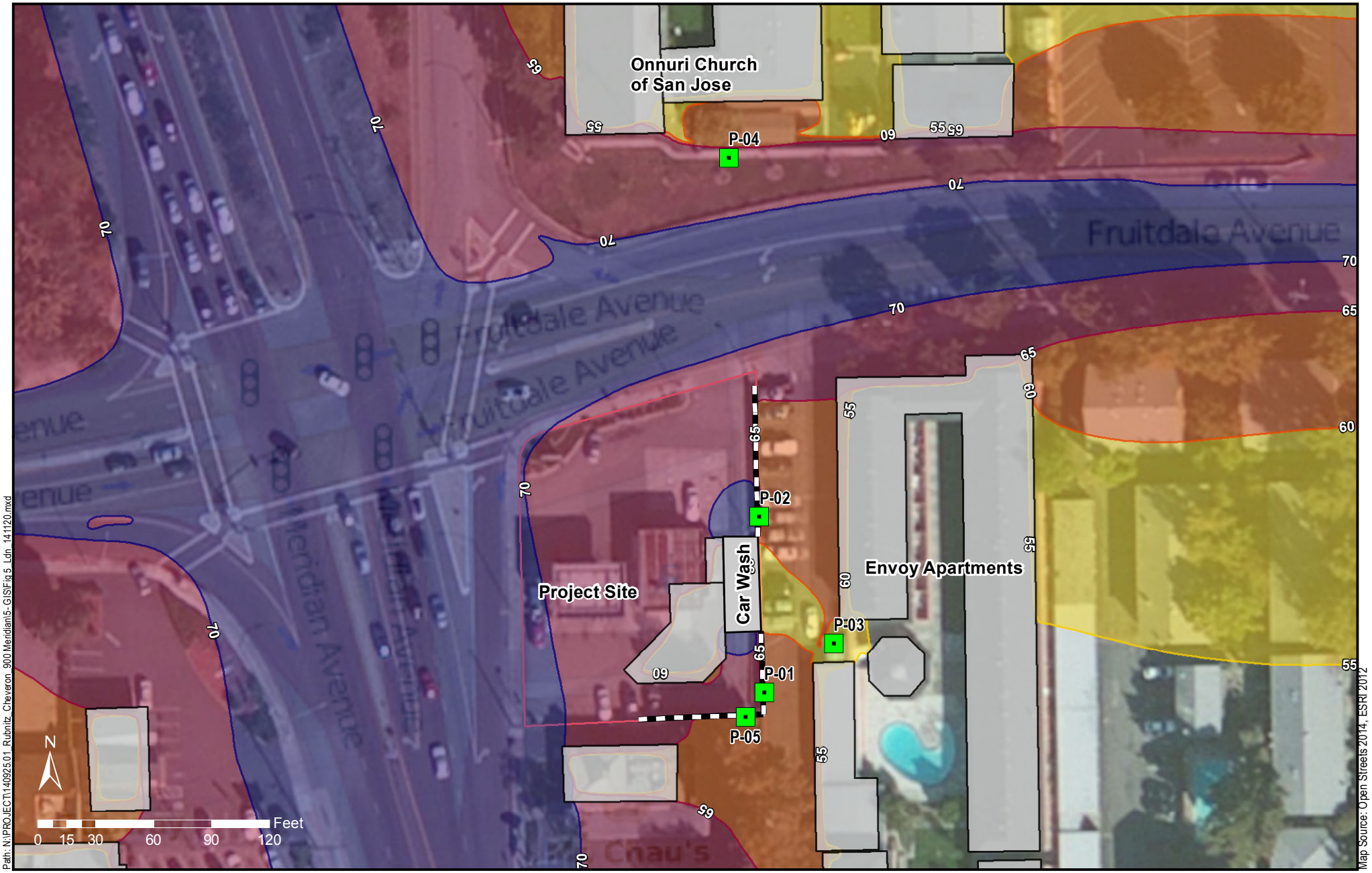
Modeled Car Wash Noise Levels

Day-Night - dBA, Ldn

Chervron Car Wash
900 Meridian Ave.
San Jose, CA

Date: 11/20/2014 Author: MJC

EXTANT ACOUSTICAL CONSULTING LLC



Legend

Receiver Type	Noise Level, dBA
Long-Term	45.0
Short-Term	50.0
Prediction	55.0
Project Site	60.0
	65.0
	70.0

Figure 5

Modeled Car Wash Noise Levels

Day-Night - dBA, Ldn

Chervron Car Wash
900 Meridian Ave.
San Jose, CA

Date: 11/20/2014 Author: MJC

EXTANT ACOUSTICAL CONSULTING LLC

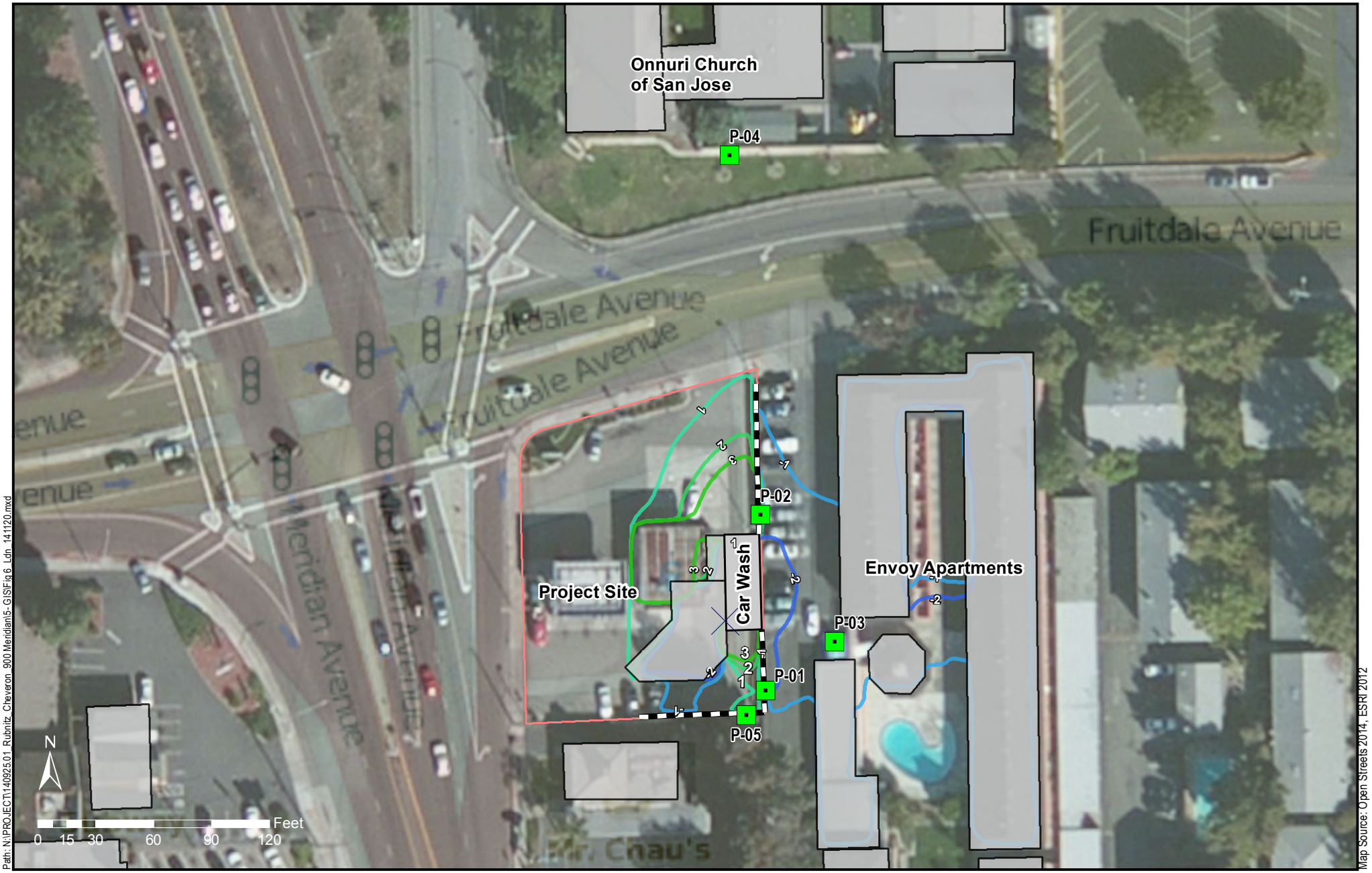


Figure 6

Project Effect on Existing Environment

Relative Change with Project - dBA, Ldn

Chervron Car Wash
900 Meridian Ave.
San Jose, CA

Date: 11/20/2014 Author: MJC

EXTANT ACOUSTICAL CONSULTING LLC

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Appendix A Description of Noise Metrics

This Appendix describes the noise terminology and metrics used in this report.

A.1 A-weighted Sound Level, dBA

Loudness is a subjective quantity that enables a listener to order the magnitude of different sounds on a scale from soft to loud. Although the perceived loudness of a sound is based somewhat on its frequency and duration, chiefly it depends upon the sound pressure level. Sound pressure level is a measure of the sound pressure at a point relative to a standard reference value; sound pressure level is always expressed in decibels (dB), a logarithmic quantity.

Another important characteristic of sound is its frequency, or "pitch." This is the rate of repetition of sound pressure oscillations as they reach our ears. Frequency is expressed in units known as Hertz (abbreviated "Hz" and equivalent to one cycle per second). Sounds heard in the environment usually consist of a range of frequencies. The distribution of sound energy as a function of frequency is termed the "frequency spectrum." The frequency spectrum of sound is often represented as the sum of the sound energy in frequency bands that are one octave or 1/3-octave wide. An octave represents a doubling of frequency.

The human ear does not respond equally to identical noise levels at different frequencies. Although the normal frequency range of hearing for most people extends from a low of about 20 Hz to a high of 10,000 Hz to 20,000 Hz, people are most sensitive to sounds in the voice range, between about 500 Hz to 2,000 Hz. Therefore, to correlate the amplitude of a sound with its level as perceived by people, the sound energy spectrum is adjusted, or "weighted."

The weighting system most commonly used to correlate with people's response to noise is "A-weighting" (or the "A-filter") and the resultant noise level is called the "A-weighted noise level" (dBA). A-weighting significantly de-emphasizes those parts of the frequency spectrum from a noise source that occurs both at lower frequencies (those below about 500 Hz) and at very high frequencies (above 10,000 Hz) where we do not hear as well. The filter has very little effect, or is nearly "flat," in the middle range of frequencies between 500 and 10,000 Hz. A-weighted sound levels have been found to correlate better than other weighting networks with human perception of "noisiness." One of the primary reasons for this is that the A-weighting network emphasizes the frequency range where human speech occurs, and noise in this range interferes with speech communication. The figure below shows common indoor and outdoor A-weighted sound levels and the environments or sources that produce them.

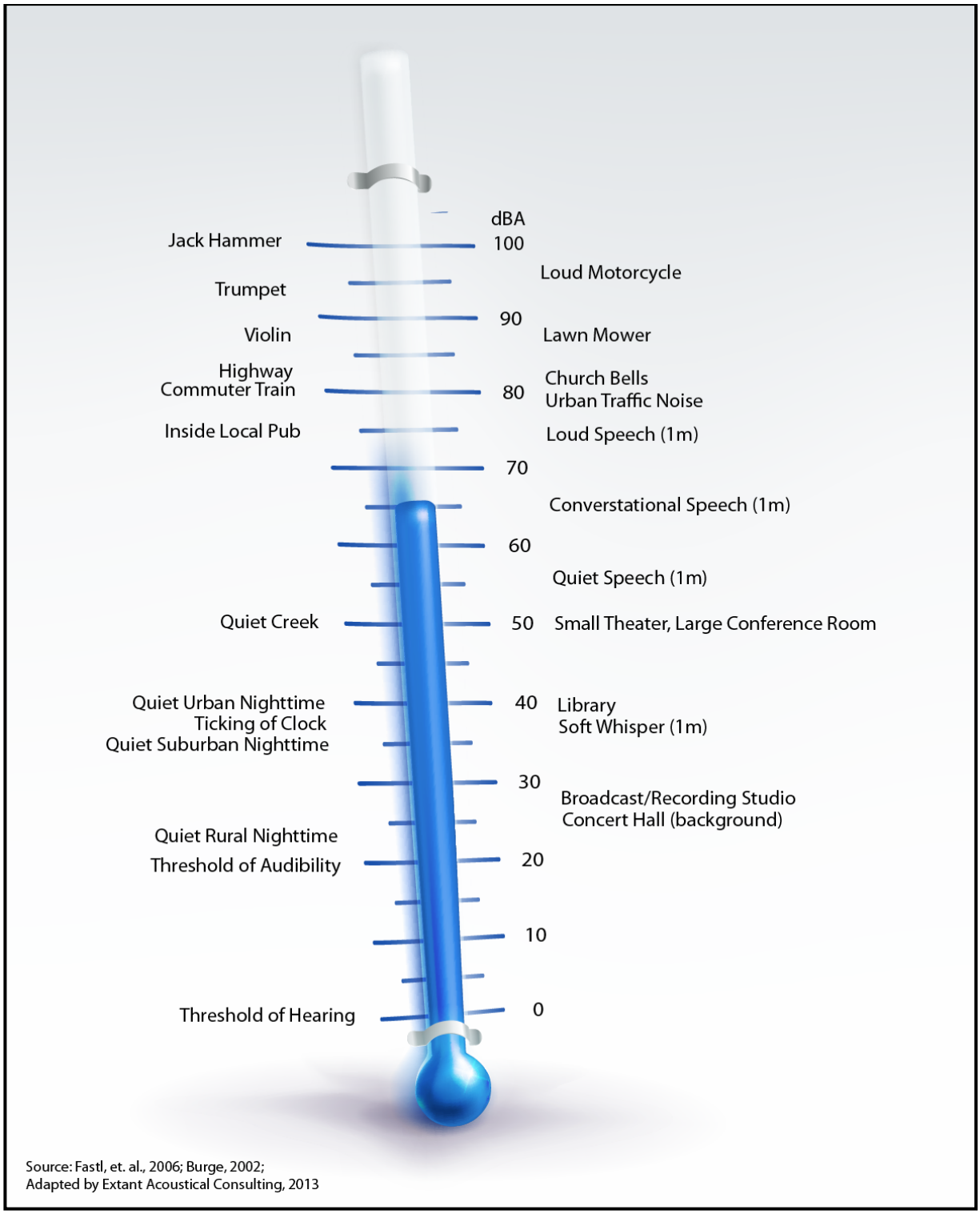


Exhibit A.1 – Common Noise Levels

A.2 Equivalent Sound Level, Leq

The Equivalent Sound Level, abbreviated L_{eq}, is a measure of the total exposure resulting from the accumulation of A-weighted sound levels over a particular period of interest -- for example, an hour, an 8-hour school day, nighttime, or a full 24-hour day. However, because the length of the period can be different depending on the time frame of interest, the applicable period should always be identified or clearly understood when discussing the metric. Such durations are often identified through a subscript, for example L_{eq1h}, or $L_{eq\ (24)}$.

L_{eq} may be thought of as a constant sound level over the period of interest that contains as much sound energy as (is "equivalent" to) the actual time-varying sound level with its normal peaks and valleys. It is important to recognize, however, that the two signals (the constant one and the time-varying one) would sound very different from each other. Also, the "average" sound level suggested by L_{eq} is not an arithmetic value, but a logarithmic, or "energy-averaged" sound level. Thus, the loudest events may dominate the noise environment described by the metric, depending on the relative loudness of the events.

A.3 Statistical Sound Level Descriptors

Statistical descriptors of the time-varying sound level are often used instead of, or in addition to L_{eq} to provide more information about how the sound level varied during the time period of interest. The descriptor includes a subscript that indicates the percentage of time the sound level is exceeded during the period. The L_{50} is an example, which represents the sound level exceeded 50 percent of the time, and equals the median sound level. Another commonly used descriptor is the L_{10}, which represents the sound level exceeded 10 percent of the measurement period and describes the sound level during the louder portions of the period. The L_{90} is often used to describe the quieter background sound levels that occurred, since it represents the level exceeded 90 percent of the period.

A.4 L_{dn} (Day-Night Noise Level)

The 24-hour L_{eq} with a 10 dB "penalty" applied during nighttime noise-sensitive hours, 10:00 p.m. through 7:00 a.m. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.

A.5 CNEL (Community Noise Equivalent Level)

The CNEL is similar to the L_{dn} described above, but with an additional 5 dB "penalty" for the noise-sensitive hours between 7:00 p.m. to 10:00 p.m., which are typically reserved for relaxation, conversation, reading, and television. If using the same 24-hour noise data, the CNEL is typically 0.5 dB higher than the L_{dn}.

A.6 SEL (Sound Exposure Level)

The SEL describes the cumulative exposure to sound energy over a stated period of time; typically reference to one (1) second.

Appendix B Long-Term Noise Monitoring Data

Appendix B-1
Long-Term 24 Hour Continuous Noise Monitoring

Project: Existing Noise Monitoring - 900 Meridian Ave.
Date: September 30, 2014 to October 01, 2014
Site: LT-1

Hour	Leq	Lmax	L50	L90
16:00	60.3	79.4	58.5	55.7
17:00	59.7	74.1	58.7	56.2
18:00	62.8	85.6	58.7	56.0
19:00	59.7	86.4	57.0	54.3
20:00	56.7	75.3	55.0	51.7
21:00	57.9	81.4	54.3	51.1
22:00	54.5	73.6	52.4	48.8
23:00	53.0	72.0	49.6	45.6
0:00	50.4	72.4	46.1	43.7
1:00	49.1	66.7	44.7	42.6
2:00	48.9	71.7	44.0	42.1
3:00	48.8	65.2	45.9	43.8
4:00	52.0	68.9	48.9	45.0
5:00	57.3	72.8	55.0	50.5
6:00	62.0	72.9	58.9	56.5
7:00	69.5	89.5	61.7	56.5
8:00	63.5	85.4	60.9	55.8
9:00	67.8	91.5	59.2	55.2
10:00	59.7	77.2	57.5	54.0
11:00	59.6	79.4	57.9	54.1
12:00	59.9	76.4	58.0	54.9
13:00	60.8	83.8	59.2	55.8
14:00	61.4	82.0	58.6	55.5
15:00	59.7	77.1	58.2	55.0

Lowermost Level

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	56.7	74.1	54.3	51.1
Nighttime (10 p.m. - 7 a.m.)	48.8	65.2	44.0	42.1

Average Level

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	62.9	81.6	58.2	54.8
Nighttime (10 p.m. - 7 a.m.)	55.4	70.7	49.5	46.5

Uppermost-Level

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	69.5	91.5	61.7	56.5
Nighttime (10 p.m. - 7 a.m.)	62.0	73.6	58.9	56.5

Energy Distribution

Daytime	90%
Nighttime	10%

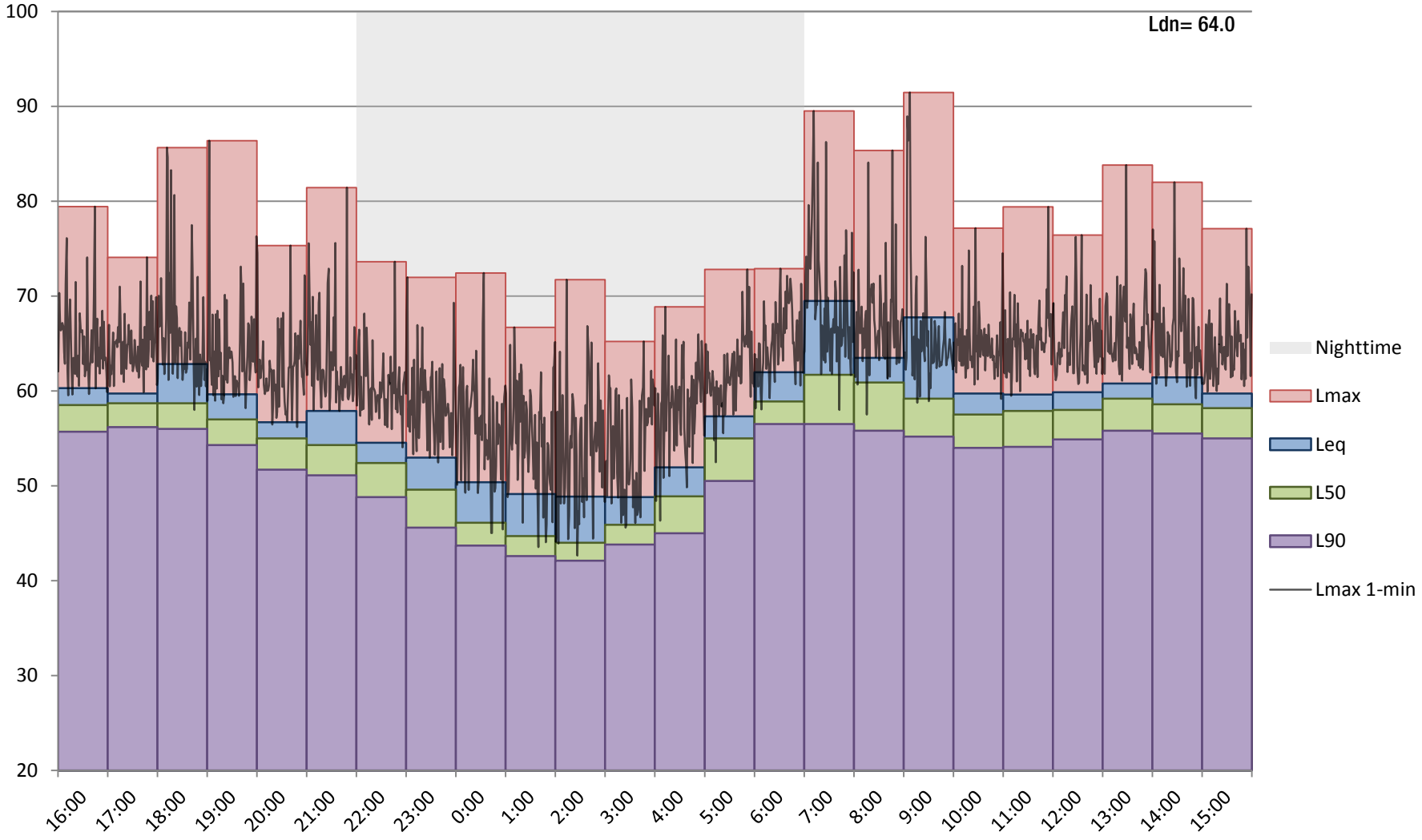
Calculated L_{dn}, dBA

64.0

Appendix B-1

Existing Noise Monitoring - 900 Meridian Ave. - LT-1

September 30, 2014 to October 01, 2014



Silencer Package

GENERAL DESCRIPTION

The Proto-Vest "Silencer Package" was developed to enable our dryers to meet OSHA, federal, state and local noise reduction standards. The OSHA permissible noise exposure is 85 dB for an 8-hour shift. By reducing noise levels into the 70 dB to 80 dB range, comparable to an electric typewriter or digital alarm clock. You can be assured of a pleasant environment for both your employees and customers. The Silencing Package is a standard feature on all Untouchable dryers, while the Stripper and Windshear drying systems can be equipped with the Silencing Package as an option.

Using state-of-the-art materials, which require virtually no maintenance, Proto-Vest has designed three components to comprise the Silencer Package.

- **Blower Inlet:** reduces the noise generated by rapidly moving air being drawn into the blower assembly.
- **Blower-motor Cover:** houses the blower and motor completely, absorbing noise from the motor and impeller as well as protecting them.
- **Riser Can:** absorbs the noise created by the blower and impeller and the movement of the air as it leaves the blower and advances through the dryer's plenum.

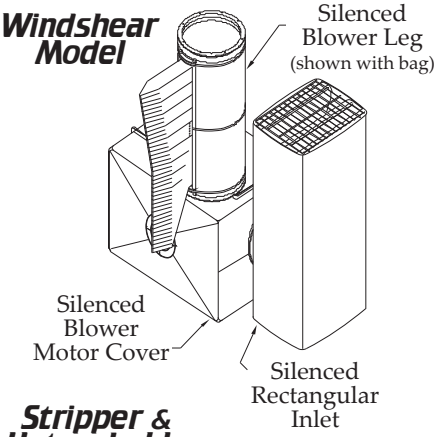
The Silencer Package reduces decibel levels on Proto-Vest dryers on an average of 10 decibels. Therefore the Silenced Stripper, Windshear or Untouchable dryers are approximately 10 times quieter than the unsilenced model!

DECIBEL LEVEL READINGS

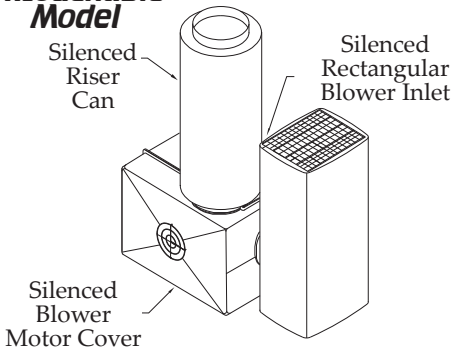
With Silencer (WS)	Without Silencer (WOS)
Windshear InBay - (2) 25hp Dryer:	
WS: 10 ft=88 dBa;	WOS: 10 ft=94 dBa
WS: 20 ft=82 dBa;	WOS: 20 ft=88 dBa
WS: 30 ft=78.4 dBa;	WOS: 30 ft=84.5 dBa
WS: 40 ft=76 dBa;	WOS: 40 ft=82 dBa
WS: 50 ft=74 dBa;	WOS: 50 ft=80 dBa
WS: 60 ft=72.4 dBa;	WOS: 60 ft=78.4 dBa
Windshear - 30hp Dryer:	
WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa
Windshear II - (2) 30hp Dryer:	
WS: 10 ft=88 dBa;	WOS: 10 ft=99 dBa
WS: 20 ft=81.9 dBa;	WOS: 20 ft=92.9 dBa
WS: 30 ft=78.4 dBa;	WOS: 30 ft=89.4 dBa
WS: 40 ft=75.4 dBa;	WOS: 40 ft=86.9 dBa
WS: 50 ft=74 dBa;	WOS: 50 ft=85 dBa
TopShot - 30hp Dryer:	
WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa
TopShot II - (2) 30hp Dryer:	
WS: 10 ft=88 dBa;	WOS: 10 ft=99 dBa
WS: 20 ft=81.9 dBa;	WOS: 20 ft=92.9 dBa
WS: 30 ft=78.4 dBa;	WOS: 30 ft=89.4 dBa
WS: 40 ft=75.9 dBa;	WOS: 40 ft=86.9 dBa
WS: 50 ft=74 dBa;	WOS: 50 ft=85 dBa

With Silencer (WS)	Without Silencer (WOS)
SideShot - 15hp Dryer:	
WS: 10 ft=74.5 dBa;	WOS: 10 ft=82.9 dBa
WS: 20 ft=68.5 dBa;	WOS: 20 ft=76.9 dBa
WS: 30 ft=64.9 dBa;	WOS: 30 ft=73.4 dBa
WS: 40 ft=62.4 dBa;	WOS: 40 ft=70.9 dBa
WS: 50 ft=60.5 dBa;	WOS: 50 ft=69 dBa
SideShot II - 30hp Dryer:	
WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa
90N/90XS - 15hp Dryers:	
WS: 10 ft=74.5 dBa;	WOS: 10 ft=82.9 dBa
WS: 20 ft=68.5 dBa;	WOS: 20 ft=76.9 dBa
WS: 30 ft=64.9 dBa;	WOS: 30 ft=73.4 dBa
WS: 40 ft=62.4 dBa;	WOS: 40 ft=70.9 dBa
WS: 50 ft=60.5 dBa;	WOS: 50 ft=69 dBa
U325/90NU/90XSU - 30hp Dryers:	
WS: 10 ft=76.9 dBa	
WS: 20 ft=70.9 dBa	
WS: 30 ft=67.4 dBa	
WS: 40 ft=64.9 dBa	
WS: 50 ft=63 dBa	
(Untouchable Dryer Series is equipped with Silencer Package.)	

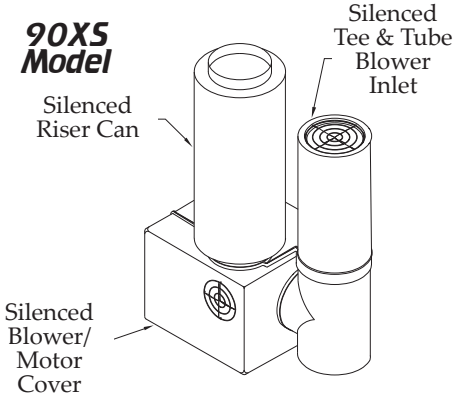
Windshear Model



Stripper & Untouchable Model



90XS Model



Proto-Vest Inc.

*Specifications subject to change without notice.

NOTE: The Proto-Vest dryer's dimensions will vary with the Silencer Package.

Proto-Vest, Inc., 7400 N. Glen Harbor Blvd., Glendale, AZ 85307 • 800-521-8218 • 623-872-8300 • Fax 623-872-6150
www.proto-vest.com