APPENDIX F

INITIAL STUDY

SAN MARINO CENTER IMPROVEMENT PROJECT

JANUARY 2022

INITIAL STUDY
San Marino Center Improvement Project

Prepared for:

City of San Marino
Community Development Department
2200 Huntington Drive
San Marino, CA 91108

Prepared by:

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January 2022
Revised March 14, 2022

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LIST OF ACRONYMNS

Acronym	Definition
AB 32	Assembly Bill 32
AB 52	Assembly Bill 52
ADA	American Disabilities Act
AFY	Acre Feet Per Year
AQMP	Air Quality Management Plan
APE	Area of Potential Effect
APN	Assessor Parcel Number
APZ	Accident Potential Zone
BERD	Built Environment Resource Directory
BMPs	Best Management Practices
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of San Marino
CMP	Congestion Management Program
CNPS	California Native Plant Society
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CRHR	California Register of Historic Places
dBA	A-Weighted Decibels
DIF	Development Impact Fees
DPM	Diesel Particulate Matter
DPR	California Department of Parks and Recreation
EPA	Environmental Protection Agency
ERRP	Enhanced Recharge and Recovery Program
ESA	Endangered Species Act
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping Management Program
GHG	Greenhouse Gas
GSP	Groundwater Sustainability Plan
gpd/acre	Gallons per Day per Acre
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
ITE	Institute of Transportation Engineers
LOS	Level of Service
LST	Localized Significance Threshold
MLD	Most Likely Descendent
MMRP	Mitigation Monitoring and Reporting Program
MRZ	Mineral Resources Zone
MS4	Municipal Separate Storm Water Sewer System
MTCO2e	Metric Tons Carbon Dioxide Equivalent
MWD	Metropolitan Water District
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
ND	Negative Declaration
NO2	Nitrogen Dioxide
NOx	Nitrogen Oxides

NPDES	National Pollutant Discharge Elimination System
OHP	California Office of Historic Preservation
PM-2.5	Particulate Matter Less Than 2.5 Microns in Diameter
PM-10	Particulate Matter Less Than 10 Microns in Diameter
PRIMMP	Paleontological Resource Impact Mitigation Monitoring Program
RWQCB	Regional Water Quality Control Board
SARWQCB	Santa Ana Regional Water Quality Control Board
SGMA	the Sustainability Groundwater Management Act
sf	Square Feet
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SLF	Sacred Lands File
SMC	San Marino Center
SRA	State Responsibility Area
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board

1 INTRODUCTION

The California Environmental Quality Act ("CEQA"), codified in the Public Resources Code (PRC), Section 21000 et seq., and the CEQA Guidelines, codified in California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387 and are herein referred to as the "CEQA Guidelines," was established to require public agencies to consider and disclose the environmental implications of their actions (projects). CEQA was enacted in 1970 by the California Legislature to disclose to decision makers and the public the significant environmental effects of a proposed project and identify possible ways to avoid or minimize significant environmental effects of a project by requiring implementation of mitigation measures or recommending feasible alternatives. CEQA applies to all California governmental agencies at all levels, including local, regional, and State, as well as boards, commissions, and special districts.

As provided by PRC Section 21067, the public agency with the principal responsibility for approving a project that may have a significant effect upon the environment is considered the Lead Agency. The City of San Marino ("City"), as Lead Agency for the approval of the Proposed Project ("Project"), is responsible for preparing environmental documentation in accordance with CEQA to determine if approval of the discretionary actions requested and subsequent implementation of the Proposed Project could have a significant impact on the environment. As defined by Section 15063 of the CEQA Guidelines, an Initial Study (IS) is prepared to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) would be appropriate for providing the necessary environmental documentation and clearance for the Proposed Project. CEQA Guidelines Sections 15006(d) and 15063(c)(3) also allow Lead Agencies to use the Initial Study to identify significant environmental issues and to narrow the scope of an EIR, if required, by focusing the EIR on only those effects determined to be significant.

City of San Marino
Initial Study and Environmental Evaluation

1.	**Project Title:**	San Marino Center Improvement Project
2.	**Lead Agency Name and Address:**	City of San Marino Community Development Department 2200 Huntington Drive San Marino, CA 91108
3.	**Contact Person:**	Alex Hamilton Interim Community Development Director AHamilton@cityofsanmarino.org (626) 300-0710
5.	**Project Location:**	1800 Huntington Drive, San Marino South side of Huntington Drive, approximately 345 feet west of West Drive Adjacent to Crowell Library (east side) Adjacent to Henry E. Huntington Middle School (west side) Assessor Parcel No. 5334-024-903 *El Monte* USGS Quad; T1 South, R12 West, S2
4.	**Project Sponsor's Name and Address:**	City of San Marino 2200 Huntington Drive San Marino, CA 91108
6.	**General Plan Designation:**	Very Low Density Residential
7.	**Zoning Designation:**	Residential (R-1)

8. Description of Project:

The Project proposes to upgrade the architectural style of the San Marino Community Center (SMC) building façade from its existing architectural designation as "Modern Colonial Revival" to a "Spanish Mediterranean" architectural style which is similar to that of the adjacent buildings. Other upgrades include rehabilitation of the building interior to include additional offices to accommodate six City Recreation Department staff, optimize the interior public gathering space, replace to current standards the heating/air conditioning, plumbing, electrical systems and light fixtures, and update the building and grounds for compliance with the Americans with Disabilities Act.

9. Surrounding Land Uses:

Surrounding land uses are identified in Table 2.1-1 The Project site is an existing community center, constructed in 1952 as the San Marino Women's Club.

The Project site is bounded on the east by the Crowell Public Library, on the west and south by the Huntington Middle School, and on the north by Huntington Drive.

Table 2.1-1: Surrounding Land Use

Direction	Land Use Description
North	Huntington Drive – east bound lane. Immediately north is an approximate 55 foot wide landscaped median, the westbound lane of Huntington Drive, and residential uses.
West	Henry E. Huntington Middle School, parking lot and campus building. Other uses adjacent and west of the Project site include Valentine Elementary School and the San Marino Unified School District offices. Virginia Road intersects Huntington Drive approximately 1,350 feet west of the Project site.
South	Huntington Middle School, parking lot, tennis courts and campus buildings.
East	Crowell Public Library and parking lot. West Drive is adjacent on the east side of the library.

10. Other Public Agencies Whose Approval is Required:

The following approvals are required for the Project:

- City of San Marino – City Council; Adoption of the CEQA compliance documentation
- City of San Marino – Building Division, Fire Marshall, Parks and Public Works Department, approval of building plans.

11. California Native American Consultation:

The City of San Marino conducted tribal consultation in accordance with AB52 prior to adoption of the environmental documentation by sending letters on June 1, 2021 to the following tribes:

- Mr. Sam Dunlap, Cultural Resources Director, Gabrieleno/Tongva Nation
- Chief Anthony Morales, San Gabriel Band of Mission Indians
- Chairman Andrew Salas, Gabrieleno Band of Mission Indians – Kizh Nation

Mitigation measures requested by the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh) as part of the consultation were reviewed and incorporated, as appropriate, into the Initial Study.

2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The San Marino Center Improvement Project (Project) is located at 1800 Huntington Drive, San Marino, which is the south side of Huntington Drive, between West Drive on the east and Virginia Road on the west. (*Exhibit 2-1: Regional Vicinity* and *Exhibit 2-3:*). The Project site is identified as Los Angeles County Assessor's Parcel Number (APN) 5334-024-903 and currently supports an existing community center. The Project site is adjacent and east of the Huntington Middle School and west of and adjacent to the Crowell Public Library. Residential land uses are located east of West Drive and on the north side of Huntington Drive in proximity to the Project site.

City of San Marino Setting

The City of San Marino's General Plan (COSM, October 8, 2003) identifies the City as having a "tradition of excellence in residential living." The General Plan states: "Homes, both old and new, are architecturally appealing and well-maintained in pleasantly landscaped settings" (COSM, October 8, 2003).

In September 1998, the City adopted Commercial Design Guidelines to guide the revitalization of commercial buildings in four major commercial areas located along Huntington Drive. The Design Guidelines generally encourage preservation and reinforcement of the existing architectural heritage and identity of each of the commercial districts, but all guidelines indicate that a Spanish-Mediterranean style is desired. Although the SMC is not located in one of the four major commercial areas identified by the Guidelines, the SMC is located along Huntington Drive, which is a major city thoroughfare.

Project Site Setting

The SMC building was originally constructed in 1952 by the San Marino Woman's Club to hold community events and club meetings. In 2005, the City purchased the SMC from the San Marino Women's Club to use as a community center and meeting space for senior and youth recreation programs, and community events and other activities. In 2011, the California State Historic Preservation Office (SHPO) found the SMC eligible for inclusion in the National Register of Historic Places for its social connection to the community as the City's first community center.

The SMC is an approximately 10,832 square-foot-building with a concrete foundation, flat roof and raised parapet along the rear and side elevations. The building is two stories, with the primary meeting spaces on the first floor and limited space and mechanical/electrical rooms on the second floor. In its existing configuration, the SMC has a current occupancy rating of 1,020.

The building was designed by Pasadena architect Marion S. Varner and is one of his earlier designs. The front façade features a side-facing medium gable roof with an offset front gable wing. An "L"-shaped porch runs across the front elevation and is supported by decorative wrought iron posts. The roof is covered with wood shingles. A large multi-paned steel framed window is located below the main front gable with brick trim under the window. A tall exterior brick chimney is located on the northeast side. The building windows are primarily multi-pane steel casements, and the siding is stucco.

The interior of the building contains a large open-room style auditorium with a theater stage, a meeting room with a fireplace, a commercial kitchen, an office that houses the San Marino Chamber of Commerce, restrooms and storage rooms.

Renovations conducted in 1958 included the front entrance doors and window replacements. Other improvements over the years have included canvas awnings over the front entry and several windows and additional restroom facilities.

The site is flat at approximately 545 feet above mean sea level, and there are no areas of significant topographic relief.

Two mature, coast live oak trees exist in the front of the building, near the entryway, and the building is surrounded on the north and east sides with low vegetation and urban landscaping.

Site Access and Parking

Vehicle access to the SMC is located on Huntington Drive and West Drive. Public transit service is provided by Los Angeles Metro (Metro) with bus stops located within walking distance of the SMC.

Parking for the SMC exists on the west and south sides of the building, in the parking lot of the Henry E. Huntington Middle School, through a cooperative agreement with the San Marino Unified School District (SMUSD) for use of 48 spaces for both the SMC and the Crowell Library. The agreement between the City and the SMUSD was initiated in 2006 after the City purchased the building and the agreement was renewed in 2019 for a 10-year term (Appendix A). The shared parking arrangement with the SMUSD appears to be a traditional feature of the SMC and the Library. The 1952 SMC site plans indicate “school parking area” on the west and south sides of the building footprint. Historical articles in the Los Angeles Times indicate that the San Marino Women’s Club used the “school parking area” for club parking and for community events.

Additionally, there are 18 dedicated spaces for Crowell Library parking directly on the City-owned library parcel and can be accessed from West Drive, which is also the main access entrance to the library. With the SMC and the Library being both City facilities, library spaces may also be utilized for the SMC when the library is not open.

Adjacent Land Uses

<u>Crowell Public Library</u>

The first public library, which was established in 1915 at the Mayberry House in San Marino as a branch of the Los Angeles County Library, was moved to the Henry E. Huntington Middle School (formerly the San Marino Grammar School). The City’s original library was housed in a building on the adjacent school grounds beginning in approximately 1920. In 1932, the City took control of the Library, making it a department of the City.

Outgrowing that location, the City constructed a new library in 1951 at its current location on the southwest corner of Huntington Drive and West Drive, on a parcel owned by the City. Designed by Herbert

J. Powell, its architectural style was known as "International-Mediterranean mix," which combined traditional Spanish elements with a modern look.

In 2006, the library was demolished and reconstructed to optimize use of space in the interior and provide updated lighting, internet, telecom and other electrical, and the heating/air conditioning. It was also renamed the Crowell Public Library after former San Marino mayor Suzanne Crowell.

SMUSD Schools and District Office

In 1917, San Marino School District acquired a 5-acre portion of Cooper Ranch, located on the south side of Huntington Drive, near the southeast corner of Huntington Drive and Virginia Road to build the City's first grammar school. Various school facilities continued to grow at this location, including the Henry E. Huntington Middle School, the Valentine Elementary School and the SMUSD offices being later constructed within this location.

The SMUSD Program Needs Assessment, which amends its 1996 Facilities Master Plan, states that all of the SMUSD elementary schools, middle school, and District Office have a consistent mission-style architectural design, with stucco exteriors and red tile roofs, with school construction dating back as far as the early 1900's (gkk works, December 21, 2017). In 1987, Valentine School was declared a historic landmark. In 1993, the original building went through a state-funded modernization. The original Valentine rooms are those on the street side of the long corridor, and all except one room of the four westerly fingers which extend out toward the playground.

2.2 PROJECT OBJECTIVES

In 2020, the City formed a working group to discuss how to revitalize and improve the SMC. A sample schedule of existing and proposed events for the SMC is provided in Table 2.2-1. The primary discussions of the working group focused on how to encourage better use of the facility, the need for facility repair and renovation and the need to create aesthetic continuity with the adjacent public buildings. Through a number of meetings and public hearings, the City working group recommended the following Project objectives:

- Create architectural, aesthetic continuity along eastbound Huntington Drive between Virginia Road and West Drive by changing the SMC building façade's architectural features from the existing Modern Colonial Revival to the Spanish-Mediterranean style that is used by the City's library on the east and the school campus structures to the west.

- Replace interior aged electrical and mechanical systems with code compliant systems including replacing light fixtures;

- Rehabilitate interior space to house City recreational staff;

- Rehabilitate interior space to optimize community use for large and small public and private events; and

- Retrofit and update the facility and grounds with American with Disabilities Act (ADA) compliant features.

Table 2.2-1 forms the basis of the analysis of this Initial Study, and the analysis focused on new, Proposed events, primarily with anticipated larger attendance.

Table 2.2-1: Example of Existing and Proposed Uses of the SMC

Classes	**Existing (E) or Proposed (P)**	**No. of Users/ Participants**	**Frequency**
Bridge Club	E	40	Mondays 12-4pm, Wednesdays 11am-2pm. Wednesdays 7:15-10:45pm
Tai Chi Class	E/P	10	Mondays & Wednesdays 7-9pm
Gentle Yoga Class	E/P	75	Tuesdays & Thursdays 10-11am
Safe & Steady Class	E/P	7	Thursdays 12:30-1:30pm
Adult Line Dance Class	E/P	12	Thursdays 7:30-9pm
Fit & Fabulous Class	E/P	7	Fridays 8-9am
Chair Fitness Class	E/P	7	Fridays 9-9:45am
Intro to Piano Class	E/P	6	Tuesdays 3-5pm
Musical Theater Camp	E/P	25	2 weeks in July 9-3pm
Civic Club/Charitable Group Events/Meetings	**Existing (E) or Proposed (P)**	**No. of Users/ Participants**	**Frequency**
City Club	E	150	3rd Tuesday of every month 3-10pm
Unit Bridge	E	60	1st Sunday of each month 9am-3pm
Rotary Club	E	100	Once a year - Weekday 5-10pm
PTA	E	250	Twice a year - Weekday & Weekend, 8am 4-(8 hours)
NCL	E	50	Once a year - Weekend 10am-2pm 4 hours
Civic Club/Charitable Group Events/Meetings (Large Group)	P	200	Sat PM, 1 per quarter
Private Event Usage	**Existing (E) or Proposed (P)**	**No. of Users/ Participants**	**Frequency**
Church Service	E	250	2 Saturdays each year - 5-9pm
Private Industry Conferences	P	100	2 times per year Weekday & Weekend 8am – 4pm (varies)
Private Celebrations	E/P	75-125	12 rentals on random weekends throughout year (approx.: 6 hours each)
City Administration Uses	**Existing (E) or Proposed (P)**	**No. of Users/ Participants**	**Frequency**
City Council Meetings	E	20-40	24 times per year
Recreation Staff	P	7	M-Th 7 am-5 pm Friday 7 am-11am
Guest Speaker Series'	E/P	30	12 times per year - Weekday 12-3pm
Recreation Commission Meetings	E/P	15	6 times per year - Weekday 6-9pm
Town Hall Meetings	E/P	30	12 times per year
Human Resources FD/PD Training	E/P	30-50	6 times per year - Weekday & Weekend 8am (Varies 4-8 hours)
Human Resource Testing	E/P	30	6 times per year - Weekday 8am (Varies 4-8 hours)

2.3 PROJECT CHARACTERISTICS

Consistent with the Project Objectives, the City has developed a Project that proposes to change the SMC building façade from a "Modern Colonial Revival" to a "Spanish Mediterranean" architectural style, which is similar to that of the adjacent buildings. Other upgrades include various retrofitting for Americans with Disability Act (ADA) compliance, rehabilitation of the building interior to include additional offices to accommodate six City Recreation Department staff, optimize the interior public gathering space, and replace the heating/air conditioning, plumbing and electrical systems and light fixtures to current building code standards. The specific improvements for the SMC building are described in the following sections.

The existing building occupancy is 1,020. The proposed interior space reconfiguration will allow for an occupancy rating of 1,083.

2.3.1 Exterior Improvements – Façade Features

Exterior improvements include the following. Refer to Exhibit 2-3 for the existing view and Exhibits 2-4 through 2-6 for proposed views:

- Replace the decorative wrought iron posts along the front patio with stucco columns;
- Replace the wood shingled roof with the terra cotta tile;
- Replace doors and windows to include grid patterns similar to the library windows; type of windows will be newer energy efficient;
- Add wood accents where appropriate and complimentary such as around windows and the entry door consistent with features of architectural style;
- Add an open patio area at the back of the building that will have a stucco wall and a wood trellis ceiling similar to the open space areas at the library;
- Modify concrete walkway and front patio to enhance design elements and ADA compliance;
- Remove canopies over patio and windows that were added to the building after its original construction;
- New paint and stucco repair that will match the color of the library; and

Exterior features that are anticipated to remain intact or will not be impacted by the proposed improvements include the following:

- The cornerstone of the building inscribed with "San Marino Women's Club" near the building entry (while plans require that this will be protected in place, utility trenching may impact the cornerstone), and;
- Landscaping, including the two large oak trees adjacent to the front entry, grassy areas and urban landscaping around the west and south of the building. The front yard (Huntington Drive frontage area) landscaping will be replaced with drought-tolerant plant materials suitable for placement underneath oak trees and provide aesthetic continuity with the Crowell Public Library landscaping.

2.3.2 Interior Improvements

The improvements to be renovated and/or replaced include the following. Refer to Exhibit 2-7 for the existing interior layout and Exhibit ~~and~~ 2-8 for the proposed interior layout:

- Add two offices (for a total of three offices);
- Install a folding wall in the main room;
- Upgrade the kitchen, bathrooms, ceiling tiles, and electrical and mechanical systems to current code standards;
- Remove and replace light and plumbing fixtures with current style fixtures;
- Replace entryway flooring containing the San Marino Women's Club insignia (insignia may be preserved as a plaque);
- Various upgrades for ADA compliance, including but not limited to: accessible restrooms; appropriate door hardware; door widths, thresholds; correct access to stage from main floor (from only stairs to stair and personnel lift);
- Update paint and carpet; and
- Conduct other deferred maintenance items.

Interior features that are not anticipated to be impacted by the proposed improvements include the following:

- Fireside room fireplace and cabinetry; and
- Stage.

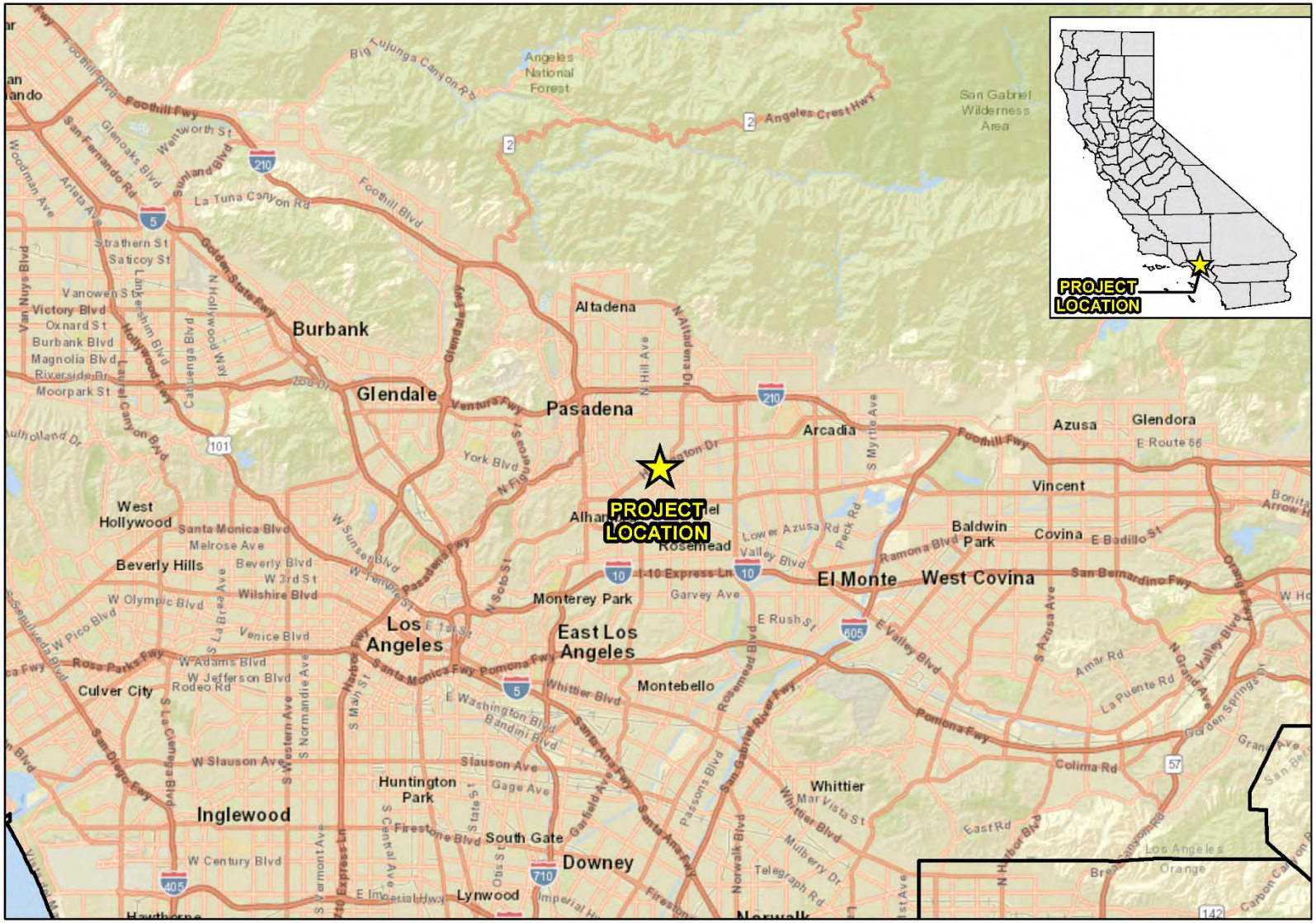
2.3.3 Utility/Hardscape Improvements

Some improvements will occur outside of the building envelope. Site preparation for new ADA parking and loading, sidewalk repair, parking lot paving, and landscaping enhancement as necessary will only require surficial disturbance. There are other improvements that will require excavation that will generally vary between 2 to 3 feet wide by 1 to 3 feet deep, depending on the activity (refer to Exhibit 2-9). The activities that require excavation include but are not limited to the following:

- Install new domestic water service and sewer lines in the same area as the existing lines;
- Replace overhead electrical service with new underground electrical service;
- Install new landscape irrigation meter, with pipe replacements, as necessary, in the same location as existing;
- Install new, separate water service for the fire sprinkler system;
- Install new footings for new patio site walls and pilasters, trash enclosure, building columns;
- Add various upgrades for ADA compliance including but not limited to: accessible paths of travel to entry points from parking lot and correct and appropriate disabled parking space; and
- Repair existing building footings and slab where applicable.

2.4 PROJECT TIMING

Construction is expected to last approximately 18 months, beginning in late fall/early winter 2022, with facilities opening as available in spring/summer 2023.



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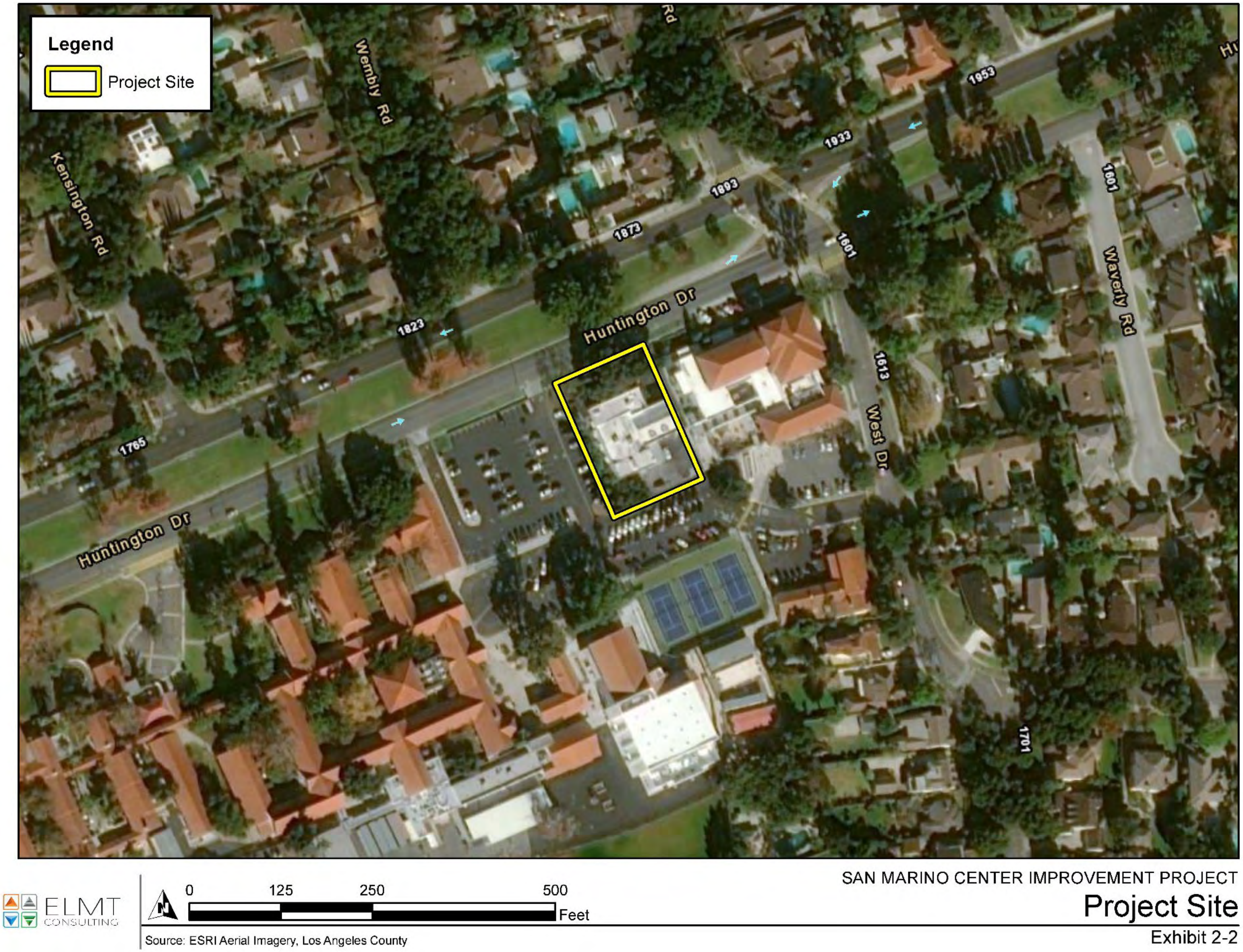
SAN MARINO CENTER IMPROVEMENT PROJECT

Regional Vicinity

Exhibit 2-1



SAN MARINO CENTER IMPROVEMENT PROJECT

Project Site

Exhibit 2-2

ELMT CONSULTING

Not to Scale

Source: Los Angeles County

SAN MARINO CENTER IMPROVEMENT PROJECT

Existing Northwest View (facing Huntington Drive)

Exhibit 2-3

ELMT CONSULTING

Not to Scale

Source: Los Angeles County

SAN MARINO CENTER IMPROVEMENT PROJECT

Proposed Northwest View (Adjacent to School Parking Lot)

Exhibit 2-4

ELMT CONSULTING

Not to Scale

Source: Los Angeles County

SAN MARINO CENTER IMPROVEMENT PROJECT

Proposed Southeast View (Rear View)

Exhibit 2-5

ELMT CONSULTING

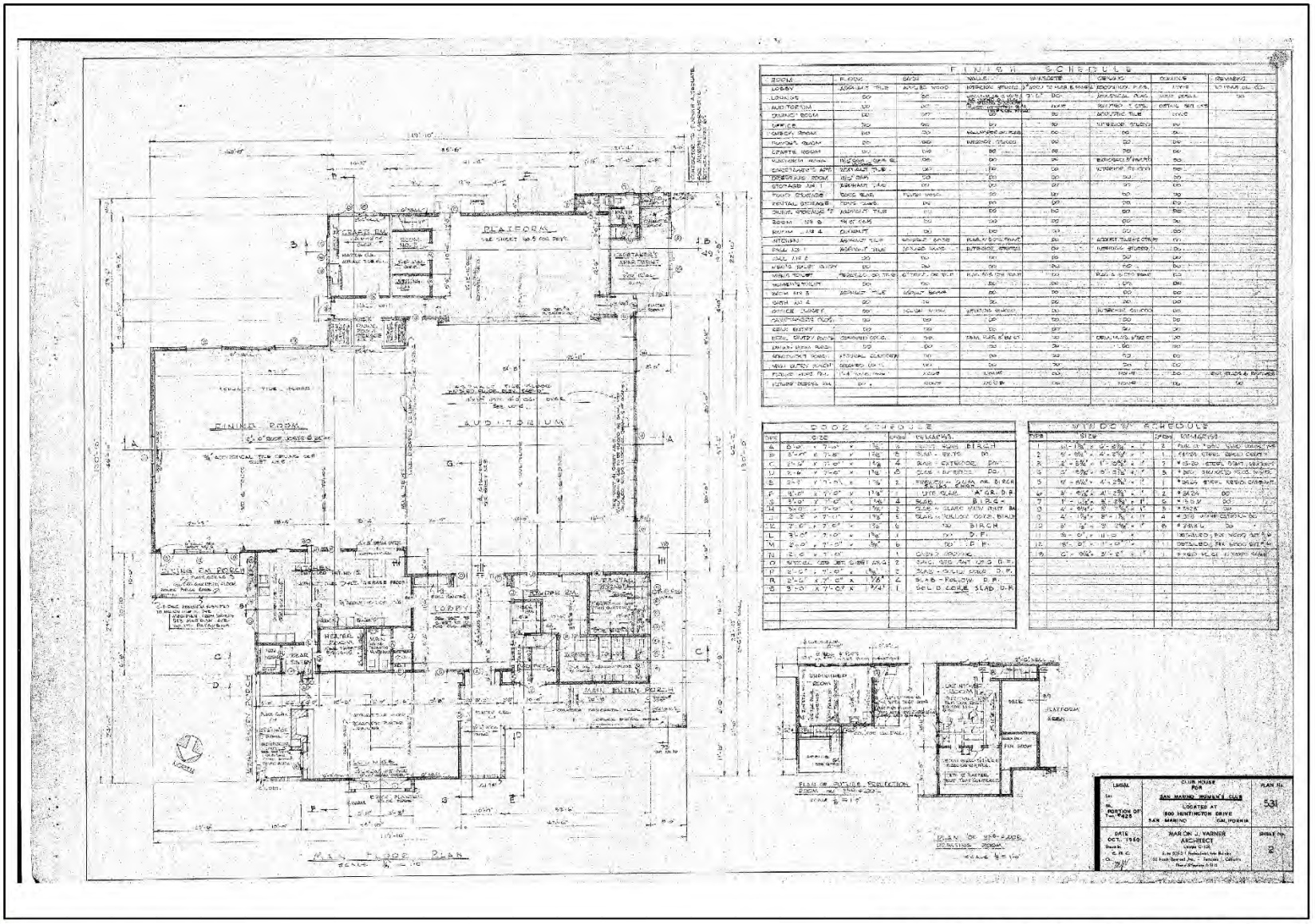
Not to Scale

Source: Los Angeles County

SAN MARINO CENTER IMPROVEMENT PROJECT

Proposed Northeast View (Adjacent to Library)

Exhibit 2-6



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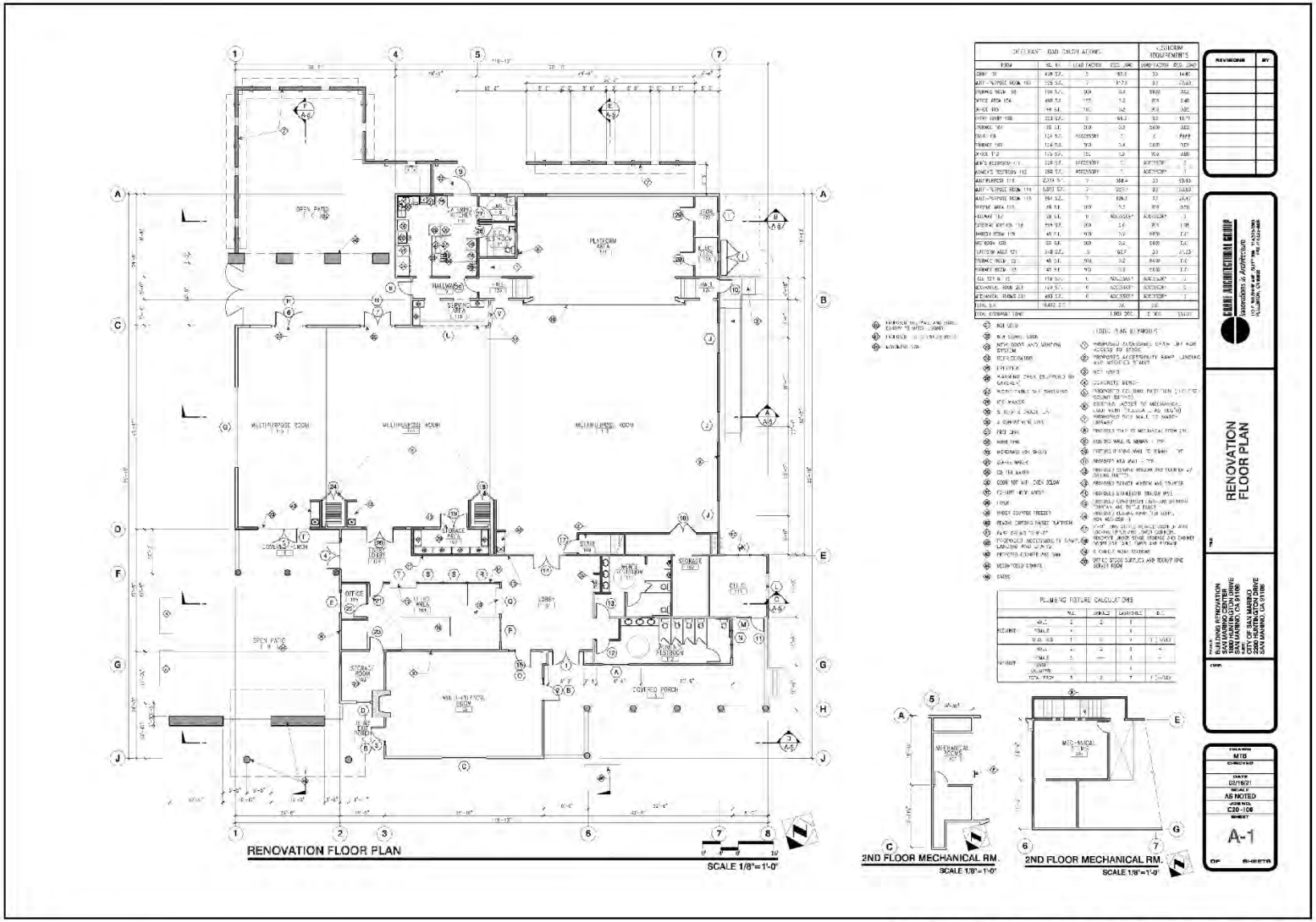
Source: Los Angeles County

SAN MARINO CENTER IMPROVEMENT PROJECT

Existing Floor Plan (per original plans)

Exhibit 2-7



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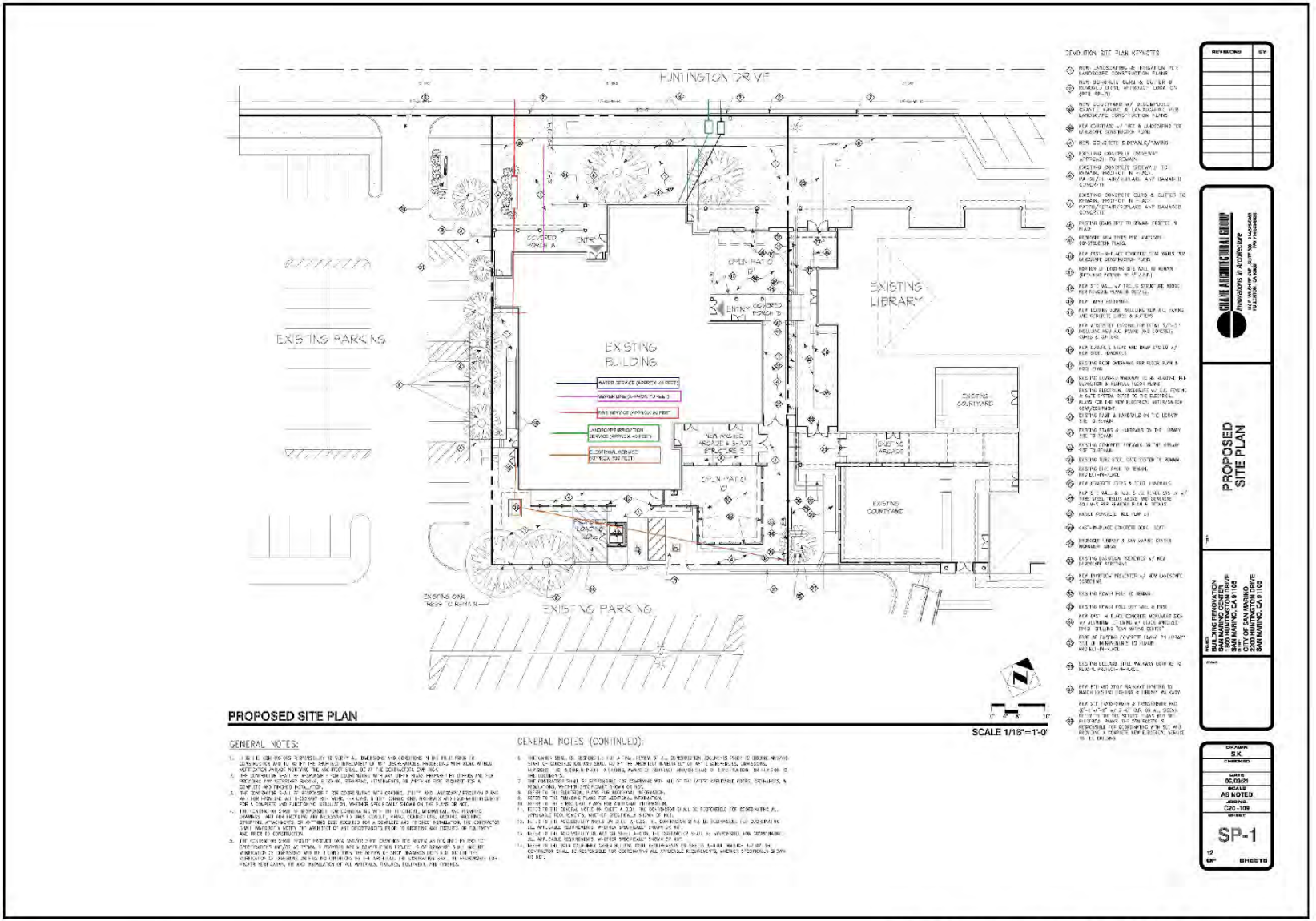
Source: Los Angeles County

SAN MARINO CENTER IMPROVEMENT PROJECT

Proposed Floor Plan

Exhibit 2-8



ELMT CONSULTING

Not to Scale

Source: Los Angeles County

SAN MARINO CENTER IMPROVEMENT PROJECT

Excavation Locations

Exhibit 2-9

3 ENVIRONMENTAL ANALYSIS AND DETERMINATION

In accordance with the California Environmental Quality Act (CEQA) this Initial Study has been prepared to analyze the proposed Project to determine any potentially significant adverse impacts upon the environment that would result from construction and/or implementation of the Project. In accordance with CEQA Guidelines Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency in consultation with other responsible agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

3.1 ORGANIZATION OF ENVIRONMENTAL ANALYSIS

Section 4 provides a discussion of the potential environmental impacts of the Project. The evaluation of environmental impacts follows the questions provided in the Checklist provided in the Appendix G of the CEQA Guidelines.

3.2 EVALUATION OF ENVIRONMENTAL IMPACTS

A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

All answers must take account of the whole action involved, including off site as well as on site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

Once the Lead Agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant.

"Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

"Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." Mitigation measures are identified and explain how they reduce the effect to a less than significant level (mitigation measures may be cross-referenced).

Earlier analyses may be used where, pursuant to the Program EIR or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (Section 15063[c] [3][D]. In this case, a brief discussion should identify the following:

a) Earlier analyses used where they are available for review.

b) Which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and whether such effects were addressed by mitigation measures based on the earlier analysis.

c) The mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project for effects that are "Less than Significant with Mitigation Measures Incorporated.

References and citations have been incorporated into the checklist references to identify information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document, where appropriate, include a reference to the page or pages where the statement is substantiated.

Source listings and other sources used, or individuals contacted are cited in the discussion.

The explanation of each issue should identify:

a) The significance criteria or threshold, if any, used to evaluate each question

b) The mitigation measure identified, if any, to reduce the impact to less than significant.

3.3 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Based on the analysis in Section 4, the proposed Project could potentially affect ("Potentially Significant") the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor and identifies where mitigation measures would be necessary to reduce impacts to less than significant.

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

3.4 DETERMINATION

On the basis of this initial evaluation, the following finding is made:

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

Signature

1-7-2022
Date

Alex Hamilton
Name

Interim Community Development Director
Title

4 ENVIRONMENTAL IMPACTS

4.1 AESTHETICS

4.1.1 Environmental Setting

The Project is located along the south side of Huntington Drive, a major thoroughfare, between Virginia Road (east) and Wood Drive/Cambridge Road (west). Huntington Drive is a four-lane road, divided by an approximately 58-foot-wide grassy median with mature trees centrally placed throughout the median. This wide median was once railroad right of way. The grassy, tree-lined median provides a dramatic road statement for motorists traveling along Huntington Drive, through the City of San Marino.

The north side of Huntington Drive in this segment is lined with residential uses where short walls and tall shrubs and trees separate the property boundary from the adjacent sidewalk and roadway. The south side of Huntington Drive in the Project vicinity is characterized as public facilities, containing the library, the SMC and a school complex.

4.1.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Discussion

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

Less Than Significant Impact. The CEQA Guidelines do not provide a definition of what constitutes a "scenic vista" or "scenic resource" or a reference as to from what vantage point(s) the scenic vista and/or resource, if any, should be observed. Scenic resources are typically landscape patterns and features that are visually or aesthetically pleasing and that contribute affirmatively to the definition of a distinct community or region such as trees, rock outcroppings, and historic buildings.

A scenic vista is generally identified as a public vantage viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Common examples may include a public vantage point that provides expansive views of undeveloped hillsides, ridgelines, and open space areas that provide a unifying visual backdrop to a developed area. The City of San Marino's General Plan does not identify any scenic vistas in the city.

While Huntington Drive in the Project area is not considered a "scenic vista," motorists traveling along Huntington Drive in the Project vicinity can enjoy an aesthetically pleasing driving experience offered by the wide, grassy, tree-lined median, the tall trees and shrubs that hide residential uses on the north side, and the residential and commercial uses on the south side that are partially obscured by mature trees in the sidewalk. The Crowell Library and Huntington School, which are adjacent to the SMC on the east and west, are both similar architectural styles of Spanish Mediterranean with stucco and wood accents that complement the mature trees within the landscape. The SMC, however, is clearly architecturally different than the adjacent buildings, therefore, there is a visible variation in the continuity of the aesthetically pleasing driving experience in the immediate area of the Project.

The façade updates proposed by the Project seeks to reduce the visual variation along the south side of Huntington Drive by modifying the SMC exterior to create a similar look and feel as that of the Crowell Library and Huntington School. The views of the south side of Huntington Drive will be temporary disrupted during construction. Therefore, impacts will be less than significant.

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

No Impact. The Project does not occur within a state scenic highway. Therefore, the Project will not damage resources within a state scenic highway.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The Project is located in an urbanized area and is zoned R-1 (very low density residential), and the adjacent public buildings (library and school) are within the same

zoning designation. The site's zoning and use are consistent with the City's applicable zoning and other regulations. The Project would not increase the height or density of development in the area. Impacts would be less than significant, and no mitigation is required.

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

Less than Significant Impact. The Project site is currently developed with an existing community center, with adjacent public uses to the east and west of the site. The Project includes replacement of exterior lighting consistent with the brightness that currently exists, and no new lighting is proposed. Therefore, the improvements will not create a new source of substantial light or glare that would adversely affect day or nighttime views. Impacts would therefore be less than significant, and no mitigation is required.

4.1.3 Mitigation Measures

No mitigation measures are required.

4.2 AGRICULTURE & FORESTRY RESOURCES

4.2.1 Environmental Setting

The proposed Project is located an urbanized area of the City of San Marino. The Project improvements will occur on an existing developed site.

4.2.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Discussion

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

No Impact. The California Department of Conservation Farmland Mapping and Program identifies the Project site as "Urban and Built-Up Land." There are no agricultural uses on the site, and none are proposed. No impacts would occur, and no mitigation is required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is not zoned for agricultural use by the City of San Marino General Plan and is not the site of any Williamson Act contracts. No impacts would occur, and no mitigation is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. No part of the Project site or its surroundings are designated as timberland or for forest use. No impacts would occur, and no mitigation is required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. There is no designated forestland on the Project site, and the proposed Project would; therefore, not affect forests during construction or operations. No impacts would occur, and no mitigation is required.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or the conversion of forest land to non-forest use?

No Impact. The Project site is zoned R-1. It is not zoned for or under use as Farmland or forest land. No impacts would occur, and no mitigation is required.

4.2.3 Mitigation Measures:

No mitigation measures are required.

4.3 AIR QUALITY

An Air Quality Analysis was prepared for the proposed Project in September 2021 (Appendix B).

4.3.1 Regulatory Setting

Air pollutants are regulated at the national, state, and air basin level; each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level under the Clean Air Act of 1970. The California Air Resources Board (ARB) regulates at the state level. The South Coast Air Quality Management District (SCAQMD) regulates at the air basin level.

There are six common air pollutants, called criteria pollutants, which were identified from the provisions of the Clean Air Act of 1970.

- Ozone
- Nitrogen Dioxide
- Lead
- Particulate Matter (PM10 and PM2.5)
- Carbon Monoxide
- Particulate Matter
- Sulfur Dioxide

The US environmental Protection Agency (EPA) and the California Air Resources Board (CARB) designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

The Project site is located in the City of San Marino, which is part of the South Coast Air Basin (SCAB) that includes all of Orange County as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD’s 2016 Air Quality Management Plan (AQMP) assesses the attainment status of the SCAB. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) attainment statuses for the SCAB are listed in Table 4.3-1. The SCAQMD updates the AQMP every three years. Each iteration of the AQMP is an update of the previous plan and has a 20-year horizon. The latest AQMP, the 2016 AQMP, was adopted on March 3, 2017.

Table 4.3-1: South Coast Air Basin Attainment Status

CRITERIA POLLUTANT	STANDARD	AVERAGING TIME	DESIGNATION [a]	ATTAINMENT DATE [b]
1-Hour Ozone	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 Originally 11/15/2010 (not attained)[c]
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone[d]	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	1-Hour (20 ppm) 8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO_2[e]	NAAQS	1-Hour (0.10 ppm)	Unclassifiable/Attainment	N/A (attained)
	NAAQS	Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-Hour (0.18 ppm) Annual (0.030 ppm)	Attainment	---
SO_2 [f]	NAAQS	1-Hour (75 ppb)	Designations Pending (expect Uncl./Attainment)	N/A (attained)
	NAAQS	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)
PM10	NAAQS	1987 24-hour (150 µg/m^3)	Attainment (Maintenance)[g]	7/26/2013 (attained)
	CAAQS	24-hour (50 µg/m^3) Annual (20 µg/m^3)	Nonattainment	N/A
PM2.5[h]	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m^3)	Attainment	8/24/2016
	NAAQS	2012 Annual (12.0 µg/m^3)	Nonattainment (Serious)	12/31/2025
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment	N/A
Lead	NAAQS	3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial)[i]	12/31/2015
Hydrogen Sulfide (H2S)	CAAQS	1-Hour (0.03 ppm/42 µg/m^3)	Attainment	---
Sulfates	CAAQS	24-Hour (25 µg/m^3)	Attainment	---
Vinyl Chloride	CAAQS	24-Hour (0.01 ppm/26 µg/m3)	Attainment	---

Notes:

a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment orUnclassifiable

b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typicallyrequired for attainment demonstration

c) 1-hour O_3 standard (0.12 ppm) was revoked, effective June 15, 2005 ; however, the Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements

d) 1997 8-hour O_3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O_3 standard is still subject to anti-backsliding requirements

e) New NO_2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO_2 standard retained

f) The 1971 annual and 24-hour SO_2 standards were revoked, effective August 23, 2010; however, these 1971 standards willremain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO_2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.

g) Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006;SCAQMD request for attainment re-designation and PM10 maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.

h) Attainment deadline for the 2006 24-Hour PM2.5 NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual PM2.5standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m3. Designations effective April15, 2015, so serious area attainment deadline is December 31, 2025.

i) Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect re-designation to attainment based on current monitoring data.

Thresholds of Significance

The SCAQMD provides numerical thresholds to analyze the significance of a project's construction and operational emissions impacts on regional air quality. These thresholds are designed so a project that is consistent with the thresholds would not have an individually or cumulatively significant impact to the SCAB's air quality.

Thresholds of Significance for Construction:

- 75 pounds per day of ROG
- 100 pounds per day of NOx
- 550 pounds per day of CO
- 150 pounds per day of SOX
- 150 pounds per day of PM10
- 55 pounds per day of PM2.5

Thresholds of Significance for Operations:

- 55 pounds per day of ROG
- 55 pounds per day of NOx
- 550 pounds per day of CO
- 150 pounds per day of SOX
- 150 pounds per day of PM10
- 55 pounds per day of PM2.5

Localized Significance Thresholds

In addition to the listed thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA Air Quality Handbook. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for nitrogen oxides (NO_X), carbon monoxide (CO), PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each SRA, distance to the sensitive receptor, and project size. LSTs only apply to emissions within a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008a). According to the SCAQMD (2008) Final Localized Significant Thresholds

Methodology, the use of LSTs is voluntary, to be implemented at the discretion of local agencies. For this Initial Study, the LST Method was utilized.

4.3.2 Environmental Setting

The SCAB is located on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the SCAB is bounded by the Pacific Ocean to the southwest and high mountains to the east forming the inland perimeter. Annual average temperatures vary little throughout the SCAB, ranging from the low-to-middle 60s, measured in degrees Fahrenheit (F). The majority of annual rainfall in the SCAB occurs between October and March. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the SCAB and along the coastal side of the mountains. Average temperatures in winter months in the Project area range from a low of 34 degrees F to a high of 68 degrees F. In the summer, average temperatures range from a low of 59 degrees F to a high of 98 degrees F. During an average year, the greatest amount of precipitation, 2.86 inches, occurs in February

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal areas and around the Los Angeles area is transported inland until it reaches the mountains where the combination of mountains and inversion layers generally prevent further dispersion. This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas.

Local Air Quality

The SCAQMD operates a network of 38 ambient air monitoring stations throughout the South Coast Air Basin. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California and federal standards. The air quality monitoring station located nearest to the Project site is the Pasadena station, located approximately 1.3 miles northwest of the Project site at 725 South Wilson Avenue. Table 4.3-2 identifies the ambient air quality in the Project vicinity, as reported at the Pasadena station and PM10 and PM2.5 as obtained from a Los Angeles station, approximately 8 miles southwest of the Project site.

Table 4.3-2: Local Ambient Air Quality

Pollutant	2018	2019	2020
Ozone, ppm – First High 8-Hour Average (2015 Standard)	0.090	0.098	0.115
Number of days of above 2015 standard (>0.070 ppm)	19	24	60
Nitrogen Dioxide, ppm – First High National	68.2	59.1	61.2
Nitrogen Dioxide, ppm – First High State	68	59	61
Days above the State standard (>0.18 ppm)	0	0	0
Days above the national standard (>100 ppb)	0	0	0
Particulate Matter <10 microns, μg/m3 First High Federal	68.2	62.4	83.7
Particulate Matter <10 microns, μg/m3 First High State	81.2	93.9	185.2
Estimated number of days greater than national 24-hour standard (>150 μg/m3)	0	*	0
Estimated number of days greater than state standard (>50 μg/m3)	31	15	34
Particulate Matter <2.5 microns, μg/m3 First High	32.5	41.8	67.7
Annual average (exceedances of 12 μ/m3 standard not reported)	*	*	*
Number of samples of Federal exceedances (>12 μg/m3)	0	1	2

Notes:
Pasadena – 725 South Wilson Street Monitoring Station
Los Angeles – 1630 N Main Street
Note – Ozone, Nitrogen Dioxide and PM2.5 data from Pasadena Station; PM10 data from Los Angeles Station
*Data insufficient to determine the value
Source: California Air Resources Board, 2018, 2019, 2020 Annual Air Quality Data Summaries available at https://www.arb.ca.gov/adam/topfour/topfour1.php

As shown in Table 4.3-2, both the federal and state ozone standards were exceeded at the Pasadena monitoring station during each of the last three years. The federal PM10 standard was not exceeded during the last three years. Insufficient data was available to determine whether the state standard was exceeded.

Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, a sensitive receptor would be a location where a sensitive individual could remain for 24-hours or longer, such as residencies, hospitals, and schools (etc.).

Nearby sensitive receptors are the Valentine Elementary School and Huntington Middle School located adjacent to and south/southwest and single-family residences located across Huntington Drive approximately 200 feet north/northwest and northeast of the site and adjacent to the site on the east side of West Drive.

4.3.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			X	

Discussion

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

Less Than Significant Impact. A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. The proposed Project involves remodeling the existing San Marino Center building. Vehicle trips associated with the Project would be consistent with similar community center uses; and as discussed herein, Project-related emissions would not exceed thresholds recommended by the SCAQMD. The Project does not include new housing or businesses, nor would operation and maintenance of the proposed Project require new employees; therefore, the Project would not generate population, housing, or employment growth. As a result, the Project would not exceed the Southern California Association of Governments' projected growth forecasts, which underlie the emissions forecasts in the 2016 AQMP. Therefore, the Project would not conflict with or obstruct implementation of the AQMP. Impacts are less than significant, and no mitigation measures are required.

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

Less Than Significant Impact. Potential air quality impacts for construction and operations were modeled in Appendix B and are summarized herein.

Construction

Construction activities such as clearing, grading and excavation are common sources of diesel and dust emissions. Construction equipment that would generate criteria air pollutants includes excavators, graders, dump trucks, and loaders. The proposed Project does not require grading, therefore, no heavy equipment is required for grading. Only minor exterior ground disturbance for utility trenching as described in the Project Description is proposed and does not require the use of heavy equipment for trenching. Exterior improvements would consist of concrete demolition/removal, concrete work, landscaping and painting. Construction emissions associated with development of the proposed Project by estimating the types of equipment (including the number) that would be used on-site during the demolition, building construction and painting phases. The Air Quality Study analyzed construction emissions using the regional thresholds established by the SCAQMD and published in the *CEQA Air Quality Handbook* (refer to Appendix B)

The Air Quality analysis in Appendix B modeled construction emissions for demolition (which primarily includes roof replacement, window removal and replacement, porch post replacement, and exterior stucco removal and replacement), building construction and architectural coating application based on the overall scope of the proposed Project and construction phasing which is expected to fall/winter 2022 and extend through mid-2023. The total area disturbed as a result of the Project would be limited to the building interior and exterior landscape and hardscape. For modeling purposes, it was assumed the Project would be required to comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the SCAB. In addition to SCAQMD Rule 403 requirements, emissions modeling also accounts for the use of low-VOC paint (50 g/L for non-flat coatings) and 100 g/L for parking lot coating as required by SCAQMD Rule 1113.

Table 4.3-3 summarizes the estimated maximum mitigated daily emissions of pollutants anticipated to occur during construction.

Table 4.3-3: Estimated Maximum Mitigated Daily Construction Emissions

Construction Phase		Maximum Emissions (lbs/day)				
	ROG	NOx	CO	SOx	PM10	PM2.5
2022 Maximum lbs/day	20.2	7.1	7.8	0.01	0.45	0.36
SCAQMD Regional Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded 2022	**No**	**No**	**No**	**No**	**No**	**No**

As shown in Table 4.3-3, construction of the proposed Project would not exceed the SCAQMD regional thresholds. No mitigation in addition to compliance with SCAQMD Rule 403 and Rule 1113 would be required to reduce construction emissions to less than significant.

Operations

Operational emissions, as estimated in Table 4.3-4, include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), and area sources including landscape equipment and architectural coating emissions as the structures are repainted over the life of the Project. The majority of operational emissions are associated with vehicle trips to and from the Project site. Trip volumes are based on the trip generation rates in the Traffic Impact Assessment prepared for the proposed Project by Linscott, Law and Greenspan, Inc. (Appendix E).

Area source emissions from the Project include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as energy), yard and landscape maintenance, consumer use of solvents and personal care products, and an average building square footage to be repainted each year.

Table 4.3-4: Estimated Operational Emissions

	Estimated Emissions (lbs/day)					
	ROG	**NOx**	**CO**	**Sox**	**PM10**	**PM2.5**
Area	0.2	0.01	0.01	0.0	0.0	0.0
Energy	0.01	0.06	0.4	0.01	0.01	0.01
Mobile	0.7	0.6	6.5	0.01	1.3	0.3
Maximum lbs/day	**1.0**	**0.7**	**6.5**	**0.01**	**1.3**	**0.3**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

As shown in 4.3-4, daily unmitigated emissions would not exceed the SCAQMD thresholds for ROG, NO_X, CO, SO_X, PM_{10} or $PM_{2.5}$. Therefore, the Project's regional air quality impacts (including impacts related to criteria pollutants, sensitive receptors and violations of air quality standards) would be less than significant, and no mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Localized Significance Thresholds (LSTs) were devised by the SCAQMD in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size and distance to the sensitive receptor. The Project site is located in Source Receptor Area 11 (SRA-11, South San Gabriel Valley).

The nearest sensitive receptors to the Project site are the Huntington Middle School located, approximately 200 feet southwest of the site and the Valentine Elementary School, located approximately 1,000 feet to the west. To provide a conservative evaluation of construction emissions relative to LST thresholds, allowable emissions for 25 meters (82 feet) were used. LSTs for construction related emissions in the SRA 11at varying distances between the source and receiving property are shown in Table 4.3-5.

Table 4.3-5: SCAQMD LSTs for Construction

Pollutant	Allowable emissions as a function of receptor distance in meters from a one-acre site (lbs/day)				
	25	**50**	**100**	**200**	**500**
Gradual conversion of NOx to NO2	83	84	96	123	193
CO	673	760	1,113	2,110	6,884
PM10	5	13	29	60	153
PM2.5	4	5	9	20	83

Source: http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf, October 2009.

As shown in Table 4.3-4, total emissions of NOx, CO, PM_{10} and $PM_{2.5}$ would not exceed SCAQMD Standards. The LST thresholds at the shortest distance 25 meters, or approximately 82 feet are shown in Table 4.3-5, and potential sensitive receptors are identified at approximately 200 and 1,000 feet, therefore, the Project's operation emissions are less than significant.

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

Less Than Significant Impact. Potential sources of odor during construction activities include equipment exhaust. The objectionable odors that may be produced during the construction process would occur periodically and end when construction is completed. No significant impact related to odors would occur during construction of the proposed Project, and no mitigation is required. Operations of the facility after construction would remain the same as the existing condition, which does not produce odors. Therefore, there would be no odor impact from operations.

4.3.4 Mitigation Measures

No mitigation measures are required.

4.4 BIOLOGICAL RESOURCES

Given that the Project is a developed building, a biological resource field assessment was conducted for the Project by an ELMT biologist, and the results of the field assessment is provided as part of the analysis of this section.

4.4.1 Regulatory Setting

Given the urban environment, regulations governing biological resources for this Project include the following:

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C 703-711) provides protection for nesting birds that are both residents and migrants whether they are considered sensitive by resource agencies. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered a take under federal law. The USFWS, in coordination with the California Department of Fish and Wildlife (CDFW) administers the MBTA. CDFW's authoritative nexus to MBTA is provided in California Fish and Game Code (FGC) Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State.

City of San Marino Heritage Tree Ordinance

The City of San Marino tree preservation ordinance is contained in Chapter 23, Article 19 of the City Municipal Code. This ordinance requires permits for trimming and/or removal of certain trees including but not limited to:

Trees protected by the City of San Marino's tree preservation ordinance include:

- *ESTABLISHED TREE: A tree that is not a heritage tree or an oak tree, that is at least fifteen feet (15') in height, and/or whose trunk diameter is at least six inches (6") at its widest point, when measured at a point four and one-half feet (4.5') above natural grade.*

- *HERITAGE TREE: A tree that is at least fifteen feet (15') in height, and/or whose trunk diameter is at least four inches (4") at its widest point, when measured at a point four and one-half feet (4.5') above natural grade, and is one of the following*: *Platanus racemosa (Western Sycamore), Juglans californica (California Black Walnut), Sambucus nigra (Elder), Sambucus Mexicana (Mexican Elderberry), Aesculus californica (California Buckeye), Salix lasiolepis (Arroyo Willow), Populus fremontii (Fremont Cottonwood), Alnus rhombifolia (White Alder), Umbellularia californica (California Bay Laurel), Populus trichocarpa (Black Cottonwood), Ginkgo biloba (Maidenhair), Cedrus deodora (Deodar Cedar), Pinus canariensis (Canary Island Pine), Pinus halepensis (Aleppo Pine), Pinus pinea (Stone Pine), Pinus thunbergiana (Black Pine), Sequoia sempervirens (Coast Redwood), Taxodium mucronatum (Montezuma Cypress), Calocedrus decurrens (California Cedar), Cupressus sempervirens (Mediterranean Cypress), Podocarpus gracilior (African Fern Pine), Magnolia grandiflora (Southern Magnolia), Magnolia xsoulangeana (Chinese Magnolia),Cinnamomum camphora (Camphor), Persea Americana (Avocado), Liquidambar styraciflua (Sweetgum), Ulmus parvifolia (Chinese Elm), Ficus microcarpa (Chinese banyan),*

Quercus agrifolia (Coast Live Oak), Quercus engelmannii (Engelmann or Pasadena Oak), Quercus ilex (Holly Oak), Quercus lobata (Valley Oak), Quercus suber (Cork Oak), Brachychiton discolor (Lacebark), Brachychiton populneus (Kurrajong), Chorisia speciose (Silk Floss Tree), Arbutus unedo (Strawberry Tree), Prunus caroliniana (Carolina Cherry-Laurel), Pyrus kawakamii (Evergreen Pear), Cassia spp (Golden Shower Tree), Ceratonia silique (Carob), Lagerstroemia indica (Crepe Myrtle), Callistemon spp (Bottlebrush), Eucalyptus citriodora (Lemon-Scented Gum), Melaleauca quinquenervia (Paper Bark Tea Tree), Grevillea robusta (Southern Silky Oak), Cupaniopsis anacardioides (Carrotwood), Koelreuteria spp (Chinese Flame Tree), Schinus molle (California Pepper Tree), Citrus sinensis (Sweet Orange), Fraxinus uhdei (Shamel Ash), Olea europaea (Olive Tree), Jacaranda mimosifloria (Blue Jacaranda), Tabebuia spp (Tabebuia), Brahea edulis (Guadalupe Palm), Butia capitate (Jelly Palm), Phoenix canariensis (Canary Island Date Palm), Syagrus romanzoffianam (Queen Palm), Washingtonia filifera (California Palm), Washington robusta (Mexican Fan Palm), Cedrus atlantica (Atlas Cedar),and Cedrus atlantica (Blue Atlas).

4.4.2 Environmental Setting

The Project site is located in an urbanized area on the *El Monte* USGS Quad, Township 1 South, Range 12 West, Section 2.

4.4.3 Biological Resources Study and Results

A biological resource field assessment was conducted by an ELMT biologist to addresses potential Project-related effects to designated Critical Habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA), or species designated as sensitive by the California Department of Fish and Wildlife (CDFW), or the California Native Plant Society (CNPS), as well as the City of San Marino General Plan and various ordinances.

The assessment included a literature review and field visit on January 19, 2021. Literature reviewed for the biological assessment included State, federal and local databases that included but are not limited to the following:

- U.S. Fish and Wildlife (USFWS) threatened and endangered species occurrence GIS overlay;
- USFWS Information for Planning and Consultation System (IPaC);
- California Natural Diversity Database (CNDDB) *Rarefind 5*);
- CNDDB Biogeographic Information and Observation System (BIOS);
- California Native Plant Society Electronic Inventory (CNPSEI) database;
- Calflora Database;
- USDA Natural Resources Conservation Service (NRCS) Web Soil Survey;
- USFWS National Wetland Inventory;
- Environmental Protection Agency (EPA) Water Program “My Waters” data layers
- USFWS Designated Critical Habitat Maps
- City of San Marino General Plan and ordinances

The survey results indicated that there is no critical habitat, sensitive species or sensitive plants or wildlife that could be on the Project site or in the vicinity.

The Project site is currently developed with an existing building, parking lot, and outdoor areas. Existing on-site vegetation consists of heritage and established landscaping and trees including four oaks, one sycamore and urban ornamental shrubs.

No active nests or birds displaying nesting behavior were observed onsite during the field survey. Although heavily disturbed, the Project has the potential to provide minimal foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to disturbed areas and urban environments. The coast live oak trees and ornamental trees on the Project site also have the potential to provide avian nesting opportunities.

4.4.4 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		

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

Discussion

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

Less Than Significant with Mitigation Incorporated. Based on the literature review and field survey, implementation of the Project will have no significant impacts on federally, State, or local species known to occur in the general vicinity of the Project site because the Project exists in an urbanized area, and no sensitive species were determined to exist on-site, nor are any expected to exist on-site.

However, the Project site has the potential to support suitable habitat for foraging and nesting birds, which are protected by the Migratory Bird Treaty Act and the Fish and Game Code. The loss of individuals would result in a potentially significant impact. With the implementation of **Mitigation Measure BIO-1**, located at the end of this section, impacts would be less than significant.

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

No Impact. Based on the records search and field review, there are no riparian habitat or sensitive natural communities on the Project site, which is currently entirely developed. There would be no impacts, and no mitigation is required.

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

No Impact. The Project site is completely developed and does not contain state or federally protected wetlands. No impacts would occur, and no mitigation is required.

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

No Impact. A wildlife corridor is defined as a linear landscape element which serves as a linkage between historically connected habitats/natural areas and is meant to facilitate movement between these natural areas. During the field survey, the Project site was assessed for its ability to facilitate wildlife movement and for the presence of wildlife corridors. The Project is located in an urbanized area on a developed site. As a result, it does not contain any wildlife corridors or nursery sites. No impacts would occur, and no mitigation is required.

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

Less Than Significant with Mitigation Incorporated. Of the trees on the Project site, five trees (four coast live oak and one western sycamore) are the size and type that qualify as heritage trees per City ordinance. The Project does not propose the removal of these trees. However, some improvements may require minimal excavation or work near the roots of the trees, which if performed improperly, could damage the tree health. With the implementation of **Mitigation Measure BIO-2**, located at the end of this section, impacts would be less than significant.

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

No Impact. There are no approved local, regional, or state habitat conservation plan for the Project area. Therefore, there would be no impact under this criterion.

4.4.5 Mitigation Measures

The following mitigation measures are required to reduce potentially significant impacts to less than significant:

BIO-1: If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young

have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can resume.

BIO-2: Prior to construction, a certified arborist shall be retained to flag trees that will be avoided and observe excavation activities that are planned within the root zone of the protected trees and assist the contractor in conducting excavation in a manner that will not impact the tree roots.

4.5 CULTURAL RESOURCES

A Cultural Resources Assessment for the proposed Project was performed by BCR Consulting in September 2021 (Appendix C).

Cultural resources include archaeological sites, buildings and other kinds of structures, historic districts, cultural landscapes, and resources important to specific ethnic groups.

Archaeological sites represent the material remains of human occupation and activity either prior to European settlement (prehistoric sites) or after the arrival of Europeans (historical sites).

The historic built environment includes buildings used for habitation, work, recreation, education and religious worship, and may be represented by houses, factories, office buildings, schools, churches, museums, hospitals, bridges and other kinds of structures.

An historic district is any "geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history" (36 CFR 60.3).

The National Park Service defines a cultural landscape as "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values".

4.5.1 Regulatory Setting

The National Historic Preservation Act (NHPA) of 1966, as amended and the California Public Resources Code (PRC), Section 5024.1, are the primary federal and state laws and regulations governing the evaluation and significance of historical resources of national, state, regional, and local importance.

National Historic Preservation Act

Section 106 (Protection of Historic Properties) of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties. The Advisory Council on Historic Preservation, an independent federal agency, administers the Section 106 review process with assistance from State Historic Preservation Offices to ensure that historic properties are considered during federal project planning and implementation.

National Register of Historic Resources (National Register)

The National Register of Historic Places is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The National Register recognizes resources of local, state and national significance which have been documented and evaluated according to uniform standards and criteria.

Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources. The National Register is administered by the National Park Service, which is part of the U. S. Department of the Interior.

As defined in National Register Bulletin #15, "How to Apply the National Register Criteria for Evaluation," resources are eligible for the National Register if they:

A) are associated with events that have made a significant contribution to the broad patterns of our history; or

B) are associated with the lives of significant persons in or past; or

C) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D) have yielded or may be likely to yield, information important in history or prehistory.

Once a resource has been determined to satisfy one of the above-referenced criteria, then it must be assessed for integrity. Integrity refers to the ability of a property to convey its significance, and the degree to which the property retains the identity, including physical and visual attributes, for which it is significant under the four basic criteria. The National Register recognizes seven aspects or qualities of integrity: location, design, setting, materials, workmanship, feeling, and association. To retain its historical integrity, a property must possess several, and usually most, of these aspects.

California Register of Historical Resources

The California Register program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act

The California Register was established to serve as an authoritative guide to the state's significant historical and archaeological resources (Public Resources Code § 5024.1). The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation (DPR), implements the policies of the NHPA on a statewide level.

State law provides that in order for a property to be considered eligible for listing in the California Register, it must be found by the Office of Historic Preservation (OHP) to be significant under any of the following four criteria:

1) It is associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

2) It is associated with the lives of persons important to local, California, or national history;

3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; and/or

4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). Fifty years is normally considered sufficient time to be considered a potential historical resource. All resources older than 45 years will be evaluated.

The California Register also requires that a resource possess integrity, which is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association.

All resources listed on or formally determined eligible for the National Register are automatically listed in the California Register, in accordance with the California Office of Historic Preservation policies (refer to https://ohp.parks.ca.gov/?page_id=21237). In addition, properties designated under municipal or county ordinances or through local historic resources surveys, are eligible for listing in the California Register.

City of San Marino Local Register of Historic Resources

Chapter XXIII, Article 18 of the San Marino City Code is designed to "*promote the public health, safety, and general welfare by providing for the identification, designation, protection, enhancement, and ongoing use of historical resources that represent the City's cultural, architectural, social, economic, and political heritage*."

Chapter XXIII, Article 18 of the San Marino City Code, Section 23.18.03 (A) states: "*Automatic Designation: Any property within the City that is listed in the National Register of Historic Places or the California Register of Historic Places is automatically designated as a historic landmark for purposes of this article*."

4.5.2 Environmental Setting

History

The first significant European settlement of California began during the Spanish Period (1769 to 1821) when 21 missions and four presidios were established between San Diego and Sonoma. The land of the City of San Marino, which was part of the San Gabriel Mission, was initially occupied by Gabrielino (Tongva) Indians, who had a village located on what is now the Huntington School.

In 1852, Tennessee native Benjamin Davis Wilson acquired a vast tract of land that included the area that later became San Marino as well as several neighboring towns. In 1873, Benjamin Wilson gave 500 acres of his land to his son in law James Debarth Shorb, who then named the ranch on his land "San Marino" which was inspired by his grandfather's plantation in Maryland which in turn got its name from the Republic of San Marino, Italy.

In 1903, the San Marino land was purchased from James Shorb by Henry E. Huntington, a businessman who was the owner of the Pacific Electric Railway Company in Southern California. Henry Huntington played a major role in shaping the economy of Southern California. Huntington and George Patton Sr. joined with another landowner to incorporate San Marino in 1913. They also spearheaded a campaign to prevent their properties from being developed by the city. Their advocacy for restrictive zoning has prevented the development of strip malls and mansions in San Marino.

In 1904, Pacific Electric (PE), which was owned by Henry Huntington, built a double track line commencing at a connection with the Monrovia Line at Huntington Drive in San Marino northerly on private way to a point near Colorado Street, Pasadena. The line opened for service on March 19, 1904.

The city's irregular street grid pattern reflects its historic patterns of residential development, which were largely guided by Huntington and oriented around the Pacific Electric Railway (PERy) routes he constructed in the City between 1903 and 1906. Most of the street grid skews northwest/southeast, roughly perpendicular to the northeast/southwest route of Huntington Drive (the PERy's Monrovia-Glendora route). The grid in the northeast portion of the city is skewed in response to the PERy's Sierra Madre line (now Sierra Madre Boulevard). The northwest part of San Marino, containing the most prominent hills and the largest lots, is marked by curvilinear streets responding to the natural contours of the landscape (ARG, 2020).

Rail operation continued until October 6, 1950, when the line was abandoned in favor of motor coaches. The median of what is now Huntington Drive was part of this line and was developed with grass and trees after the PERy's abandonment. The roadways on either side of the median were reconfigured from bidirectional traffic to one-way traffic.

San Marino Women's Club

During the 1930s, there were many organizations in the community in San Marino that gathered for music, book reviews, and various other activities. However, there were few organizations for women. On June 8th, 1936, a group of 52 women gathered at the San Marino Police Department courtroom to organize a local women's club. By the time the San Marino Woman's Club was completely organized, the club already had around 420 members (San Marino Tribune, January 7, 2016). The club catered to elite married white women who could afford to pay the $10 dues and had time to attend frequent events and do charity work. Most of these women had live-in domestic help in the 1930s and 1940s; those who took on leadership roles were in their forties and fifties, with grown or nearly-grown children.

The San Marino Woman's Club members were required to wear black dresses and black hats with a pair of white gloves. There were 16 different guilds within in the club: music, drama, literature, writers, home craft, philanthropy, foreign language, current events, travel, bible, home interior, language, sports, public affairs, flower, and garden. Regular meetings were held at Henry E. Huntington Middle School auditorium while the guild meetings were held at homes of the members. The club raised funds for a slightly used ambulance, which it donated to the city in 1940. This was just one of many charitable contributions the group made to the community over the decades.

In 1939, the club purchased the property at 1800 Huntington Drive for $6,000 to build a clubhouse for its growing membership. At the time, the property held a residence and was surrounded by open fields.

Members raised most of the funds to complete the clubhouse through bazaars, rummage sales, parties, and various entertainment events over a 10-year period. Fundraising efforts were suspended when the US entered World War II in 1942, and construction remained difficult immediately after the war in the late 1940s. They also made an appeal to the public for funds. In 1949, the club requested and received variances from San Marino City Council because the parcel was zoned for residential use and required setbacks that did not fit in with the club's plans for the property. By the end of the decade, the club had $57,000 on hand, and was able to borrow an additional $35,000 in 1951 to construct the clubhouse, which was completed in 1952.

In addition to club meetings and events, the facility was used for a variety of community and private functions such as wedding receptions and sorority events. Over the years, the club's charitable contributions were numerous and included the endowment of a bed at the Orthopedic Hospital, nursing scholarships, Toys for Tots, and others. They also provided help to the Assistance League, American Red Cross and the City of Hope.

The San Marino Woman's Club moved its organization to Pasadena in 2004, and the City purchased the building in 2005.

Project Site Area Development

The SMC was constructed in approximately 1951/52. Adjacent to the SMC are the Crowell Public Library (~~west~~ east) which was constructed in 1951/52, at about the same time as the construction of the SMC. The Henry E. Huntington Middle School (constructed in 1918) is located directly ~~east~~ west and south of the SMC, and the Valentine Elementary School (~~east~~ west of the middle school), constructed in 1938, and the San Marino Unified School District offices, located within the middle school grounds. The Crowell Library was reconstructed to its current design between 2006 and 2008.

4.5.3 Cultural and Archaeological Resources Study and Results

BCR Consulting conducted a survey of the Project site through a field survey and a records search. The records search was conducted at the South Central Coastal Information Center and through review of various other State, federal and local databases (Appendix C) for the Project site and a 1 mile radius.

The records search revealed that in June 2011 the SMC underwent a required historical review as part of a project to install an ADA compliant door and other features, which was being funded through the federal Housing and Urban Development through the County of Los Angeles Community Development Block Grant program.

The architectural style was identified in the 2011 study as "Modern Colonial Revival," which is not recognized as a unique style of architecture. Designed by architect Marion Varner as one of his earlier designs, the SMC large primarily one-story building with a flat roof and raised parapet along the rear and side elevations. The front elevation features a side-facing medium gable roof with an offset front gable wing. An L-shaped porch runs across the front elevation and is supported by decorative wrought iron posts. The roof is covered with wood shingles. A large multi-paned steel framed window is located below the main front gable. Underneath the window is brick trim. A tall exterior brick chimney is located on the northeast elevation. Windows are primarily multi-paned steel casements. Siding is stucco and foundation is concrete. The interior of the building when first built contained a large auditorium, dining room, meeting

room and office. There were two additions in 1958 and a separate modular building in rear, constructed at an unknown date.

The 2011 study identified that the integrity of the building appeared sufficient for eligibility to the National Register of Historic Places as follows:

- Location: The property at 1800 Huntington Drive is in its original location.
- Setting: The historic setting of the property was found to be partially intact. The relationship to the adjacent library and school remain. However, the original 1950 library was replaced with a new library building within the last several years.
- Design: The original design of the 1952 building was primarily intact except for changes to the front entrance doors and two small additions in 1958 done in the same style.
- Materials: The integrity of materials was found to be somewhat intact.
- Feeling and Association: The feeling and association as a woman's club was no longer intact since the building is now the San Marino Community Center, but it continues to function to serve the community.

The California OHP concurred with this recommendation on August 5, 2011; therefore, in accordance with the OHP policy, the SMC was formally listed in the California Register of Historical Resources (California Register) under Criterion 1, for association with an event important to the history of the San Marino community. The OHP identifies the SMC as being listed on the California Register through its listing on the State's Built Environment Resource Directory (BERD).

During the 2021 fieldwork, BCR Consulting confirmed that that the SMC retained the integrity to convey its historic significance as identified in 2011. No other cultural or archaeological resources were identified within the subject property boundaries.

4.5.4 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	X			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Potentially Significant Impact. Section 15064.5(a) of the CEQA Guidelines defines historical resources, which includes: *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*

Public Resources Code Section 5020.1(q) defines "Substantial adverse change" as the demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired. CEQA Guidelines Section15064.5 (b)(1) and (b)(2) clarify that the impairment must be material and states that material impairment of a historical resource would occur when the Project "demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources."

The SMC was formally listed in the California Register of Historical Resources (California Register) under Criterion 1, for association with an event important to the history of the San Marino community. The OHP identifies the SMC as being listed on the California Register through its listing on the State's BERD.

The SMC is also a City landmark pursuant to the San Marino City Code, Chapter XXIII, Article 18 Section 23.18.03 (A) "Automatic Designation."

The Project includes changing the exterior architectural design of the SMC building to better aesthetically match the adjacent Crowell Public Library and Henry E. Huntington Middle School and San Marino Unified School District offices. For example, the existing wood shake roof would be replaced with tile, and the decorative wrought iron posts would be changed to stucco columns. The SMC will remain a community center, open for community events, club meetings, City recreation staff offices, and City recreation classes.

Because the SMC is eligible for listing to the National Register, is listed on the California Register of Historic Resources, and is therefore automatically considered a City landmark, CEQA Guidelines Section 15064.5(b)(3) states that a project that follows the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995), Weeks and Grimmer (collectively referred to as "Secretary's Standards"), "shall be considered as mitigated to a level of less than a significant impact on the historical resource." The Secretary's Standards are intended to pertain to rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

Additionally, in accordance San Marino City Code Section 23.18.08 discusses procedures for the City to issue a Certificate of Appropriateness for rehabilitation of historic structures. One requirement is that the project is consistent with the Secretary's Standards and any applicable design guidelines adopted by the City.

The Project does not qualify as a preservation or rehabilitation project as under the Secretary's Standards as currently designed, according to the Cultural Resources evaluation in Appendix C. As identified in Appendix C, the proposed Project would materially alter a number of the physical characteristics of the SMC that convey its historical significance and that justify its inclusion in the California Register of Historical Resources

The CEQA Guidelines Section 15126.4(b) addresses impacts to historical resources and mitigation alternatives as follows:

> *(1) Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.*
>
> *(2) In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.*

With respect to CEQA Guidelines Section 15126.4(b)(1), should the Project be re-designed to be consistent with the Standards, the impact would be considered to be mitigated to a less than significant level. In November 2021, the City begun exploring this alternative by consulting with Chattel Historic Preservation Consultants (Chattel), a historic preservation consultant who meets the Secretary of the Interior's Professional Qualification Standards in architecture, historic architecture, and architectural history. Chattel provided the City with a memo that outlined various components of a re-designed project that would be consistent with the Standards and still achieve symmetry with the library (Appendix C-1).

In summary, the memo in Appendix C-1 identified the following: the additions to the building (date unknown) can be removed to return the symmetry of its original design; replace the landscape planter that was removed; repaint the building to the color of the library; replace the wood shake roof with a red asphalt shingle similar to the tile color on the library; and replace the windows with a specific window type that is compliant with the original type yet would complement the window style used in the library. Within the interior, the period chandelier light fixtures are encouraged to be re-lamped, and the San Marino Women's Club emblem in the floor must be preserved. All safety and HVAC improvements can be completed as planned by the City. The memo also noted that the design must be performed in collaboration with a qualified historic preservation consultant to ensure compliance with the Secretary's Standards.

CEQA Guidelines Section 15126.4(b)(2), would allow for the City to proceed with the proposed Project by completing a Historical American Building Survey (HABS) to photo document the SMC prior to its renovation. However, CEQA Guidelines Section 15126.4(b)(2) also states that completion of a HABS does not mitigate the impacts to less than significant. This is because the proposed Project is similar to a demolition type project in that it will remove building features that convey its historical significance in accordance with its listing on the California Register of Historic Resources.

Therefore, the proposed Project, as currently designed, will cause a substantial adverse change in the significance of a historical resource because the Project will materially demolish or materially alter in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources, as identified in CEQA Guidelines Section15064.5 (b)(1) and (b)(2). The Project's impact would therefore be **Potentially Significant**.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact With Mitigation Incorporated. Archaeological sites represent the material remains of human occupation and activity either prior to European settlement (prehistoric sites) or after the arrival of Europeans (historical sites). The SMC and its environs were developed between 1918 and 1950/51 on a portion of land originally known as the Cooper Ranch property, which was used for orange and pear groves. There are no known archaeological sites to be within or underlying the built environment of the Project site.

The Project will involve excavation in limited areas to depths up to 3 feet for the purpose of installing, repairing, and upgrading utilities and various foundations. Given the disturbed nature of the site, it is unlikely that archaeological resources will be uncovered. However, to ensure potential impacts are avoided or minimized, implementation of **Mitigation Measure CUL-1**, located at the end of this section.

Potential impacts to tribal cultural resources are discussed separately below in Section 4.18.

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

Less than Significant Impact. Based on an analysis of records and archaeological survey of the property, it has been determined that the Project site does not include a formal cemetery or any archaeological resources that might contain interred human remains. Nonetheless, the Project will be required to adhere to State Health and Safety Code Section 7050.5 if in the event that human remains are encountered and by ensuring that no further disturbance occur until the County Coroner has made the necessary findings as to origin of the remains. Furthermore, pursuant to Public Resources Code Section 5097.98 (b), remains shall be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made. This is State Law, is also considered a standard Condition of Approval and as pursuant to CEQA, is not considered mitigation. Therefore, impacts in this regard are considered less than significant.

4.5.5 Mitigation Measures

The following mitigation measure is required to reduce potential impacts to unanticipated buried archaeological and cultural resources to less than significant:

CUL-1: Provision for Unanticipated Cultural/Archaeological Buried Resources: In the event that cultural resources are discovered during Project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease, and a qualified cultural/archaeologist specialist meeting Secretary of Interior standards shall be hired to assess the find. If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Project. Work on the other portions of the Project outside of the buffered areas may continue during this assessment period. Salvage operation requirements pursuant to Section 15064.5 of the CEQA Guidelines shall be followed, and the treatment of discovered Native American remains shall comply with State codes and regulations of the Native American Heritage Commission (NAHC). Any significant archaeological resources found shall be preserved as determined necessary by the Project archaeologist and offered to a qualified repository for curation. Any resulting reports will be submitted to the South Central Coastal Information Center.

4.6 ENERGY

This section describes the potential energy usage effects from implementation of the proposed Project for both construction activities as well as long-term operations. A report of estimated energy usage was prepared for the Project in September 2021 and is provided in Appendix B-1.

4.6.1 Regulatory Setting

Building Energy Efficiency Standards

The California Energy Conservation and Development Commission (California Energy Commission) adopted Title 24, Part 6, of the California Code of Regulations; energy Conservation Standards for new residential and nonresidential buildings in June 1977 and standards are updated every three years. Title 24 ensures building designs conserve energy by requiring the use of new energy efficiency technologies and methods into new developments. Currently, the California Energy Commission (CEC) Title 24 2016 Building Energy Efficiency Standards are in effect; they were updated in 2019 and the updates took effect on January 1, 2020. The 2019 Building Energy Efficiency Standards states that nonresidential buildings will use about 30 percent less energy compared to the 2016 standards due mainly to lighting upgrades.

Senate Bill 350

Senate Bill (SB) 350 (de Leon) was signed into law in October 2015 and established new clean energy, clean air, and greenhouse gas reduction goals for 2030. SB 350 establishes periodic increases to the California Renewables Portfolio Standard (RPS) Program with the target to increase the amount of electricity generated per year from eligible renewable energy resources to an amount that equals at least 33% of the total electricity sold annually to retail customers, by December 31, 2020. The SB 350 specifically calls for the quantities of eligible renewable energy resources to be procured for all other compliance periods reflecting reasonable progress in each of the intervening years to ensure that the procurement of electricity products from eligible renewable energy resources achieves 40 percent by December 31, 2024, 45 percent by December 31, 2027, and 50 percent by December 31, 2030.

Senate Bill 100

Senate Bill 100 (SB 100) was signed into law September 2018 and increased the goal of the California RPS Program to achieve at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045. SB 100 also includes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

CEQA Guidelines Section 15126.2(b)

The CEQA Guidelines identifies that if an analysis of the project's energy usage reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption use of energy, and mitigate for that usage. The CEQA Guidelines indicate that the analysis should include the project's energy use for all project phases and components, including transportation-related energy,

during construction and operation. Guidance on information that may be included in the analysis is provided in Appendix F of the CEQA Guidelines.

4.6.2 Environmental Setting

California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration [EIA] 2018). California consumed 292,039 gigawatt-hours (GWh) of electricity and 2,110,829 million cubic feet of natural gas in 2017 (Appendix B-1). In addition, Californians consume approximately 18.9 billion gallons of motor vehicle fuels per year (Federal Highway Administration 2019). The single largest end-use sector for energy consumption in California is transportation (39.8 percent), followed by industry (23.7 percent), commercial (18.9 percent), and residential (17.7 percent) (EIA 2018).

Most of California's electricity is generated in-state with approximately 30 percent imported from the northwestern United State and Canadian provinces (Alberta, British Columbia, Idaho, Montana, Oregon, South Dakota, Washington, and Wyoming) and southwest (Arizona, Baja California, Colorado, Mexico, Nevada, New Mexico, Texas, and Utah) in 2017. In addition, approximately 30 percent of California's electricity supply comes from renewable energy sources such as wind, solar photovoltaic, geothermal, and biomass (CEC 2018). Adopted on September 10, 2018, SB 100 accelerates the State's Renewables Portfolio Standards Program by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. Southern California Edison (SCE), the region's electricity supplier, reports that it expects to derive 50 percent of its power from eligible renewable sources by 2030. The Renewables Portfolio Standard (RPS), which is set by the state, includes eligible renewable sources such as solar and wind energy that SCE produces or purchases.

4.6.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. ENERGY: Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Discussion

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

Less Than Significant Impact. The Project would not require ground disturbances associated with excavation or grading. Minor demolition would be required. The majority of the work would be completed with hand tools or small pieces of equipment.

After construction, the proposed Project is expected to generate 19 new vehicle trips (13 inbound trips and 6 outbound trips) during the weekday AM peak hour according to the traffic analysis (Appendix E). During the weekday PM peak hour, the proposed Project is expected to generate 25 new vehicle trips (12 inbound trips and 13 outbound trips).

The Energy analysis in Appendix B-1 estimated the daily emissions based on the scope and sequence of construction activities, daily emissions were conservatively estimated using the most intensive mix of equipment over the 180-day construction period extending from June 2022 to November 2022. The common method is to calculate fuel demand based on the six phases of construction defined in California Emission Estimator Model (CalEEMod) 2020.4.0; demolition, site preparation, grading, building construction, paving and painting (i.e., architectural coating). However, for the purpose of determining maximum daily air emissions and annual greenhouse gas (GHG) emissions, three phases were used; demolition, building construction/improvements and architectural coating (i.e., painting). These data were used to conservatively estimate gasoline and diesel fuel demand during construction using the most equipment intensive operation as the basis for the calculations.

Construction is anticipated to generally require the following or a similar mix of equipment

- Air compressor, 78 horsepower at 0.48 load factor;
- Concrete/Industrial saws; 81 horsepower at 0.73 load factor;
- Crane (or similar heavy lift equipment); 231 horsepower at 0.29 load factor;
- Fork-Lift (2); 89 horsepower, 0.2 load factor;
- Rubber-tired dozer; 287 horsepower, 0.4 load factor; and
- Tractor/Loader/Backhoe (2), 97 horsepower, 0.37 horsepower.

Because this equipment mix would not be required daily throughout the duration of the Project, fuel consumption calculations likely overestimate actual diesel fuel demand. During operation, fuel demand associated with daily vehicle trips referenced above were estimated. Energy consumption (i.e., natural gas and electricity) estimated for operation of the San Marino Center post-construction were also considered in the analysis in Appendix B-1.

Table 4.6-1 identifies the estimated gasoline demand for construction workers for work occurring in 2022, as well as projected annual gasoline demand Projected for operation of the San Marino Center assuming a total of 312 daily trips and an average trip length of 16.6 miles.

Table 4.6-2 identifies the estimated diesel fuel demand for equipment operation in 2022.

Table 4.6-1: Construction Worker Gasoline Demand

2022	CO2E MT	Kg CO2e	Gallons
Worker Fuel	4.22	4,220	476
User Fuel	5.2	56,202	5,212

Table 4.6-2: Construction Equipment Diesel Demand

2022	CO2E MT	Kg CO2e	Gallons
Equipment Fuel	56.2	56,200	5,521

Project modifications to improve energy efficiency include but are not limited to window repair, replacement of HVAC systems and lighting upgrades. The Energy analysis in Appendix B-1 estimates that operation of the San Marino Center post-construction would generate an annual demand of 194,543 kBTU of natural gas and 117,636 kWh of electricity.

Energy use during construction would be temporary and construction equipment used would be typical of similar-sized construction projects in the region. In the interest of cost efficiency, construction contractors are not anticipated to utilize fuel in a manner that is wasteful or unnecessary. Therefore, Project construction would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and no construction-related energy impact would occur. The Project upgrades include installation of energy efficient components to reduce energy usage during operations. Therefore, impacts would be less than significant, and no mitigation measures are required.

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

Less Than Significant Impact. Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the City is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by the SCE and Southern California Gas Company.

Given the above, the proposed Project would have a less than significant potential to conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.6.4 Mitigation Measures

No mitigation measures are required.

4.7 GEOLOGY AND SOILS

4.7.1 Regulatory Setting

Alquist-Priolo Earthquake Fault Zoning

Earthquake fault zones were conceived in the Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act), passed in 1972 with the intent to reduce losses from surface fault rupture following the destructive 1971 San Fernando earthquake (magnitude 6.6), which was associated with extensive surface fault ruptures that damaged numerous structures.

The law requires the state geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist- Priolo Zones) - averaging about 0.25 mile wide - around the surface traces of active faults, and to publish appropriate maps that depict these zones. The maps are then distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. In general, construction within an Alquist-Priolo Zone requires a fault investigation be approved by the County prior to issuing grading and building permits. The Act seeks to prevent construction or major rehabilitation of structures used for human occupancy within 50 feet of an active fault.

An active fault, for the purposes of the Alquist-Priolo Act, is one that has ruptured in the last 11,000 years.

4.7.2 Environmental Setting

Regional Geologic Setting

The City of San Marino is located in the San Gabriel Valley in Los Angeles County, approximately 9 miles northeast of downtown Los Angeles. San Marino is bounded by the cities of Pasadena and South Pasadena to the north/northwest, the City of Alhambra to the west/southwest, the City of San Gabriel to the south, and the unincorporated communities of East San Gabriel and East Pasadena to the east (ARC 2019)

The area's topography generally slopes gently down to the south, descending from the San Gabriel Mountains, with a small group of hills in the northwestern (Oak Knoll) part of the city. The slopes generally rise north of Euston Road, Virginia Road, and Old Mill Road, and are incised with south-trending canyons and gullies and are heavily vegetated with native oak woodland wherever land is undeveloped. One channelized wash, Rubio Wash, runs from Robles Avenue (north of San Marino High School) south past the southern city limits (ARG 2020).

Soils

The Project site soils are classified by the US Dept. of Agriculture as Urban land-Azuvina-Montebello complex, 0 to 5 percent slopes. This type of soil is identified as urban uses constructed over remnant alluvium (USDA 2021).

Liquefaction

Liquefaction is a process whereby soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. There are no liquefaction zones in the city (CSM, Feb 2019, refer to maps in Appendix H). In addition, Project construction would comply with California Building Code, which requires that structures be designed and constructed to resist seismic hazards, such as liquefaction, through foundation design, making potential risks to life or property related to liquefaction less than significant.

Faulting

The City of San Marino is located in the southern California basin, a complex geological region that has a history of seismic activity due to the number of faults in the region. There are two active fault systems - the San Andreas and San Gabriel. There is also a system of faults associated with the transverse ranges.

The Raymond Hill Fault is an active fault with a known length of 12 miles, extending through the cities of Monrovia, Arcadia, Pasadena, San Marino, and into the Highland Park neighborhood of the City of Los Angeles. The fault traverses east-west through the City, and approximately 0.5 mile north of the SMC. Due to its active status, this has been identified as an Alquist-Priolo Hazard Zone.

Classified as a "left-lateral," the Raymond Hill Fault slip rate is estimated between 0.10 and 0.22 millimeters per year. The most recent surface rupture was during the Holocene era (within the past 10,000 years). It is estimated that the interval between ruptures is roughly 4,500 years. Although the exact nature of the slip has been debated, the fault produces an obvious south-facing scarp along much of its length. The steepness of the fault scarp that can be seen in both Arcadia and San Marino indicates that there has not been significant erosion recently, but depression along the fault trace suggests recent, small movements. The most recent activity on the Raymond fault was from the Pasadena earthquake in December 1988.

4.7.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. GEOLOGY AND SOILS: Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to				X

Division of Mines and Geology Special Publication 42.				
• Strong seismic ground shaking?			X	
• Seismic-related ground failure, including liquefaction?				X
• Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) 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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

Discussion

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- *Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*
- *Strong seismic ground shaking?*
- *Seismic related ground failure, including liquefaction?*
- *Landslides?*

Less than Significant Impact. The Project is located in Southern California, a seismically active area and susceptible to the effects of seismic activity include rupture of earthquake faults. The Project is not located on or near a Alquist-Priolo Earthquake fault. The closest known active earthquake fault

with a documented location is the Raymond Fault Zone located approximately 0.5 mile to the north, in Lacy Park. In addition, other relatively close active faults include the San Andreas fault located approximately 13.5 miles to the northeast, the Elsinore fault located approximately 21.4 miles to the southwest, and the Cucamonga fault located approximately 24 miles to the north.

All proposed improvements would comply with the latest seismic provisions of applicable building codes, designed to reduce impacts ~~to~~ from earthquakes.

The City of San Marino's *Local Hazard Mitigation Plan* (CSM, Feb 2019) identifies that the City is not subject to liquefaction.

The Project site and the surrounding area is flat; thus, there is no potential for landslides.

Overall, the impact is less than significant, and no mitigation is required.

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

Less Than Significant. Construction activities associated with the Project would not require earth moving to the extent that it would expose soil that would temporarily increase erosion susceptibility. Excavation for the Project only consists of shallow utility trenches. Therefore, there are no impacts.

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

No Impact. Refer to the discussion of Thresholds above for a discussion of hazards associated with liquefaction and landslide hazards. As noted, there is no potential for landslide or liquefaction.

Therefore, because no aspects of the proposed Project could increase the likelihood of landslides, lateral spreading, subsidence, liquefaction, there are no impacts.

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

No Impact. The subsurface soils primarily consist of urbanized compacted soil. There will be no impacts, and mitigation is required.

e) 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?

No Impact. The building would remain connected to the existing sewer system. The Project does not propose to install any septic tanks or alternative wastewater disposal systems. No impacts would occur.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant With Mitigation Incorporated. The Project will conduct minor utility excavation, and no paleontological resources are anticipated to occur. However, implementation of **Mitigation Measure CUL-1** describes procedures if unanticipated cultural resources are found. A qualified cultural/archaeological resource specialist typically also have training in paleontological resources, and/or be able to identify which paleontological resources are significant and engage additional professionals. Implementation of this mitigation measure will also reduce potential impacts to paleontological resources if discovered.

4.7.4 Mitigation Measures

No mitigation measures are required.

4.8 GREENHOUSE GAS EMISSIONS

An Air Quality/Greenhouse Gas Assessment for the Project was prepared in June 2021 (Appendix B).

4.8.1 Regulatory Setting

Since 1988, many countries around the world have made an effort to reduce GHG emissions since climate change is a global issue. Over the past 30 years, the United States, and the State of California, have enacted a myriad of regulations that have evolved over time aimed at reducing GHG emissions in transportation, building and manufacturing.

Assembly Bill 32

In 2006, the CA Legislature passed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 designed to further the goals established in EO S-3-05, which was an Executive Order signed in June 2005 by then CA Governor Arnold Schwarzenegger. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Further, in 2008, CARB adopted the Scoping Plan in accordance with Health and Safety Code, Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan undergoes updates as more data becomes available.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set new statewide GHG reduction targets, make changes to CARB's membership, increase legislative oversight of CARB's climate change–based activities, and expand dissemination of GHG and other air quality–related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

South Coast Air Quality Management District

The Project is within the SCAB, which is under the jurisdiction of the SCAQMD. California Resources Agency has adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, but contain no suggested thresholds of significance for GHG emissions. Instead, lead agencies are given the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. In 2008 the SCAQMD adopted quantitative significance thresholds for GHGs.

Rule 2700 of the SCAQMD currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.
- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

SCAQMD has established recommended significance thresholds for greenhouse gases for local lead agency consideration. The 2008 adopted SCAQMD threshold considers emissions of over 10,000 metric tons CO2E /year to be significant. However, the SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency. SCAQMD also published a five-tiered draft GHG threshold which includes a 10,000 metric tons of CO_2e per year for industrial projects and two options for non-industrial projects. Tier 3 is anticipated to be the primary tier by which the SCAQMD will determine significance for projects. The Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90-precent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to CEQA analysis. The 90-percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the SCAQMD's annual Emissions Reporting Program.

The current draft thresholds consist of the following tiered approach:

Tier 1	consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
Tier 2	consists of determining whether or not the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
Tier 3	consists of screening values, which the lead agency can choose but must be consistent. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant: - Industrial projects: 10,000 $MTCO_2e$ per year - Based on land use types: residential is 3,500 $MTCO_2e$ per year; commercial is 1,400 $MTCO_2e$ per year; and mixed use is 3,000 $MTCO_2e$ per year or - All non-industrial land use types: 3,000 MTCO2e per year
Tier 4	has the following options: - Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined - Option 2: Early implementation of applicable AB 32 Scoping Plan measures - Option 3: Year 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO2e/SP/year for projects and 6.6 MTCO2e/SP/year for plans;

	- Option 3, 2035 target: 3.0 MTCO2e/SP/year for projects and 4.1 MTCO2e/SP/year for plans
Tier 5	involves mitigation offsets to achieve target significance threshold.

Although not formally adopted, the SCAQMD has developed a draft quantitative threshold for all land use types of 3,000 metric tons CO_2E /year (Appendix B). Note that lead agencies retain the responsibility to determine significance on a case-by-case basis for each specific project.

Local jurisdictions, such as the City of San Marino, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. The City of San Marino is in the process of developing its Climate Action Plan (CAP), but does not yet have an approved CAP. Therefore, for the purpose of evaluating potential project related impacts, the SCAQMD threshold of 3,000 (Tier 3) annual metric tons is used herein due to the land use type.

4.8.2 Environmental Setting

Global Climate Change (GCC) refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2 (carbon dioxide), N_2O (nitrous oxide), CH_4 (methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radioactive heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as greenhouse gases (GHG). These gases are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the earth's average temperature would be approximately 61° Fahrenheit (F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

Since 1988, many countries around the world have made an effort to reduce GHG emissions since climate change is a global issue. Over the past 30 years, the United States, and the State of California, have enacted a myriad of regulations that have evolved over time aimed at reducing GHG emissions in transportation, building and manufacturing.

To reduce statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from refineries located in California. Gasoline is the most used transportation fuel in California with 15.5 billion gallons sold in 2017 and is used by light-duty cars, pickup trucks, and sport utility vehicles (California Department of Tax and Fee Administration 2018). Diesel is the second most used fuel in California with 4.2 billion gallons sold in 2015 and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles (CEC 2016). Both gasoline and diesel are primarily petroleum-based, and their consumption releases greenhouse gas (GHG) emissions, including CO2 and NOX. The transportation sector is the single largest source of GHG emissions in California, accounting for 41 percent of all inventoried emissions in 2016 (California Air Resources Board [CARB] 2018).

Local jurisdictions, such as the City of San Marino, have the authority and responsibility to reduce air pollution through its police power and decision-making authority.

For the purposes of Greenhouse Gas Analysis (Appendix B), the focus was on emissions of CO_2, CH_4, and N_2O because these gasses are the primary contributors to Global Climate Change (GCC) from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

4.8.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion

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

Less Than Significant Impact. The greenhouse gas emissions from Project construction equipment and worker vehicles are shown on Table 6 of Appendix B. The emissions are from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated at 2 metric tons of CO_2e per year. Annual CalEEMod output calculations are provided in Appendix A of Appendix B.

Operational emissions occur over the life of the Project. The operational emissions for the Project are 31 metric tons of CO_2e per year as shown in Table 7 of Appendix B. These emissions would not exceed the SCAQMD 3,000 metric ton annual threshold for non-industrial projects.

Therefore, the proposed Project's GHG emissions are considered to be less than significant, and no mitigation is required.

b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As stated previously, the applicable plan for the proposed Project is the SCAQMD's Tier 3 thresholds which used Executive Order S-3-05 goal as the basis for deriving the screening level. The California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following reduction targets:

- 2010: Reduce greenhouse gas emissions to 2000 levels
- 2020: Reduce greenhouse gas emissions to 1990 levels
- 2050: Reduce greenhouse gas emissions to 80 percent below 1990 levels.

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide emission cap which was phased in starting in 2012.

Therefore, as the Project's emissions meet the threshold for compliance with Executive Order S-3-05, the Project's emissions also comply with the goals of AB 32. Additionally, as the Project meets the current interim emissions targets/thresholds established by SCAQMD, the Project would also be on track to meet the reduction target of 40 percent below 1990 levels by 2030 mandated by SB-32. Furthermore, all of the post 2020 reductions in GHG emissions are addressed via regulatory requirements at the State level and the Project will be required to comply with these regulations as they come into effect.

The City of San Marino is in the process of developing its Climate Action Plan (CAP), but does not yet have an approved CAP. Therefore, for the purpose of evaluating potential Project-related impacts, the SCAQMD threshold of 3,000 (Tier 3) annual metric tons is used herein. The Project is therefore in compliance with the Tier 3 annual metric tons guidelines.

Therefore, the impacts are less than significant, and no mitigation is required.

4.8.4 Mitigation Measures

No mitigation measures are required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Regulatory Setting

The City of San Marino has a mutual aid agreement with nearby fire departments from Burbank, Glendale, and Los Angeles County Fire Department (LACoFD). The Cities of Burbank or Glendale will respond to hazardous materials incidents within the City of San Marino. In the event of a hazardous materials incident, either City would provide a qualified hazardous materials response unit. In case a Burbank or Glendale unit is not available, the County of Los Angeles would be utilized to provide hazardous materials units to the City. The San Marino Police Department (SMPD) is responsible for maintaining the free flow of traffic through the City's transportation corridors and providing for the safety of the public. In the event of a hazardous materials spill/release, it would be the SMPD's responsibility to cordon off the area limiting access to only the appropriate emergency response personnel. In addition, SMPD personnel would be responsible for any necessary evacuations (CSM Feb 2019).

The air toxics provisions of the Clean Air Act (CAA) require EPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112 of the CAA, EPA establishes National Emission Standards for Hazardous Air Pollutants (NESHAP). The list of hazardous air pollutants (HAP), or "air toxics", includes specific compounds that are known or suspected to cause cancer or other serious health effects.

Asbestos was one of the first hazardous air pollutants regulated under the air toxics program. Three of the major health effects associated with asbestos exposure are lung cancer, mesothelioma, and asbestosis. On March 31, 1971, EPA identified asbestos as a hazardous pollutant, and on April 6, 1973, EPA promulgated the Asbestos NESHAP, currently found in 40 CFR Part 61, Subpart M. The Asbestos NESHAP has been amended several times, most comprehensively in November 1990. In 1995, the rule was amended to correct cross-reference citations to other federal and EPA rules governing asbestos.

SCAQMD Rule 1403

The SCAQMD specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials (ACWM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

4.9.2 Environmental Setting

A hazardous material is a substance that is toxic, flammable/ignitable, reactive, or corrosive. Extremely hazardous materials are substances that show high or chronic toxicity, carcinogenic, bioaccumulative properties, persistence in the environment, or that are water reactive. Improper use, storage, transport, and disposal of hazardous materials and waste may result in harm to humans, surface and groundwater degradation, air pollution, fire, and explosion.

Typical equipment which may contain fuel or hydraulic oil that may be used during construction could include a crane, a forklift/pallet jack, jackhammers, and demolition saws.

Additionally, the SMC was constructed in 1952. Asbestos was used extensively in building construction from the early 1940s through the 1970s as highly-effective and inexpensive fire-retardant material and thermal and acoustic insulator. Asbestos is most commonly found as thermal insulation on pipes, but also may be found in certain types of floor and ceiling tiles. There are two types of asbestos: "friable" and "non-friable." Friable asbestos generally contains more than 1 percent asbestos by weight or area, and can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand, which releases fibers. Non friable asbestos generally contains more than 1 percent asbestos but cannot be pulverized under hand pressure and generally does not release asbestos fibers.

In November 2021, the City performed a "Comprehensive Hazardous Materials Survey Report" (Vista, November 2021), which is on file with the City Public Works Department. This report will be integrated into the construction documents and contractor compliance.

The results of the survey and testing indicate that hazardous or regulated materials are present at the Project site including asbestos and lead based paint. Asbestos was found to occur in various materials typically used at the time of the building's construction including but not limited to: flooring, sealing mastic in various locations and various areas of the plaster walls and ceiling. Removal of these hazardous and/or regulated materials is part of the Project construction. The City is required to comply with all regulations related to disturbance and/or removal operations of hazardous materials. State law requires that asbestos-containing materials, or those assumed to contain asbestos, must be performed by a registered and State licensed asbestos removal contractor in accordance with Title 8 of the California Code of Regulations, Section 1529 (8 CCR 1529).

4.9.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X	~~X~~	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		X		

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		X		
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				X

Discussion

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

Less than Significant Impact. Construction of the proposed Project would involve the use of construction-related chemicals. These include but are not limited to hydraulic fluids, motor oil, grease, runoff, and other related fluids and lubricants. The construction activities would involve the disposal and recycling of materials, trash, and debris. The City's *Local Hazards Mitigation Plan* addresses potential hazards in the City and identifies activities to reduce risks and damages associated with hazards, including disposal of hazardous materials due to human activities.

In general, operations are not anticipated to handle hazardous materials, aside from routine cleaning supplies. The proposed Project would comply with local, state, and federal requirements for proper storage and handling of hazardous materials, including development of a hazardous materials business plan if required. In addition, the Project would implement Best Management Practices to minimize impacts in the event of a spill or release of hazardous materials used on site. These include, but are not limited to routine cleaning, inspection, and maintenance, development of procedures to mitigate spills, provide signage in construction areas, proper storage and handling procedures, and providing secondary containment of liquid materials. Activities inside the building are not anticipated to require the transport, use, or disposal of hazardous materials, therefore, the impact of operations is less than significant.

With mandatory regulatory compliance with federal, State, and local laws (as described above), potential hazardous materials impacts associated with construction of the Project would be less than significant and no mitigation is required.

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

Less than Significant Impact With Mitigation Incorporated. Construction and operation of the Project would involve the routine transport, use, or disposal of hazardous materials on- and off-site.

Construction activities would require the temporary use of hazardous substances, such as fuel, lubricants, and other petroleum-based products for operation of construction equipment as well as oil, solvents, or paints. As a result, the proposed Project could result in the exposure of persons and/or the environment to an adverse environmental impact due to the accidental release oil, solvents, or paints. However, the transportation, use, and handling of these materials would be temporary and would coincide with the short-term Project construction activities. Further, these materials would be handled and stored in compliance with all with applicable federal, state, and local requirements, any handling of hazardous materials would be limited to the quantities and concentrations set forth by the manufacturer and/or applicable regulations, and all hazardous materials would be securely stored in a construction staging area or similar designated location within the Project site. In addition, the handling, transport, use, and disposal of hazardous materials must comply with all applicable federal, state, and local agencies and regulations, including the Department of Toxic Substances Control; Occupational Health and Safety Administration (OSHA); Caltrans; and the County Health Department - Hazardous Materials Management Services.

Compliance with local, state, and federal regulations would minimize short-term construction impacts associated with the handling, transport, use, and disposal of hazardous materials would be less than significant.

During asbestos removal, the City and the contractor is required to comply with regulations that include but are not limited to, and which are outlined in the "Comprehensive Hazardous Materials Survey Report" (Vista, November 2021), which is on file with the City Public Works Department:

- All disturbance and/or removal operations of asbestos containing materials (ACMs), including Assumed ACMs must be performed by a Cal/OSHA registered and State licensed asbestos removal contractor in accordance with Title 8 of the California Code of Regulations, Section 1529 (8 CCR 1529). Notification must be provided to the Division of Occupational Safety and Health (Cal/OSHA) 24 hours prior to commencing such activities in accordance with 8 CCR 5203. All disturbance and/or abatement operations should be under the direction of a California Certified Asbestos Consultant.

  Should the removal of identified asbestos-containing materials involve at least 100 square feet then a 14 calendar day written notification to the South Coast Air Quality Management District (SCAQMD) in accordance with Rule 1403, and a 24 hour written notice to Cal/OSHA prior to the initiation of such activities are required. Notification to employees and contractors working within the building should be made in accordance with the California Health and Safety Code, Section 25915 *et.seq.,* and Proposition 65.

- All activities involving potential and identified lead-containing surfaces should be performed in accordance with California Health & Safety Code sections 17920.10 and 10525, 10525.7, Title 8, California Code of Regulations (CCR), Section 1532.1. In addition, all activities involving identified lead-based paints (LBP) must be performed in accordance with Title 17, CCR, Division 1, Chapter 8, Sections 35001 through 36100, and 40 CFR 745 which proscribe the use of California Department of Public Health (CDPH) or Federal EPA certified firms, workers, work practices, and other requirements.

  Written notification to Cal/OSHA must be accomplished should LBP activities involve equal to or more than 100 square feet or 100 linear feet of removal in accordance with the requirements of 8 CCR 1532.1. Written notification to CDPH may be required.

  Any welding, cutting or heating of metal surfaces containing surface coatings should be conducted in accordance with 8 CCR 1537 Welding, Cutting, and Heating of Coated Metals. This standard requires surfaces covered with toxic preservatives, and in enclosed areas, be stripped of all toxic coatings for a distance of at least 4 inches, in all directions, from the area of heat application prior to the initiation of such heat application, or 8 CCR 1536 Ventilation Requirements for Welding, Brazing, and Cutting.

Therefore, because the City and its contractors are required to comply with federal, State, and local regulations, impacts associated with the handling, transport, use, and disposal of hazardous materials and the release of hazardous materials into the environment would be less than significant.

However, due to the age of the building and the potential for hazardous wastes to be discovered during construction that was not identified in the hazardous waste survey, **Mitigation Measure HAZ-1,** located at the end of this section, will ensure that potential impacts from hazardous waste that was not identified in the report are less than significant by stopping work and having the suspect material evaluated as a potentially hazardous material.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact With Mitigation Incorporated. The proposed Project is adjacent to the Huntington Middle School. And while the contractors will be handling all equipment and materials in accordance with State, federal and local regulations which will minimize potential emissions, implementation of **Mitigation Measures HAZ-1** and **HAZ-2,** located at the end of this section, will ensure that potential impacts from potential emissions and construction debris are minimized to less than significant.

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

Less Than Significant Impact. Section 65962.5(a)(1) requires that Department of Toxic Substance Control (DTSC) "shall compile and update as appropriate, but at least annually, and shall submit

to the Secretary for Environmental Protection, a list of all the following: ....(1) all hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code ("HSC")." The hazardous waste facilities identified in HSC § 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This is known as the "Cortese List." This is a very small and specific subgroup of facilities and they are not separately posted on the DTSC or Cal/EPA's website. The following databases that meet the "Cortese List" requirements were reviewed for this Project.

Envirostore Database. There are no sites listed in the Envirostore Database within 1,000 feet of the Project site.

Geotracker Database. Geotracker is the SWRCB's database that manages potential hazardous sites to groundwater. There are no sites listed in the Geotracker Database within 1,000 feet of the Project site.

Based on the result of the database review, the Project site has not been identified in accordance with Section 65962.5 of the Government Code.

The site is located within the San Gabriel Valley Groundwater Basin. Portions of the San Gabriel Valley Groundwater Basin have been listed on the National Priority List (NPL), or Superfund Site, for volatile organic compound (VOC) impacted groundwater. These areas of impacted groundwater are referred to by the EPA as "Operable Units." The Operable Units are contaminated with chlorinated solvents, namely trichloroethene (TCE) and tetrachloroethylene (PCE), which were historically used by the commercial and industrial facilities located in these areas.

The Project site is located near Area 3 Operable Unit, but not within any known groundwater plumes (refer to Exhibit 4-1 located at the end of this section). In addition, and the Project site is not listed on the EPA database as being a potentially responsible party. Based on this information, there is a low likelihood that elevated concentrations of VOCs are present in groundwater beneath the site or that the site has contributed to the regional groundwater issue.

The scope of work entails working above the ground surface on the interior and exterior of an existing community center. Any exterior work will be focused on the stucco, window and door replacement, tree protection measures by way of protective screens, new landscaping and hardscape work. The hardscape work will only required the removal and reestablishing of approximately 3 inches of the top soil. The Project does not include trenching or boring into the earth in order to capture groundwater. As a result, the Project would not contribute constituents to the Superfund site, therefore, there will be a less than significant impact, and no mitigation is required.

e) For a project located within an airport land use plan or, where such a plan had not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. No airports exist within 2 miles of the Project site. There would be no impact, and no mitigation is required.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact With Mitigation Incorporated. No construction equipment or operations would necessitate lane closures along Huntington Drive. As a result, construction of the proposed Project would have no impact on City emergency response or evacuation plans.

The Crowell Library, located adjacent to the SMC, also has an evacuation plan that allows patrons easy access to its parking lot and exit onto West Drive.

The Huntington Middle School and SMC have shared the same parking lot for decades. To date there has been no emergency documented that caused a conflict of the parking lot or the buildings. Because the City desires to offer the SMC for larger venues as outlined in Table 2.2-1, and the parking lot is a shared resource, there may be an unknown future event that may conflict with the SMC and the Huntington Middle School's use of the parking lot and/or the buildings. For example, the school may use the parking lot to evacuate students to a safe distance in the event of an emergency inside the school grounds, such as a fire or earthquake. During Project construction, construction equipment and personnel may occasionally be staged in the parking lot during various phases of construction. In the event the school would need to utilize the parking lot for an evacuation during construction, implementation of **Mitigation Measure HAZ-2,** located at the end of this section, will ensure potential impacts to the school's evacuation plan are reduced to less than significant.

During Project operations, SMC patrons would be utilizing the parking spaces within the shared parking lot. In the event the school needed to utilize the entire parking lot for an evacuation or evacuation staging, or conversely, the SMC patrons needed to utilize the parking lot for an evacuation of the SMC, both school personnel and SMC patrons may be required to relocate their vehicles and/or coordinate emergency personnel and resources. Implementation of implementation of **Mitigation Measure HAZ-3,** located at the end of this section will also ensure that both the SMC and the Huntington Middle School have appropriate communication during emergencies that require evacuation.

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

No Impact. The Project is located in an urban area, and there are no wildlands in the vicinity of the Project. The new facilities will be constructed in accordance with all local, State and federal regulations regarding fire safety devices, including but not limited to fire sprinklers in the building. Therefore, there is no impact, and no mitigation is required.

4.9.4 Mitigation Measures

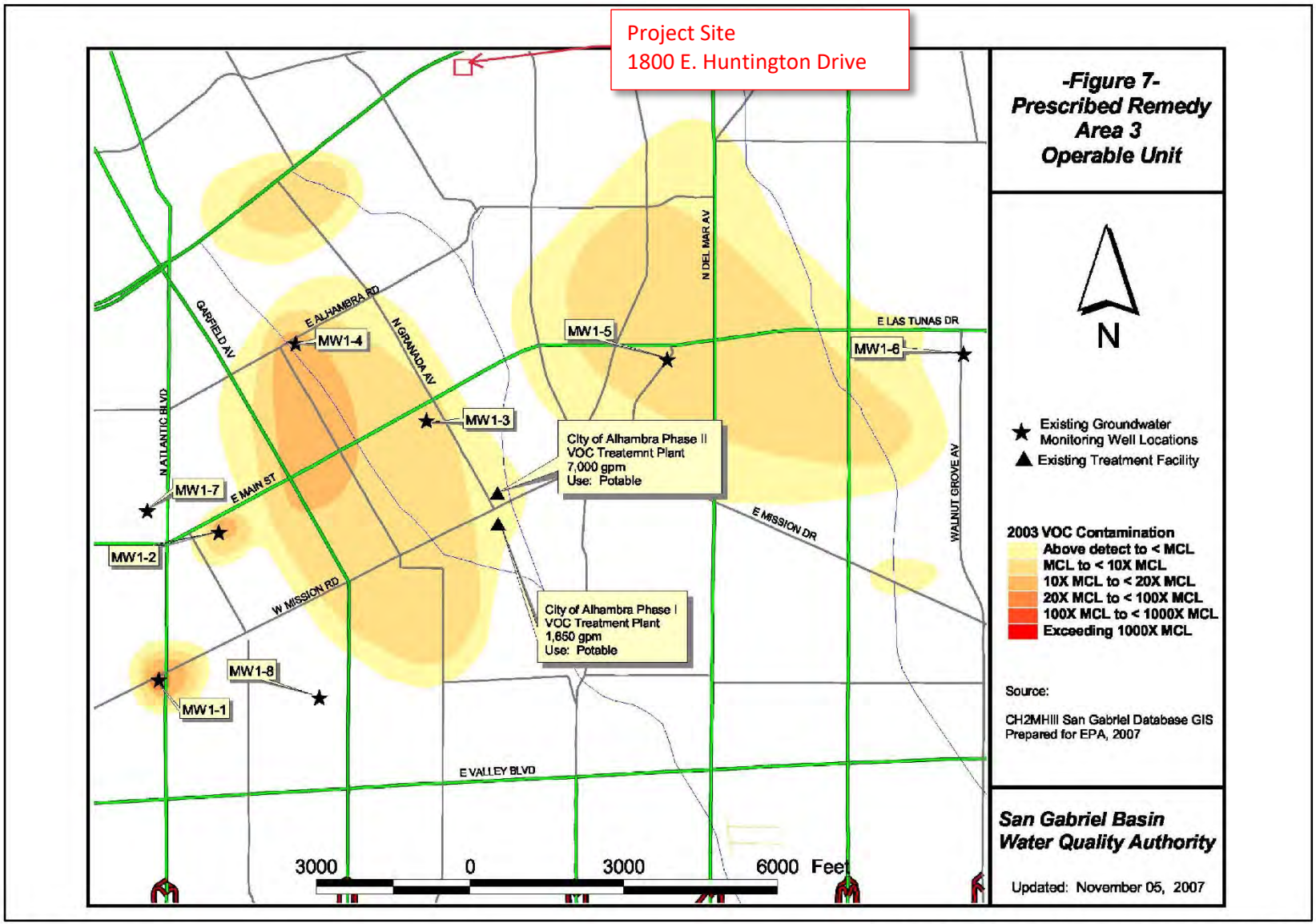
The following mitigation measures are required to reduce potential impacts to less than significant:

HAZ-1: Unanticipated Encounters With Hazardous Waste: Following the abatement of hazardous materials by contractors licensed to remove said materials, should materials similar to those identified in "Comprehensive Hazardous Materials Survey Report" (Vista, November 2021), or if other forms of suspect hazardous materials are discovered during the remaining work activities, maintenance personnel and/or contractors must immediately cease work activities which may initiate an exposure episode, and notify the City Public Works Department manager. All such materials should be assumed to be hazardous and handled accordingly until properly tested and assessed.

HAZ-2: Construction Safety and Evacuation Plan: Prior to the start of Project construction, the City shall designate construction equipment and materials safety and staging areas for the City employees and contractors to follow during construction. The staging area plan shall be prepared collaboratively with and/or approved by the San Marino Unified School District and Huntington School personnel. Additional items to be addressed in the plan shall include but not be limited to safety barrier locations, identifying a clear walking path for students, posting hazard signs, and identifying a construction communication protocol between City and School staff.

Additionally, the plan shall address the evacuation protocol for the school, and procedures that the City and contractor must adhere to in the event of a school evacuation during SMC construction.

HAZ-3: Shared Evacuation Plan – Operations. The City shall work with the San Marino Unified School District and Huntington School to create an evacuation plan that addresses procedures if an emergency occurs that effects both facilities, as well as emergency communication protocols when an emergency would impact the parking lot for both facilities.



SAN MARINO CENTER IMPROVEMENT PROJECT

Area 3 Operable Unit

Exhibit 4-1

FLMT CONSULTING

Not to Scale

Source: Los Angeles County

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Regulatory Setting

The Los Angeles Regional Water Quality Control Board also requires that dischargers whose construction projects disturb one (1) or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD). The SWPPP would include BMPs to be implemented during and after Project construction to minimize erosion and sedimentation of downstream watercourses. Only minor utility trenching is proposed for the Project.

4.10.2 Environmental Setting

The Project site is located within the Los Angeles River Watershed (HCU8). The Los Angeles River Watershed is one of the largest in the Region at 824 square miles; the river is 55 miles long. It is also one of the most diverse in terms of land use patterns. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The rest of the watershed is highly developed.

The Project lies within the Arroyo Seco subwatershed of the Los Angeles River, which stretches from the San Gabriel Mountains to downtown Los Angeles, and drains into the Los Angeles River at the confluence in Lincoln Heights.

Floodplains

The Project site does not contain any natural drainages or waterways. The Flood Insurance Rate Map issued by the Federal Emergency Management Agency (FEMA) indicates that the Project site is located within Zone X / “shaded” (Map 06037C1675F). Zone X is defined as an area of moderate and minimal flood risk. Shaded areas are characterized as moderate risk within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percentannual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee.

4.10.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:				
• result in substantial erosion or siltation onsite or offsite;				X
• substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;				X
• create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				X
• impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation??				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

Discussion

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

Less Than Significant. The Project is to improve and operate an existing building and does not involve grading that would impact surface waters. No changes or improvements are planned to the existing on-site stormwater flow or flow direction. Ground disturbance consists of limited, minor utility trenching, less than 1 acre, therefore, no SWPPP is required. The impact is less than significant, and no mitigation is required.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant. The Project is to improve and operate an existing building and does not impact groundwater supplies. Potable and non-potable water usage is not anticipated to increase above historic existing levels after completion of the Project. The impact is less than significant, and no mitigation is required.

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

- *result in substantial erosion or siltation onsite or offsite;*
- *substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;*
- *create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
- *impede or redirect flood flows?*

No Impact. The Project is to improve and operate an existing building on a paved site. No changes to the existing on-site drainage patterns are proposed, nor are there any natural drainages on site. Additionally, the Project will not create new impervious surfaces. There will be no impacts, and no mitigation is required.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. According to the FEMA flood map, the Project site is located within Zone X / "shaded" (Map 06037C1675F), outside the 100-year floodplain, therefore is not in a flood hazard zone. The proposed Project is located inland, more than 40 miles northeast of the Pacific Ocean, and therefore not subject to a tsunami. There are no bodies of water in the vicinity of the site where the oscillation in the water level of a lake or partially enclosed body of water could impact the

site; therefore, the site is not located in or near any seiche zone. There are no impacts, and no mitigation is required.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The proposed Project is to improve an existing building that is used for recreational purposes. There will be no grading or changes in the existing grading, drainage patterns or existing use.

4.10.4 Mitigation Measures

No mitigation measures are required.

4.11 LAND USE PLANNING

4.11.1 Environmental Setting

The Project is located within the City limits. The Project proposes to improve an existing City building that is used for recreation. The Project site is zoned R-1, Residential. According to Section 23.02.01 of the San Marino Municipal Code, Recreational and child care activities may be conducted by the City of San Marino on properties in residential zones that are owned by the City.

4.11.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	X		~~X~~	

Discussion

a) Would the project physically divide an established community?

No Impact. The Project proposes to improve an existing City building to continue use as a community center. No zoning or land use revisions are proposed that would divide the community. No impacts would occur, and no mitigation is required.

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

Potentially Significant. The Project's Land Use Designation is Very Low Density Residential. In 1949, the San Marino Women's Club requested and received approval from San Marino City Council because the parcel was zoned for residential use, and the intended use of a community center and building setbacks did not fit in with the club's plans for the property. The Project will not change the land use or use of the building as a public gathering space as it has existed for decades. Moreover, according to Section 23.02.01 of the San Marino Municipal Code, Recreational and child care activities may be conducted by the City of San Marino on properties

in residential zones that are owned by the City. Therefore, the Project is consistent with the City's Land Use designation.

The City's General Plan and Circulation Element identifies Goals, Policies and Implementation measures that guide the City's actions. "Goals" represent a synthesis of input from those who live and work in the City of San Marino and define desired General Plan outcomes. "Policies" provide the overall direction for choosing among alternative courses of action necessary to achieve the Goals while also providing a measure of flexibility needed to adapt the action to changes over the life of the General Plan. "Implementation Measures" are specific, discreet actions the City may take to achieve the future conditions reflected in the General Plan element. Implementation Measures define the municipal work program for providing transportation improvements needed to meet Goals identified in the General Plan element, consistent with the element's policies.

When the Project is evaluated against the City's goals and objectives of its General Plan and Circulation Element, the Project is generally consistent with the City's Vision Statement, identified in the following excerpt from the General Plan:

> *The city government embraces the values of the community, and recognizes the need to make our City more attractive, more desirable, and more responsive to the changing needs of its citizens. Decision makers are accessible to residents. Although the City adapts to change in a deliberate way, its intent is to satisfy residents' needs while protecting its financial resources.*

Table 4.11-1 at the end of this section provides an evaluation of Project consistency with the specific Goals and Policies identified in the Circulation Element and General Plan that have been adopted for the purpose of avoiding or mitigating an environmental effect. For the purposes of Table 4.11-1, only those Goals, policies and implementation measures that are applicable to the Project approvals are identified.

In summary, Table 4.11-1 identifies the following:

- **Circulation Element:** Consistent.

- **General Plan - Land Use Chapter**
  - Section One - Land Use Designations - Consistent
  - Section Three – Preservation - **Inconsistent**

- **General Plan – Community Services Chapter**
  - Section One – Recreational Services: Consistent

- **General Plan – Safety Chapter**
  - Section Four – Noise: Consistent

In general, the Land Use Chapter, which includes Section Three – Preservation, identifies the following overarching guiding principals for its Goals, Policies and Implementation Measures:

1. *Maintain the residential character of San Marino.*
2. *Protect the single-family home pattern of development in San Marino neighborhoods.*

3. *Protect existing lot sizes and discourage lot subdivisions that are incompatible with the neighborhood in which they are located.*
4. *Support unique commercial areas - business activities should meet the needs of local residents while recognizing that some businesses are attractive regionally.*
5. *Perpetuate a healthy, but contained and limited, commercial environment as a service and convenience to San Marino residents, without detrimental encroachment upon the single-family areas of the community.*
6. *Accommodate future needs for municipal facilities.*
7. *Protect existing and provide for more recreational space for residents.*
8. *Cooperate with The Huntington and support the Old Mill as local cultural resources.*
9. *Ensure high quality design characteristics of existing and proposed structures in San Marino.*
10. *Ensure that new development is compatible with established neighborhoods.*
11. *Preserve significant historic properties on the State Register and National Register.*
12. *Maintain the current standard of high-quality and well-maintained properties.*
13. *Maintain reasonable buffers between residential neighborhoods and commercial uses in the City.*
14. *Establish policies for on-site parking for all uses and allow for adequate alternative parking sites for commercial uses.*
15. *Protect property values.*

Therefore, the Project is consistent with the overarching guidelines, except for No. 11 which is the preservation of significant historic properties on the State Register and National Register.

Additionally, the City's General Plan was prepared prior to the City's acquisition of the SMC. Therefore, the historical and cultural land uses, goals and policies contained in the General Plan were identified only for The Huntington Library, Art Collections, and Botanical Gardens, The Old Mill, and Lacy Park, but were not identified for the SMC. Therefore, the General Plan, Land Use Chapter Section Three – Preservation does not list the SMC as being among the buildings in the City that are listed on the Federal, State, or local registers.

The Land Use Chapter, Section Three – Preservation identifies the following City process with respect to historic properties in the City:

> *The City has an intensive design review process and has adopted residential design guidelines. These include detailed text and illustrations intended to ensure the compatibility of overall architecture as well as architectural detailing with existing development. Currently, a design review committee appointed by the Council reviews development plans to ensure compatibility with the existing historic fabric of San Marino neighborhoods. Alterations to property visible from public view as well as all new construction are scrutinized.*

The City's review process for its citizens is outlined in Chapter XXIII, Article 18 and is designed to work with property owners of historic properties to encourage the retention of the character of the structure while bringing the structure up to current codes and in accordance with the Secretary's Standards. Specifically, Chapter XXIII, Article 18 states it is designed to "*promote the public health, safety, and general welfare by providing for the identification, designation,*

protection, enhancement, and ongoing use of historical resources that represent the City's cultural, architectural, social, economic, and political heritage."

As discussed in Section 4.5, the SMC is considered a City Landmark. Chapter XXIII, Article 18 of the San Marino City Code, Section 23.18.03 (A) states: "*Automatic Designation: Any property within the City that is listed in the National Register of Historic Places or the California Register of Historic Places is automatically designated as a historic landmark for purposes of this article*." The California OHP identifies the SMC as being listed on the California Register through its listing on the State's BERD.

Chapter XXIII, Article 18, Section 23.18.07 of the San Marino City Code also identifies that no alteration, restoration, rehabilitation, construction, removal, relocation, or demolition of any historic landmark shall occur unless the City has first issued a Certificate of Appropriateness (Certificate) or Certificate of Economic Hardship. Section 23.18.08(C) states that the Planning Commission must approve the Certificate of Appropriateness if more than minor modifications are proposed that are beyond the authority of the Planning and Building Director to issue such Certificate. However, the Planning Commission must make the following findings to issue a Certificate of Appropriateness:

> *a. The project will not cause a substantial adverse change in the significance of a historic landmark within the meaning of the California Environmental Quality Act as determined by the commission and the Council;*
>
> *b. The project is consistent with the provisions of this article; and*
>
> *c. The project is consistent with the Secretary's Standards and any applicable design guidelines adopted by the City.*

Because the SMC is a public building and a historic structure, the City conducted extensive outreach for the Project beginning in January 2018 when the City Recreation Commission began holding public discussions regarding re-envisioning the City's recreation program. In 2018, the City Council adopted a strategic plan that identified developing a plan for the future of the SMC and appointed a "Blue Ribbon Committee" to evaluate the recreational programming. In August 2019, conceptual plans were developed for the SMC. Between August and September 2020, the City surveyed the community regarding the needs and appearance of the SMC. One of the survey questions asked the community if the City should restore the original 1950s exterior architecture or remodel it to match other adjacent buildings. Of the 209 responses received, the results indicated:

- Restore 1950 's 79
- Match Crowell Library 95
- Match Barth Athletic Center 4
- Do something different 10
- No response 21

The result of the outreach was that nearly equal portions of the community supported retaining the existing design or supported a more modern look. Given that there was no clear community consensus, the City Council, after deliberations, determined that redesigning the SMC to more closely align with the architectural style of the Crowell Public Library would more closely align

with the overall City's vision, "to make our City more attractive, more desirable, and more responsive to the changing needs of its citizens." An architect was retained to provide the current plans.

Therefore, while the City did conduct extensive outreach and the Project does align with the overall vision, the Project does not align with the overall goal to preserve the historical structures in San Marino. Therefore, the Project impact is **Potentially Significant**.

Additionally, the Project is not consistent with Chapter XXIII, Article 18, Section 23.18.07 findings for the Planning Commission to make to issue a Certificate of Appropriateness when renovating historic buildings. Therefore, the Project impact is **Potentially Significant.**

4.11.3 Mitigation Measures

Potential mitigation measures to reduce the impact to less than significant would be the same as discussed in Section 4.5.4 and include re-designing the Project to a design that is compliant with the Secretary's Standards. Currently, no mitigation measures are proposed to reduce impacts to less than significant.

Table 4.11-1: General Plan Consistency Analysis

General Plan Goal or Policy	Project Consistency Analysis
Circulation Element	
San Marino Entry Statements ***Policy 1.*** *The City shall develop a design for entrance treatments to the City and install them in priority order in accordance with the hierarchy of streets established in the functional classification map, as resources permit. The entrance treatments shall be designed to communicate the message to drivers entering the City that San Marino is a residential community and that driving habits should reflect that fact.*	*Consistent.* The Project site is not considered a City entry point, but is located along Huntington Drive, a parkway road and a main entry road to the City of San Marino, approximately 1.4 miles west of the City boundary. The Project site is generally situated in a residentially-zoned neighborhood, within a pocket of public service buildings, as they have existed for decades, including the Crowell Library, the SMC (Project), Huntington Middle School, School District office, and the Valentine Elementary School. And though the Project is not located at the entrance to the City limits, the Project attempts to embody the spirit of Policy 1 by envisioning an aesthetically similar group of public use buildings to give visitors a residential community feel in the otherwise residential neighborhood that surrounds the Project.
Functional Classifications of Roadways ***Policy 11****. Maintain and enhance the character of Huntington Drive as a Parkway and as the main commercial/civic center of San Marino, thereby strengthening support for these commercial areas, through landscaping and pedestrian amenities in keeping with the residential character of the community.*	*Consistent.* Huntington Drive will remain as a Parkway with the Project. The redesign of the building from its 1950s style to the "Spanish Mediterranean" style that is more closely matched with the Crowell Library and Huntington Middle School is intended to enhance the character of Huntington Drive by identifying it architecturally as being associated with the main commercial/civic center of San Marino.
Neighborhood Traffic Control Plans ***Policy 13:*** *Develop and implement neighborhood traffic control plans which will reduce the speed and volume of traffic on residential streets to acceptable levels.*	*Consistent.* The Project's Traffic Impact Study determined that the Project would not contribute to additional traffic in the vicinity to the levels that would require traffic mitigation measures.
Policy 17: *Improve safety at school drop-off areas and employ appropriate traffic control measures in the vicinity of schools to maximize safety for school children walking or bicycling to/from school.*	*Consistent.* The Project includes implementation of Mitigation Measure HAZ-1 to address safety of the school-aged pedestrians during construction.
Public Transportation ***Policy 18:*** *The City shall work with public transit agencies to ensure that transit lines are routed on streets in accordance with the policies of [the] Circulation Element*.	*Consistent.* The Project occurs on a major street where transit is located.

General Plan Goal or Policy	Project Consistency Analysis
Policy 22. *The City shall continue to provide para-transit (Dial-A-Ride) services to residents, to the extent that resources allow.*	*Consistent.* The City provides a Dial-A-Ride service for San Marino residents who are 60 years and older or for those under 60 years with a physician-certified disability that prevents the use of regular public transit. To use this service, you must apply for membership. The Project includes implementation of PS-4 to encourage the use of paratransit services such as Dial-A-Ride services.
Non-Motorized Transportation	
Policy 25: *In areas of the City, where commercial or public facilities are located, the City shall implement measures to enhance the pedestrian and bicycle environment, to attempt to slow passing vehicular traffic, and to ensure handicapped accessibility in accordance with the requirements of the Americans with Disabilities Act.*	*Consistent.* The Project is located along Huntington Drive, near West Drive. The Huntington/West intersection contains ADA-compliant cross-walks that are clearly marked, and in which the signals are pedestrian activated, and where there are ADA compliant ramps.
Policy 26: *Install pedestrian-activated signals, where appropriate, and crosswalks to provide safe, adequate pedestrian accessibility for shopping areas and residences.*	
Transportation Demand Management	
Policy 36: *The City shall encourage its residents and employees to utilize alternative modes of transportation such as buses, light rail transit, carpools, Dial-A-Ride vehicles, bicycles and walking and shall take measures to ensure that these alternate modes are available in the City.*	*Consistent.* The Project includes implementation of Mitigation Measure PS-4 that encourages the use of alternative transportation methods.
Policy 37: *The City shall encourage Transportation Demand Management programs as a mechanism to reduce parking demands in the City.*	*Consistent.* The Project includes implementation of Mitigation Measure PS-2 and PS-4 that seek to manage parking for large events and encourage ride share opportunities.
General Plan - Land Use Chapter	
Section One – Land Use Designations	
Residential Land Uses	
Objective L.2 Very Low Density Residential (2-4 d.u./acre)– Provide residential area districts with large lots in traditional neighborhood patterns for single-family residential use	*Consistent.* The SMC, located in a Very Low Density Residential Zone, was constructed in the 1950s after the San Marino Women's Club received special approval from the City at that time to construct a community center. The City purchased the building in 2005. City Code Section 23.06.01(D) allows for public buildings in residential zones provided that the use is not obnoxious or detrimental to the welfare of the community. The Project seeks to make improvements to the building, and this Initial Study has determined that

General Plan Goal or Policy	Project Consistency Analysis
	there would be no detrimental impact to the welfare of the community.
Objective L.5 Neighborhood Character – Preserve the character of existing neighborhoods. ***Policies:*** *Place limits on mass, scale, and site placement of new construction and additions.* *Maintain residential design guidelines that require compatibility with the neighborhood, while still allowing for design choice.* *Prohibit parking of vehicles in front yards, except as permitted for short-term parking in driveways.* *Encourage parking of vehicles in garages*	*Consistent.* The SMC is an existing public building constructed in the 1950s in a residential zone. The building is adjacent to the Crowell Library, the Huntington Middle School and the School District offices. The Project proposes to revise the style of the 1950s building to a "Spanish Mediterranean" architectural style that more closely matches that of the adjacent buildings.
Commercial Land Uses **Objective L.8 Huntington Drive – Designate areas for commercial use on Huntington Drive consistent with existing commercial locations.** ***Policies:*** *Limit building height and mass to maintain a suburban scale to the commercial district.*	*Consistent.* The SMC is an existing public building constructed in the 1950s along Huntington Drive in a residential zone. The building is adjacent to the Crowell Library, the Huntington Middle School and the School District offices. The Project proposes to revise the style of the 1950s building to a "Spanish Mediterranean" architectural style that more closely matches that of the adjacent buildings.
Section Three - Preservation	
Goal: Protect the historical and culturally significant resources that contribute to community identity and a sense of history. **Objective L.23 Review existing listed resources and determine appropriate action for state and national listings.** ***Policies:*** *Consider whether or not resources are appropriately placed on current lists.* *Recognize, publicize, and maintain the sites that are locally significant.* *Identify significant architectural, cultural, and historic resources within the city that would qualify for the state or national register.*	*Inconsistent.* The SMC is eligible to the National Register of Historic Places, is listed on the California Register of Historic Resources, is a city landmark per the Code, and was identified in a "Citywide Historic Resources Survey Report." The SMC was identified to be the first community center in San Marino. The Project consists of materially altering the architectural design of the SMC in a manner that is not consistent with the Secretary of the Interior Standards for the Treatment of Historic Properties. The proposed design, however, was a result of significant City outreach effort among the community groups – some of which agreed with the revised architectural design and some of which did not feel the architectural design should be changed. Therefore, while the Project is consistent with some of the polices identified in Section Three of the Land Use Element, the Project is not consistent with the Goal or Objective to, overall,

General Plan Goal or Policy	Project Consistency Analysis
Cooperate with the San Marino Historical Society and other community groups involved in recognizing the City's history.	protect the resource. The City Council has the ultimate authority to determine the appropriate action for state and national listings.
Objective L.24 Encourage the preservation of significant architectural, historic, and cultural resources. ***Policies:*** *Encourage the identification of areas and structures of historic, architectural, and cultural significance within the city.* *Any designation based upon area, site or structure within the city should be subject to the City's approval.* *Any designation of a property within the City should be subject to the property owner's approval*.	*Inconsistent.* The policies that support Objective L.24 are related to the encouraging the identification of historic properties. The Project will materially alter the SMC, a listed resource, in a manner that would jeopardize its listing, making it ineligible for listing in a future study.
Objective L.25 Encourage and provide incentives to achieve preservation of significant architectural, historical, and cultural buildings and neighborhoods. ***Policies:*** *Support tax incentives and other methods deemed mutually agreeable to the City and the property owner, which will help to preserve historic resources.* *Consider the relaxation of current building and zoning codes, as necessary, to preserve significant structures, while ensuring that basic health and safety goals are met.* *Provide information to property owners who desire such information on how to rehabilitate, research, and appreciate their architecturally, historically, and culturally significant property.*	*Inconsistent.* The Project is to make alterations to the SMC in a manner that is not consistent with the Secretary of the Interior Standards for the Treatment of Historic Properties (Standards). The Standards are designed to assist property owners with the rehabilitation of historic properties in a manner that will retain their historical value yet allow the structure to be brought into current safety and other code compliance.
General Plan – Community Services Chapter	
Section One – Recreation Services	
Objective CS.3 Maximize program opportunities by coordinating resources. ***Policies:***	*Consistent.* The SMC was the first community center in the City of San Marino, operated by the San Marino Women's Club. The City, which purchased the building in 2005, plans to continue to operate the building as a public recreation center.

General Plan Goal or Policy	Project Consistency Analysis
Meet regularly and coordinate resources with all community organizations and agencies that serve the City's recreational needs. *Coordinate programs with the San Marino Unified School District.*	
Objective CS.5 Provide efficiently-used, well-maintained space for staff, volunteers, and participants in the recreation program. ***Policies:*** *Inventory the facilities annually to ensure the appearance, safety, and accommodations meet the needs of the program and participants.* *Identify facilities that are needed by the community because existing facilities are inadequate, unavailable, offer poor conditions, or do not exist.* *Manage long-term facilities needs using the information of facility use, identification of needs, and community input.*	*Consistent.* The Project provides for interior modifications to accommodate recreation staff offices, as well as proposes various energy efficiency and other upgrades to the plumbing, mechanical, lighting, etc to ensure the overall space is adequate for community programs. The City also conducted extensive community outreach as part of the Project development.
Section Four - Education	
Objective CS.15 Ensure public safety in and around school sites. ***Policies:*** *Work with the District and other schools to ensure efficient and safe traffic flow around schools.* *Work with the District and other schools to develop public information for parents regarding safety issues.*	*Consistent.* The SMC is located adjacent to the Huntington Middle School and shares a parking lot. The Project includes mitigation measures HAZ-1 and HAZ-2 that identifies strategies to ensure safety of the students during construction and development of a long-term strategy for emergency evacuation procedures during either a school or community emergency. Mitigation measures PS-1 through PS-5 are designed to mitigate for potential parking and traffic conflicts during flow during large events held at the school and the SMC.
Objective CS.16 Maximize use of school facilities. ***Policies:*** *Explore joint use of facilities for activities such as service yards, maintenance, and recreation, where appropriate.* *Include the school district in the City's master planning efforts to discuss joint use of parking, access, and traffic management and circulation.*	*Consistent.* The SMC is located adjacent to the Huntington Middle School and shares a parking lot. A formal shared parking agreement between the City and the SMUSD was initiated in 2006 after the City purchased the building, and the agreement was renewed in 2019 for a 10-year term. Project mitigation measures PS-1 through PS-5 are designed to mitigate for potential parking and traffic conflicts during flow during large events held at the school and the SMC.

General Plan Goal or Policy	Project Consistency Analysis
Continue working with Southwestern Academy as needed to ensure use of facilities for City programs and community activities. *Continue joint use of space at school district facilities as needed for City programs.*	
General Plan – Safety Chapter	
Section Four - Noise	
Objective S. 14 Maintain a Noise Ordinance that includes the latest technologies and policies in the field of noise. ***Policies:*** *Continuously evaluate existing noise ordinance requirements for mechanical equipment and leaf blowers.* *Consider structuring the City's Noise Ordinance to include specific time duration requirements for various noise levels.* *Restrict grading and construction activities to daily operation between 7 a.m. and 6 p.m. Monday through Friday and 9 a.m. to 4 p.m. on Saturdays, with no construction on Sundays or federal holidays.* *Include a provision in the noise ordinance requiring that all construction, grading, and gardening equipment be properly maintained.* *Require vehicles and compressors to utilize exhaust mufflers and engine enclosure covers as designed by the manufacturer.*	*Consistent.* The SMC construction would occur within the times permitted by the City ordinance. The Noise Study conducted for the Project identified that while construction noise is anticipated to exceed the limits allowed in a residential zone, the Project surroundings are public buildings within a residential zone, and there are less than significant impacts.

4.12 MINERAL RESOURCES

4.12.1 Regulatory Setting

In 1975, the California legislature enacted the Surface Mining and Reclamation Act (SMARA). This act provides for the reclamation of mined lands and directs the State Geologist to classify (identify and map) the non-fuel mineral resources of the state to show where economically significant mineral deposits occur and where they are likely to occur based upon the best available scientific data.

4.12.2 Environmental Setting

The Project is located in an urbanized area of San Marino. The California Department of Conservation, Division of Mines and Geology has not identified significant mineral resources within the City of San Marino.

4.12.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The Project site is not located on a known important mineral resource recovery site and is not currently being mined or has plans to be mined. No impacts would occur, and no mitigation is required.

b) Would the project 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?

No Impact. As discussed above, the Project site is not located on a known mineral deposit and is not currently being mined or has plans to be mined. No land use plan that applies to the site

designates it as a mineral resource recovery site. No impacts would occur, and no mitigation is required.

4.12.4 Mitigation Measures

No mitigation measures are required.

4.13 NOISE

A Noise Impact Study was prepared for the proposed Project in June 2021 (Appendix D).

Environmental noise is commonly measured in A-weighted decibels (dBA). A decibel (dB) is a unit of sound energy intensity. Sound waves, traveling outward from a source, exert a sound pressure level (commonly called a "sound level") measured in dB. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response that duplicates the sensitivity of human ears. Decibels are measured on a logarithmic scale. Generally, a three dBA increase in ambient noise levels represents the threshold at which most people can detect a change in the noise environment; an increase of 10 dBA is perceived as a doubling of loudness.

Noise Descriptors

The noise descriptors utilized in the noise study for this Project include but are not limited to the following:

- Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

- Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24- hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

- Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Publicize noise emission standards for interstate commerce
- Assist state and local abatement efforts
- Promote noise education and research

The federal government advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being constructed adjacent to a highway or, or alternatively that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

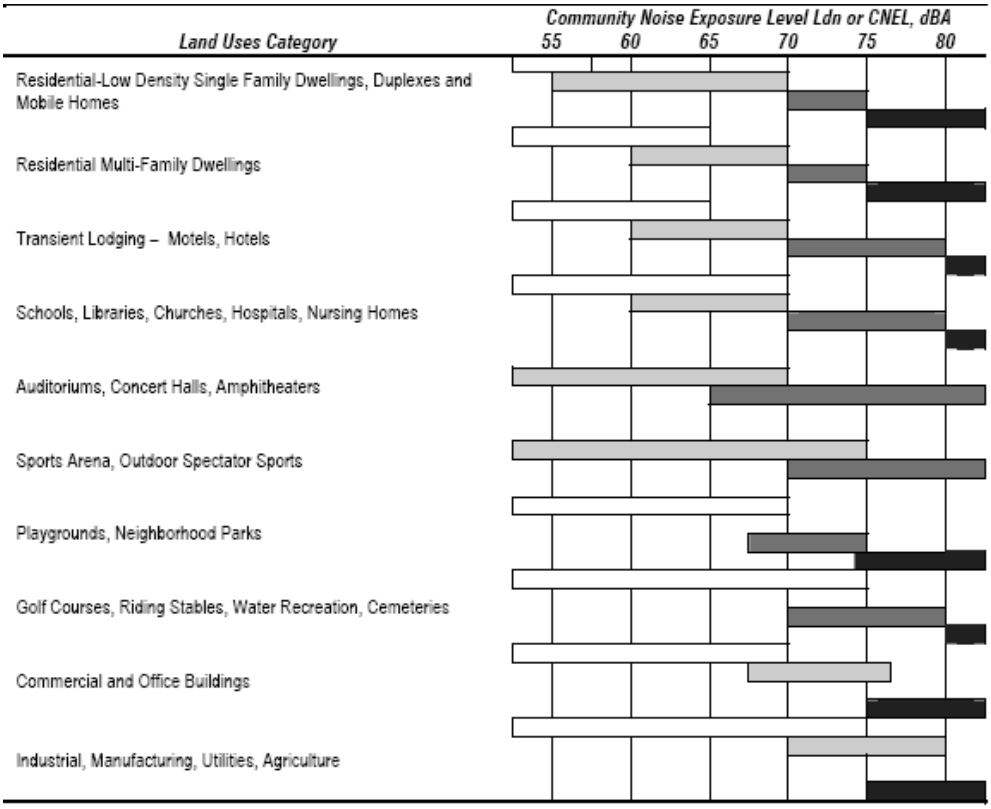
Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

State Regulations

The State of California has established noise insulation standards as outlined in Title 24 and the Uniform Building Code (UBC) which in some cases requires acoustical analyses to outline exterior noise levels and to ensure interior noise levels do not exceed the interior threshold.

The State Department of Health Services has published guidelines that rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable as illustrated in Table 4-13-1.

Table 4.13-1: Land Use Compatibility Guidelines



Source: California Office of Noise Control

City of San Marino

The City of San Marino outlines their noise regulations and standards within the Municipal Code and the General Plan.

The Project site is zoned Residential (R)-1. Per Section 14.04.04 of the Municipal Code, noise levels in R-1 Residential zones must not exceed 55 dBA between 7:00 a.m. and 10:00 p.m. and 45 dBA 10:00 p.m. 7:00 a.m.

Per Section 14.04.07 of the Municipal Code, it is unlawful for a person within a residential zone, or within a radius of five hundred feet (500 feet) therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures or projects or to operate equipment in such a manner that noise is produced which would constitute a violation of Section 14.04.05 of the Municipal Code unless, a permit is obtained from the planning and building director. As defined in Section 14.04.05, noise levels at any adjacent residential property line must not exceed 65 dB when originating from any parcel in an R-1 Zone and 75 dB from any parcel in a C-1 Zone, Park and Recreational Zone or Historical and Cultural Zone. These standards are used herein for the purpose evaluating stationary noise impacts.

With respect to traffic noise, no specific standards for this source are provided in the San Marino Municipal Code. In 1976, the California Department of Health, State Office of Noise Control published a recommended noise/land use compatibility matrix which many jurisdictions have adopted as a standard in their general plan noise elements. The California State Office of Planning and Research 2017 updates to General Plan Guidelines for cities, Appendix D Noise Element Guidelines, identifies that exterior noise levels up to 60 dBA (CNEL or Ldn) are normally compatible. Noise levels between 60 dBA and 70 dBA (CNEL or Ldn) are conditionally compatible. These noise levels are referenced in the Noise Element of the San Marino General Plan (page V-82); and thus, are used as the standard herein for the purpose of evaluating traffic noise impacts.

Vibration

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

The San Marino Municipal Code does not address construction-related vibration; thus, for the purpose of evaluating Project-related vibration impacts, the Noise Impact Assessment (Appendix D) utilized: 1) the source data established by Table 6-3 of the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* (September 2018), identified in Table 4.13-2; and 2) the Caltrans Transportation and Construction Vibration Guidance Manual, April 2020 that identifies physical effects at various levels (Table 4.13-3).

Table 4.13-2: Vibration Source Levels for Construction Equipment

	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (dVB) at 25 feet
Pile driver (impact)	1.518 (upper range)	11 2
	0.644 (typical)	10 4
Pile driver (sonic)	0.734 upper range	10 5
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018.

Table 4.13-3: Human Reaction and Damage to Buildings Thresholds

Peak Particle Velocity (inches/second)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effects on Buildings
0.006–0.019	64–74	Range of threshold ofperception.	Vibrations unlikely to cause damage of any type.
0.08	87	Vibrations readilyperceptible.	Recommended upper level to which ruins andancient monuments should be subjected.
0.01	92	Level at which continuousvibrations may begin to annoy people, particularlythose involved in vibration sensitive activities.	Virtually no risk of architectural damage tonormal buildings.
0.2	94	Vibrations may begin to annoy people in buildings.	Threshold at which thereis a risk of architectural damage to normal dwellings.
0.4–0.6	98-104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Architectural damage and possibly minor structural damage.

Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual, April 2020.

Construction activities such as blasting, pile driving, demolition, excavation or drilling have the potential to generate ground vibrations. With respect to ground-borne vibration impacts on structures, the Caltrans Manual states that ground-borne vibration levels in excess of 94 VdB (0.2 PPV) would damage buildings extremely susceptible to vibration damage.

A threshold of 65 VdB is used for buildings where low ambient vibration is essential for interior operations, such as hospitals and recording studios. A threshold of 72 VdB is used for residences and buildings where people normally sleep (i.e., hotels and rest homes). A threshold of 75 VdB is used for institutional land uses where activities occur primarily during the daytime (i.e., churches and schools).

Because the proposed project would modify an existing building, a vibration threshold of 94 VdB (0.2 PPV) is used herein for the purpose of identifying a potentially significant impact under CEQA.

4.13.1 Environmental Setting

The Project site is an existing community center, constructed in 1952 as the San Marino Women's Club. The Project site is bounded on the west by the Crowell library, on the east and south by the Huntington Middle School, and on the north by Huntington Drive. The most common and primary sources of noise in the Project site vicinity are motor vehicles (e.g., automobiles and trucks) operating on Huntington Drive. Motor vehicle noise is of concern because where a high number of individual events occur, it can create a sustained noise level. Aircraft overflights were observed but do not noticeably contribute to the ambient noise environment.

The Noise Analysis in Appendix D included data gathering on the general noise environment at the Project site by collecting two weekday morning 15- minute noise measurements on and in proximity to the site on April 7, 2021, using an ANSI Type II integrating sound level. The temperature during monitoring was 65 degrees Fahrenheit with no perceptible wind.

Site 1 is located on the Project site approximately 30 feet south of the nearest north/eastbound lanes of Huntington Drive. This location is on the site and represents noise levels at the sensitive receivers located along the north side of Huntington Drive. During monitoring, 224 cars/light trucks, four medium trucks (six tires/two axles) and zero heavy trucks (all vehicles with three or more axles) passed the site. Site 2 is located in front of the Crowell Public Library north of the site near the intersection of Huntington Drive and West Drive. This location is northeast of the site and represents noise levels at the nearest sensitive receivers located to the north of West Drive.

During monitoring, 290 cars/light trucks, 10 medium truck (six tires/two axles) and zero heavy trucks (all vehicles with three or more axles) passed the site. The dominant noise source is traffic operating primarily on Huntington Drive. Table 4.13-4 identifies the noise measurement locations and measured noise levels. Monitoring locations are shown in Figure 3 of Appendix D. As shown, the Leq was 61.6 dBA at Site M1 and 63.7 dBA at Site M2. The monitoring data sheet is provided as part of the Noise Analysis in Appendix D.

Table 4.13-4: Noise Monitoring Results – Existing Condition

Monitoring Station	Measurement Location	Primary Noise Source	Sample Time	Leq (dBA)
M1	Project site approximately 30 feet south of the nearest Huntington Drive travel lane	Traffic	Weekday morning	61.6
M2	Adjacent to the Crowell Library north of the site.	Traffic	Weekday morning	63.7

4.13.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X	~~X~~	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

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

Less Than Significant Impact With Mitigation Incorporated. The Noise Analysis in Appendix D identified the following:

Construction

The primary main noise source during construction activities would be associated with demolition and construction of the proposed improvements. Exterior improvements requiring removal of concrete or other hardscape materials would require the use of jackhammers and small tractors/bobcats to transport material to haul trucks. A jackhammer is likely to be the noisiest

type of equipment used over a sustained period of time during exterior demolition. Installation of new concrete hardscape would require use of concrete mixers to deliver the material.

Interior improvements would require materials be delivered to the site; however, noise would be limited to haul trucks. Interior improvements would be inaudible to neighboring uses.

Table 4.13-5 identifies typical maximum construction noise levels based on 25, 50 and 100 feet from the Project site.

Table 4.13-5: Typical Maximum Construction Equipment Noise Levels

Equipment Onsite	Typical Maximum Level (dBA) 25 Feet from the Source	Typical Maximum Level (dBA) 50 Feet from the Source	Typical Maximum Level (dBA) 100 Feet from the Source
Air Compressor	84	79	73
Backhoe	84	79	73
Bobcat Tractor	84	79	73
Concrete Mixer	85	78	72
Bulldozer	88	82	76
Jack Hammer	95	89	83
Pavement Roller	86	80	74
Street Sweeper	88	82	76
Man Lift	81	75	69
Dump Truck	82	76	70

Noise sensitive uses near the Project site include the Crowell Public Library which is located adjacent to and ~~north~~east of the San Marino Center. Existing school buildings and single-family residences are located 200-300 feet west, south and east of the site. Table 4.13-6 identifies the anticipated typical maximum noise levels at various distances from the Project site.

Table 4.13-6: Typical Construction Noise Levels at Various Distances from Project

Distance from Construction	Typical Maximum Noise Level at Receptor (dBA)
25 feet	88
50 feet	82
100 feet	76
250 feet	68
500 feet	62
1,000 feet	56

Actual noise levels will fluctuate throughout the day and may periodically exceed 95 dBA at the property line depending on the location of jackhammer use used and whether multiple pieces of equipment are operating simultaneously in the same area.

Because the Project is located within a Residential (R)-1 zone, as stated above, Section 14.04.07 of the San Marino Municipal Code requires that equipment operation or outside construction and

repair must not exceed 65 dB when originating from any parcel in an R-1 Zone without a permit from the planning and building director. Therefore, because the Project may exceed 65 dB at the property line, the Project would require a permit from the planning and building director per the City's code.

Because the City would comply with its ordinance and noise levels at the actual sensitive receptor locations are anticipated to be within the range of 65 dB, impacts would be less than significant. However, because the City's code requires special considerations when construction noise at the property line of within R-1 zone is above 65 dB, **Mitigation Measure NOI-1**, located at the end of this section, should be implemented to ensure impacts will be less than significant.

Operations

Operation of the proposed Project was evaluated for potential exterior traffic related impacts caused by increased traffic volumes associated with the Project. Noise levels associated with existing and future traffic were based on trip generation estimates provided in the Traffic Impact Analysis (Appendix E). A doubling of baseline traffic volumes would be required to cause a noticeable increase (3 dBA) in traffic noise. As stated, baseline conditions currently exceed 60 dBA, the normally acceptable sound level referenced in the San Marino General Plan Noise Element. Thus, the baseline and with Project sound levels were calculated to determine whether the Project would generate enough traffic to noticeably increase (+3 dBA or greater) the Leq over baseline conditions.

The Noise Analysis in Appendix D identified that baseline noise levels exceed the 60 dBA exterior standard at existing single-family residences and are consistent with measured noise levels. Noise levels associated with the Project were calculated by distributing the 25 P.M. peak hour Project trips into the baseline traffic volumes on Huntington Drive and West Drive for the purpose of evaluating worst case noise conditions.

Table 4.13-7 identifies projected operational noise impacts.

Table 4.13-7: Modeled Noise Levels

Receptor	Distance from Site	Existing Leq	Existing CNEL	With Project Leq	With Project CNEL	Decibel Change	Significant Impact
Site 1: Crowell Library	35 ft	62.6	63.6	62.6	63.6	+0.0	No
Site 2: Huntington Middle School buildings	275 ft	63.6	64.6	63.6	64.6	+0.0	No
Site 3: Single-family residence at 1600 West Drive	320 ft	63.1	64.1	63.1	64.1	+0.0	No

As shown in Table 4.13-7, Project peak hour traffic will have no effect on baseline traffic noise conditions.

Therefore, overall, permanent and temporary noise impacts are less than significant, and no mitigation is required.

b) Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Potential impacts from vibration are anticipated to occur during construction. No impacts are anticipated to occur from operations. Thus, this discussion focuses on temporary vibration caused by construction. As referenced in Appendix D, the closest building is the San Marino Center and neighboring Crowell Library. Use of a jackhammer and small tractor/bobcat may generate localized vibration. Table 4.13-8 identifies typical vibration experienced from various construction equipment at various distances, according to the Federal Rail Administration (FRA) Guidelines (Report Number 293630-1), December 1998.

Table 4.13-8: Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB				
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Large Bulldozer	87	81	79	77	75
Loaded Trucks	86	80	78	76	74
Jackhammer	79	73	71	69	67
Small Bulldozer	58	52	50	48	46

Source: Federal Railroad Administration, 1998

As identified in Table 4.13-3, ground-borne vibration levels in excess of 94 VdB would damage buildings extremely susceptible to vibration damage. The existing San Marino Center building is included on the California Register of Historic Places and eligible for inclusion in the National Register of Historic Places; and thus, may be susceptible to vibration damage. However, no construction activities with the potential to generate ground vibration above 94 VdB, such as the use of bulldozers or jackhammers, would be required to complete the proposed improvements. Thus, 94 VdB (PPV 0.2) is used herein to evaluate potential vibration impacts to neighboring structures. Construction activities referenced above that would generate significant vibration levels are not proposed.

Based on the information in Table 4.13-8, vibration levels would not reach or exceed levels required to cause any structural damage or related impacts to the San Marino Center or Crowell Public Library.

The nearest residence is approximately 205 feet north of the site across Huntington Drive. Based on the information presented in Table 4.13-8, vibration levels would attenuate to approximately 61 dBA at this residence during construction assuming use of a jackhammer. Vibration levels would be below the 72 VdB threshold required to be perceptible at neighboring residences. Temporary vibration impacts would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The SMC is not located within the vicinity of a private airstrip or airport. Therefore, there will be no impacts.

4.13.3 Mitigation Measures

The following mitigation measure is required to reduce potentially significant impacts to less than significant:

NOI-1 The City will place the following noise-reducing best management practices on the Project construction plans:

- Construction Equipment Controls: require the contractor to utilize electric powered equipment as much as possible, heavy equipment should have proper mufflers installed, and locating any generators or compressors as far from the sensitive receptors as possible.

- Limit Operations Adjacent to Receivers: Limit the number of large pieces of equipment (i.e., bulldozers or concrete mixers) operating adjacent to receivers to one at any given time.

- Neighbor Notification. Provide notification to residential occupants nearest to the Project site at least 24 hours prior to initiation of construction activities that could result in substantial noise levels at outdoor or indoor living areas. This notification should include the anticipated hours and duration of construction and a description of noise reduction measures being implemented at the Project site. The notification should include a telephone number for local residents to call to submit complaints associated with construction noise. The notification should be posted along Huntington Drive and be visible from adjacent properties.

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

The City of San Marino was incorporated in 1913. Census data in 2019 identified the population as 13,048, which is a 0.4 percent decrease from the population identified in 2010. The 2019 Census data did not have data on the number of housing units in the city but identified that 86 percent of the housing was owner occupied.

4.14.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X

Discussion

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

No Impact. The proposed Project is to improve the SMC which serves the recreational needs for the citizens of the city. The Project would not provide housing or make other infrastructure improvements. Therefore, the proposed Project would not induce population growth. No impact would occur under this threshold and no mitigation is required.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. As stated no housing would be removed; thus, no housing would need to be constructed. No existing residents would be displaced as the Project site is an existing facility and would remain as a community center. No impacts would occur.

4.14.3 Mitigation Measures

No mitigation measures are required.

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

Fire, police, and recreational services are provided by the City of San Marino. The San Marino Unified School District provides the school services within the City.

The goals and objectives outlined in the various elements of the City's General Plan and Circulation Element identifies the symbiotic relationship between the City and the San Marino Unified School District and stresses collaborative efforts to best serve the citizens of the City.

4.15.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. PUBLIC SERVICES: a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?		X		
Recreation/Parks?			X	
Other public facilities?			X	

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

Fire Protection

Less Than Significant Impact. Fire protection at the Project site is provided by the San Marino Fire Department (SMFD). The closest fire station is approximately 0.5 mile east of the Project site, at 2200 Huntington Drive. The proposed Project will not expand the size of the building. Most importantly, the Project scope will include an updated Fire Alarm system and a new Fire Sprinkler system. The Project would not increase the City's population indirectly or directly, nor would it substantially expand the community center; therefore, it would not increase demand on SMFD services. The Project will undergo review by the City's Fire Department as

part of building plan check to ensure that the improvements are consistent with the City's fire codes. Therefore, impacts would be less than significant.

Police Protection

Less Than Significant Impact. Police protection is provided by the San Marino Police Department (SMPD). The closest police station to the Project is located approximately 0.5 mile east of the Project site, at 2200 Huntington Drive. The proposed Project will not expand the size of the building. The Project would not increase the City's population indirectly or directly, nor would it substantially expand the community center; therefore, it would not increase demand on SMFD services. Therefore, impacts would be less than significant.

Schools

Less Than Significant Impact With Mitigation Incorporated. The Project would not increase the City's population indirectly or directly, nor would it directly or indirectly affect any local schools' need to expand facilities to serve students or the adjacent library's need to serve patrons.

The SMC parcel contains only one parking space. Parking for the SMC exists on the south side of the building, in the parking lot of the Henry E. Huntington Middle School, through a cooperative agreement with the SMUSD for use of 48 spaces for both the SMC and the Crowell Library. The shared parking arrangement with the SMUSD appears to be a traditional feature of the SMC and the Library as historical articles in the Los Angeles Times indicate that the San Marino Women's Club used the "school parking area" for club parking and for community events. A formal shared parking agreement between the City and the SMUSD was initiated in 2006 after the City purchased the building, and the agreement was renewed in 2019 for a 10-year term (Appendix A).

Because the SMC has historically had no dedicated parking on its parcel, nor is there room for parking within its parcel, a parking study (within Appendix E) was conducted to ensure the Project would not impact the school's existing parking and shared parking agreement to the extent that the school would be forced to construct another parking lot for its use.

A study of potential parking impacts on the school was conducted for the Project (Appendix E). The study identified that the 48 spaces allotted in the school parking lot was generally sufficient for the Project's historic and future use. Given the review of the shared parking demand analysis and comparisons with the parking supply, the parking study (Appendix E) concluded that surpluses of 9 and 33 parking spaces are forecast to occur during peak weekday and weekend conditions, respectively, assuming that the 17 on-street spaces along Huntington Drive and West Drive along the library frontages are available for shared use.

The parking study evaluated the school's monthly calendar of events compared to the existing and proposed events at the SMC, as well as the school's daily pick up and drop off times and routes. The study identified that there may be parking conflicts during times of peak use between the SMC, library and the school when large events, such as on-going school athletic events and the morning and afternoon school drop off are scheduled at the same time. When this occurs, off-street parking is generally not available and patrons must find other parking, which typically

is found along the adjacent residential streets. The parking study identified that there is no need to alter the parking arrangement or parking facilities for the Huntington Middle School but did identify strategies to reduce potential parking conflicts during peak events so that the school can maintain acceptable service ratios, response times or other performance objectives. These strategies are represented as **Mitigation Measures PS-1** through **PS-5,** located at the end of this section. Implementation of these mitigation measures would ensure impacts would be less than significant with respect to maintaining parking and traffic flow between the school and the SMC.

Recreational/Parks

Less Than Significant Impact. The Project would not involve the creation of new residences or otherwise induce population growth that would generate a need for new or physically altered park facilities. The SMC is located in an urbanized area surrounded by institutional and residential uses. The site is not located within a park. In addition, the Project would occur within an existing community center with limited potential for adverse physical effects. All improvements would be confined to previously disturbed areas. This Initial Study identifies the potential impacts of the Project improvements to the SMC. However, the Project in of itself does not *result in substantial adverse physical impacts …. in order to maintain acceptable service ratios, response times or other performance objectives.* The Project seeks to upgrade an existing community center that will provide a benefit to the city's recreation. The SMC, which is currently used as a recreational source, only may temporarily be unavailable for use during construction. Therefore, there is a less than significant impact.

Other public facilities

Less Than Significant Impact. The Project would not increase the City's population indirectly or directly, nor would it substantially expand the community center; therefore, it would not increase the number of users at libraries or other government facilities. As described in Sections 4.5 and 4.11, there are potentially significant impacts because the Project will provide a physically altered governmental facilities, which is considered a historic structure. However, the Project's construction and operation does not cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for recreational services. Impacts would be less than significant for this criterion.

4.15.3 Mitigation Measures

The following mitigation measures are required to ensure potential impacts are less than significant:

PS-1 **Shared Event Calendar**. The City and the Huntington Middle School should maintain an events calendar that is accessible and shared between the City (for library and SMC events) and the Huntington Middle School which would include the date, time and duration of the event, including the expected attendance figure for each event. Special SMC events/meetings where 40 attendees or more are expected would require further coordination with the Huntington Middle School and Crowell Public Library to ensure that any overlap of activities is minimized to the extent possible. To the extent feasible, the City and the Library shall avoid scheduling classes/meetings/events held at the SMC and

the Crowell Public Library that begin or end such that it overlaps with the morning drop-off and afternoon pick-up peak time periods at the Huntington Middle School.

PS-2 **Managed Parking Collaboration**. The City and the Huntington Middle School should collaborate to implement managed parking for some spaces within the on-site parking facility (i.e., both valet parking spaces and tandem parking spaces) which would increase the effective parking supply as valet-attended parking could occur within drive aisles located throughout the on-site parking areas or other nearby lots (i.e., District Office parking lot).

PS-3 **Additional Parking Study for Huntington Drive**. The City will study the installation of additional parking spaces along the south side of Huntington Drive along the SMC frontage, similar to the spaces that are currently in front of the Crowell Public Library, and implement as feasible.

PS-4 **Encourage Alternative Transportation**. The SMC, Crowell Public Library and Huntington Middle School should encourage all of its users and employees to utilize alternative modes of transportation including but not limited to: bicycle, transit, ride-share, and other ride service opportunities to events where appropriate.

PS-5 **Conduct Future Parking Study**. The City will conduct a parking utilization monitoring study one year from issuance of the Project's Certificate of Occupancy. The parking utilization monitoring study must demonstrate that on-site parking is adequate to meet Project demand during both weekday and weekend conditions. If the study shows that Project parking demand exceeds the supply of parking within the Project, the City shall propose measures to reduce spillover parking impacts, subject to review and approval by the Director of Community Development. The parking reduction strategies may include, but are not limited to: 1) preparation of a Valet Parking Plan, 2) provision of transit passes and/or ride-share subsidies for employees, and/or 3) subsidized off-site parking options in order to minimize on-site employee parking demand, if necessary.

4.16 RECREATION

4.16.1 Regulatory Setting

The proposed Project is consistent with and supports the visions and goals laid out in the San Marino General Plan, which are identified as follows:

Recreation Services

- *Protect existing and provide for more recreational space for residents*
- *Provide quality recreation, leisure, and social programs and facilities that meet the expectations of the residents.*
- *Fill a gap in recreational activities that are desired by residents but not available in the private marketplace.*
- *Develop a program schedule that provides activities for toddlers/preschoolers, youth, teen, adult, and older adults as appropriate.*
- *Provide events throughout the year, such as holiday activities, sporting activities, and cultural arts events to enhance the sense of community.*
- *Provide efficiently-used, well-maintained space for staff, volunteers, and participants in the recreation program.*
- *Inventory the facilities annually to ensure the appearance, safety, and accommodations meet the needs of the program and participants.*
- *Identify facilities that are needed by the community because existing facilities are inadequate, unavailable, offer poor conditions, or do not exist.*
- *Manage long-term facilities needs using the information of facility use, identification of needs, and community input.*

4.16.2 Environmental Setting

The San Marino Recreation Department provides a variety of recreation, leisure, and social programs and activities.

The City's primary recreational facility is the approximately 26.5 acre Lacy Park. Amenities include tennis courts, a sports field, a play area with structures, a rose garden, picnic tables, restrooms, the Thurnher House, which is former lodging for the Public Works Director, the Boy Scout House, and parking.

The City's General Plan also recognizes the importance of the partnership between the City of San Marino and the San Marino Unified School District regarding recreational facilities. The only swimming pool

available for public use is located at San Marino High School. The pool is operated and maintained by the school district but is used for both high school instruction/competitive swimming, and for the community's swim program for all ages. The school district also owns a field on Del Mar Avenue, known as "Del Mar Field." This is used extensively by the school district and community organizations for athletic programs.

The SMC building was originally constructed in 1952 by the San Marino Woman's Club to hold community events and club meetings. In 2005, the City purchased the SMC from the San Marino Women's Club to use as a community center and meeting space for senior and youth recreation programs, and community events and other activities.

4.16.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Discussion

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. The Project does not propose any residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks, or other recreational facilities, including the SMC. The purpose of the Project is to modernize and improve the existing SMC to enhance the City's existing use of the facility. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional parks, thus, impacts there will be no impacts. The improvements to the SMC will ensure that the facility has the most modern equipment to provide recreational services for the long-term. The facility will be unavailable to the community during construction, which is a temporary impact. Therefore, there will be a less than significant impact.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

~~**No Impact**~~ **Less Than Significant.** The Project is the improvement of an existing community center. The Project does not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. This Initial Study addresses the environmental impacts of the Project.

4.16.4 Mitigation Measures

There are no mitigation measures.

4.17 TRANSPORTATION

A Traffic Impact Study (TIS) was prepared for the proposed Project in June 2021 (Appendix E).

4.17.1 Regulatory Setting

Senate Bill 743

SB 743, passed in 2013, updated the way transportation impacts are measured in California for new development projects, to allow Californians more options to drive less. The change was made as part of the California Global Warming Solutions Act of 2006 (Assembly Bill [AB 32]) to assist with achieving climate commitments.

In January 2019, the California Office of Planning and Research (OPR) issued guidance relative to evaluating a project's Vehicle Miles Traveled (VMT) to reduce GHG emissions. The CEQA Guidelines were also subsequently revised to require that lead agencies utilize VMT-related metric(s) that evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects, beginning on July 1, 2020. Until that time, jurisdictions utilized a Level of Service (LOS) to analyze traffic impacts. The OPR guidelines require that projects be evaluated using VMT metrics but also allows jurisdictions to continue to use the LOS method as a secondary methodology for non-CEQA purposes.

Level of Service Evaluation Method

The Caltrans Highway Capacity Manual 6 (HCM 6) methodology provides a quantitative delay in seconds per vehicle (sec/veh) at intersections and assigns a qualitative letter grade that represents the operations of the intersection as a Level of Service (LOS). These grades range from LOS A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity operations. Descriptions of the LOS letter grades for signalized and unsignalized intersections are provided in Table 4.17-1 (Iteris, Inc., March 30, 2021). Cities across California continue this grading method to help guide its planning efforts relative to reducing impacts on traffic flow.

Table 4.17-1: Level of Service Descriptors

LOS	Description	Intersection Control Delay (seconds/vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Operations with very low delay occurring with favorable progression and/or shortcycle length.	≤ 10	≤ 10
B	Operations with low delay occurring with good progression and/or short cyclelengths.	>10 and < 20	>10 and < 15
C	Operations with average delays resulting from fair progression and/or longer cyclelengths. Individual cycle failures begin to appear.	>20 and < 35	>15 and < 25
D	Operations with longer delays due to a combination of unfavorable progression,long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	>35 and < 55	>25 and < 35

E	Operations with high delay values indicating poor progression, long cycle lengths,and high V/C ratios. Individual cycle failures are frequent occurrences.	>55 and < 80	>35 and < 50
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	> 80	> 50

Vehicle Miles Traveled Evaluation Method

The San Gabriel Valley Council of Governments (SGVCOG) produced a Vehicle Miles Traveled Evaluation Tool ("VMT Evaluation Tool"), which was developed by Fehr & Peers as part of the VMT Implementation Study effort. A number of the cities in the San Gabriel Valley, including the City of San Marino, utilize this tool for its VMT analysis.

Regional Transportation Plan

The Southern California Association of Governments (SCAG) is a council of governments representing the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. Every four years SCAG updates the Regional Transportation Plan (RTP) for the six-county region. On April 7, 2016, the SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy (2016 RTP/SCS). The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas emissions from transportation (excluding goods movement).

City of San Marino

The City of San Marino's Circulation Element (Meyer, Mohaddes Associates, Inc., August 1995) for its General Plan was established to provide for a safe, convenient and efficient transportation system for the city. To meet this objective, the Circulation Element was designed to accommodate the anticipated transportation needs based on the estimated intensities of various land uses within the region. The City's Circulation Element and the Final General Plan (2003) sets forth actions and policies pertaining to accident and traffic safety, transit and public transportation, ensuring easy and convenient access to the regional facilities, bicycle routes and pedestrian facilities, among other things. Relevant adopted policies include:

Circulation Element:

Functional Classifications of Roadways

- *Policy 11. Maintain and enhance the character of Huntington Drive as a Parkway and as the main commercial/civic center of San Marino, thereby strengthening support for these commercial areas, through landscaping and pedestrian amenities in keeping with the residential character of the community.*

Neighborhood Traffic Control Plans

- *Policy 13: Develop and implement neighborhood traffic control plans which will reduce the speed and volume of traffic on residential streets to acceptable levels.*

- *Policy 17: Improve safety at school drop-off areas and employ appropriate traffic control measures in the vicinity of schools to maximize safety for school children walking or bicycling to/from school.*

Public Transportation

- *Policy 18: The City shall work with public transit agencies to ensure that transit lines are routed on streets in accordance with the policies of [the] Circulation Element.*

- *Policy 22. The City shall continue to provide para-transit (Dial-A-Ride) services to residents, to the extent that resources allow.*

Non-Motorized Transportation

- *Policy 23: The City shall develop a bicycle plan which provides opportunities for safe, recreational bike usage and provides continuity between land uses in San Marino.*

- *Policy 24: The City shall evaluate the sidewalk system throughout the City, in all neighborhoods, and where approval for sidewalk installation is provided by residents.*

- *Policy 25: In areas of the City, where commercial or public facilities are located, the City shall implement measures to enhance the pedestrian and bicycle environment, to attempt to slow passing vehicular traffic, and to ensure handicapped accessibility in accordance with the requirements of the Americans with Disabilities Act.*

- *Policy 26: Install pedestrian-activated signals, where appropriate, and crosswalks to provide safe, adequate pedestrian accessibility for shopping areas and residences.*

Transportation Demand Management

- *Policy 36: The City shall encourage its residents and employees to utilize alternative modes of transportation such as buses, light rail transit, carpools, Dial-A-Ride vehicles, bicycles and walking and shall take measures to ensure that these alternate modes are available in the City.*

- *Policy 37: The City shall encourage Transportation Demand Management programs as a mechanism to reduce parking demands in the City.*

In addition to the City's General Plan and Circulation Element, the City of San Marino developed a Huntington Drive Safe Streets Corridor Plan that is focused on providing a vision for the future of the Huntington Drive corridor, from San Gabriel Avenue (east of the Project site) to Garfield Avenue (west of the Project site).

4.17.2 Environmental Setting

The Project site is located at 1800 Huntington Drive, along the south side of Huntington Drive, approximately 400 feet west of the intersection with West Drive. Huntington Drive, oriented in a northeast-southwest direction, is a six-lane divided roadway, representing the major east-west corridor through the city. Huntington Drive is designated as a Parkway in the City of San Marino's Circulation Element (Meyer, Mohaddes Associates, Inc., August 1995). The travel lanes are separated by a 60- to 65-foot median parkway, and the posted speed limit is 40 miles per hour. Huntington Drive in the Project vicinity directly serves mostly commercial and institutional uses, though there are some residences with frontage (driveway access) on the roadway (Iteris, Inc., March 30, 2021).

The Project site's main access is through three driveways on Huntington Drive, one of which will be removed with the Project. Alternative access is provided via West Drive, through the Library and School District parking lot.

In 2021, the City of San Marino conducted a Citywide Traffic Study ([Study], Iteris, Inc., March 30, 2021) that studied multiple intersections as part of the City's efforts to develop implementable safety and/or traffic calming improvements within the city. Intersections studied around the Project area included West Drive/Huntington Drive (east of the Project site) and Virginia Road/Huntington Drive (west of the Project site).

The Citywide Traffic Study identified that LOS "D" is generally acceptable. The Study found that the intersection West Drive/Huntington Drive operates at a LOS "D" in both peak AM and peak PM hours, and the intersection of Virginia Road/Huntington Drive operates at a LOS "D" in the AM and "C" in the PM peak hours. Therefore, the intersections currently operate at acceptable levels.

4.17.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. TRANSPORTATION / TRAFFIC: Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?			X	

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Less Than Significant Impact. A Citywide Traffic Study (Iteris, Inc., March 30, 2021) was prepared that utilized traffic data and community feedback to develop implementable safety and/or traffic calming improvements within the city. The Traffic Impact Study prepared for the Project (Appendix E) analyzed four intersections in the Project vicinity utilizing data from the Citywide Traffic Study. The Traffic Study determined that the Project is expected to generate 19 new vehicle trips (13 inbound trips and 6 outbound trips) during the weekday AM peak hour. During the

weekday PM peak hour, the proposed Project is expected to generate 25 new vehicle trips (12 inbound trips and 13 outbound trips). Over a 24-hour period, the proposed Project is forecast to generate approximately 312 new daily trip ends (156 inbound trips and 156 outbound trips) during a typical weekday. Based on application of the City's LOS standards identified in the Citywide Traffic Study, the proposed Project is not required to identify or construct intersection improvements at any of the study intersections.

The proposed Project is a modification of an existing building along a street that has a sidewalk for pedestrian use. A transit stop is located east of the Project at West Drive/Huntington Drive and at Virginia Road/Huntington Drive. No changes to the pedestrian or transit facilities are proposed. The Project is therefore in alignment with the City's Circulation Element, the Final General Plan, the 2014 Draft San Marino Bicycle and Pedestrian Plan, the San Marino Safe Routes to School Program, and the City of San Marino Huntington Drive Safe Streets Corridor Plan goals to promote pedestrian and bicycle safety and provide appropriate and supportive active transportation infrastructure. Further, development of the proposed Project will not prevent the City from completing any proposed transit, bicycle, or pedestrian facilities. It is therefore determined that the proposed Project will result in a less than significant impact on active transportation and public transit in the vicinity of the Project site.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. Consistent with the requirements of CEQA Guidelines Section 15064.3, the City of San Marino has adopted significance criteria for transportation impacts based on vehicle miles traveled for land use development projects. The proposed San Marino Center Improvement project meets the criteria to be screened out of VMT analysis as it will serve the local population and is considered a community institution, thereby shortening travel distances and reducing VMT (refer to Appendix D). Thus, the proposed Project can be presumed to result in a less than significant VMT impact based on State guidance because it would reduce VMT by shortening trip lengths, similar to local-serving retail developments and local-serving projects.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

No Impact. Project improvements occur solely off highway and no road improvements are planned. Traffic may be temporarily slowed or diverted around the work site during utility installation, but all State traffic controls would be in place for the time of any construction that must occur in the street.

d) Would the project result in inadequate emergency access?

Less Than Significant. The proposed Project is required to comply with the City's development review process including review by the City Fire Department for compliance with all applicable fire code requirements for construction and access to the site. The access and circulation features within the site would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. Emergency vehicles would enter the Project site using the driveway entrance on Huntington Drive, or alternatively West Drive. The internal circulation includes ample area that can accommodate fire trucks. The roadway paving and design as well as the final design plans for the Project site's ingress and egress will be reviewed by the City Engineer for appropriate width and lanes. All access lanes will meet City requirements pursuant to the Uniform Building and Fire Code to ensure adequate emergency access throughout the Project site.

Therefore, impacts are less than significant, and no mitigation is required.

4.17.4 Mitigation Measures

No mitigation measures are required.

4.18 TRIBAL CULTURAL RESOURCES

A Cultural Resources Assessment for the proposed Project was prepared by BCR Consulting in May 2021 (Appendix C). The assessment addressed the ethnographic and archaeology of the Native American occupation in San Marino, as summarized in this section.

Native American Heritage Commission Sacred Land File Search

In January 2021, BCR Consulting requested that the Native American Heritage Commission (NAHC) conduct a search of its Sacred Lands File to determine if cultural resources significant to Native Americans have been recorded in the Project footprint and/or buffer area. The NAHC responded stating that the search of its Sacred Lands File revealed positive results and to contact the Gabrieleno Band of Mission Indians – Kizh Nation.

City of San Marino AB 52 Tribal Consultation

The City of San Marino conducted tribal consultation in accordance with AB52 prior to adoption of the environmental documentation by sending letters on June 1, 2021 to the following tribes:

- Mr. Sam Dunlap, Cultural Resources Director, Gabrieleno/Tongva Nation
- Chief Anthony Morales, San Gabriel Band of Mission Indians
- Chairman Andrew Salas, Gabrieleno Band of Mission Indians – Kizh Nation

4.18.1 Environmental Setting

The Gabrielino are believed to have first encountered Europeans when Spanish explorers reached California's southern coast during the 15th and 16th centuries (Appendix C). The land of the City of San Marino, which was part of the San Gabriel Mission, was initially occupied by Gabrielino (Tongva) Indians, who had a village located on what is now the Huntington School.

During the AB 52 consultation the City and a Kizh representative discussed the Kizh historical landscapes, ceremonial places, subsurface artifacts, and other Kizh tribal cultural resources. Significant, confidential information was shared, including Kizh oral history, elder testimony, testimony by Kizh Certified Archaeologist, John Torres, data on Native American discoveries in proximity to the Project, historical information on Kizh cultural and historical uses of the area at and surrounding the Project site, historical maps, and relevant historical literature.

4.18.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		X		
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Discussion

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less Than Significant with Mitigation Incorporated. According to PRC Chapter 2.5, Section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and items with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in Section 5020.1.

There are no resources that have been identified as eligible for listing to the California Register of Historic Places within or near the Project site. However, based on AB 52 tribal consultation, the Kizh representative requested mitigation measures to be included in the Project. As such, **Mitigation Measure TRC-1, TRC-2, and TRC-3** are included to reduce potential impacts to potential Native American resources. Mitigation measures are located at the end of this section.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact with Mitigation Incorporated. The Project site is previously disturbed land currently under commercial land use. Although ground-disturbing activities would occur on previously disturbed land, there is the potential to uncover unanticipated tribal cultural resources. There are no resources that have been identified as significant within or near the Project site. However, based on AB 52 tribal consultation, the Kizh provided information pertaining to tribal history. identified that various tribal cultural resources generally exist in the region, and requested mitigation measures to be included in the Project. As such, **Mitigation Measure TCR-1, TCR-2, and TCR-3** are included to reduce potential impacts to potential Tribal Cultural Resources.

4.18.3 Mitigation Measures

The following mitigation measures are required to reduce potential impacts to less than significant:

TCR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

A. The project applicant, lead agency or construction contractor shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations. "Ground- disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground- disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered tribal cultural resources (TCRs), including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., , as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing

activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TCR-2: Unanticipated Discovery of Human Remains and Associated Funerary Objects

A. Native American human remains are defined in Public Resources Code Section 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).

D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh monitor determines in his/her sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)

E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

TCR-3: Procedures for Burials and Funerary Remains:

A. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.

B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.

D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.

F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

Water is supplied to the City of San Marino by California-American Water Company (CAWC) and the Sunny Slope Water Company. Wastewater is managed and treated by the City of San Marino Public Works Department. Electricity is provided by Southern California Edison (SCE), and natural gas is provided by The Gas Company (TGC). Solid waste is hauled by Athens Services to various landfills.

4.19.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

Discussion

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or

telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. The Project is to improve the existing community center to upgrade the façade and interior of the building to maximize use.

The center is served by all existing utilities. Minor modifications of the utilizes planned as part of the Project include replacing the overhead electrical service with an underground electrical service, including a minor electrical upgrade to today's standards, and a new landscaping water service and meter to replace the existing irrigation lines. Additional water lines will be run to service the new fire sprinkler system. These upgrades are minor modifications and do not represent a significant increase over service capacity that is currently provided. Therefore, impacts are less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. The proposed Project is to upgrade an existing community center. The water demand after the proposed Project will be similar to the current demand. The CAWC has sufficient water supplies available to service the Project. Therefore, there will be a less than significant impact.

c) Would the project 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?

Less than Significant Impact. The proposed Project is to upgrade an existing community center. The wastewater generated after the proposed Project will be similar to current volumes. The City has sufficient capacity available to service the Project. Therefore, there will be a less than significant impact.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. The proposed Project is to upgrade an existing community center. The solid waste demand after the proposed Project will be similar to the current demand.

The City's General Plan identifies the following objectives and policies regarding waste disposal and recycling:

Objective NR.10 Continue to improve waste diversion and recycling programs.

Policies:

- *Review programs that allow for mixing waste either in a single recycling bin or with other refuse, and adopt the most appropriate, cost-effective latest technologies.*
- *Work with contractors to give the City more control over the waste diversion program, including reporting.*
- *Implement appropriate green waste recycling by the City's public works department.*

The City's solid waste hauler contracts with a waste hauler that can dispose of waste at various sites in Los Angeles County. Waste collected from San Marino residences is taken directly to the Athens Materials Recovery Facility (MRF) in the City of Industry where it is separated for recyclables and disposed of or recycled.

Construction debris, such as wood from the shake roof which will be completely replaced, and various materials will be generated from Project construction, but the amount is anticipated to be minor and within the limits that can be handled by the waste system and or recycled. The waste hauler also typically works with contractors to encourage them to separate inert construction materials, which can be recycled, from non-recyclable materials. Given that the waste hauler has an active recycling program and can utilize multiple landfills within Los Angeles County, there will be a less than significant impact.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. Federal, State, and local statutes and regulations regarding solid waste generation, transport, and disposal are intended to decrease solid waste generation through mandatory reductions in solid waste quantities (e.g., through recycling and composting of green waste) and the safe and efficient transport of solid waste.

The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.

4.19.3 Mitigation Measures

No mitigation is required.

4.20 WILDFIRE

4.20.1 Environmental Setting

The City's General Plan identifies that the City has a very low risk and a very low incidence of structural and brush fires. There are typically only a few significant structural fires a year.

The City General Plan indicates that the only area of high wildfire sensitivity is the Kewen Canyon estate area located approximately 3 miles east of the SMC. The steep terrain, growth of vegetation, tree canopy, and dry weather in the Kewen Canyon/Kewen Drive area contribute to the potentially hazardous conditions. The City Fire Department regularly patrols the area and works with property owners in the area to clear brush around homes as well as conduct emergency preparedness activities.

The SMC is in the urbanized area of San Marino, where there is no risk of wildfire.

4.20.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XX. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant. The proposed Project is not located within a very high fire hazard severity zone as identified CalFire or the City of San Marino. The nearest potential wildfire area is located approximately 3 miles east in the Kewen Canyon/Kewen Drive area. The Project is however located off of Huntington Drive, which would be an evacuation route for residents of that area.

The San Marino Police Department, California Highway Patrol, and other cooperating law enforcement agencies have primary responsibility for evacuations. These agencies work together to assess fire behavior and spread, which ultimately influence evacuation decisions. Evacuation routes are generally identified by fire protection and law enforcement personnel, are determined based on the location and extent of the incident and include as many predesignated transportation routes as possible. The proposed Project would be served by an existing circulation system that provides access to the Project site and facilitates vehicular circulation throughout the project area in accordance with Riverside County and State standards. Depending on the nature of the emergency requiring evacuation, it is anticipated that the majority of the Project area users would exit the Project area via the existing roadway circulation system. Project implementation would not impair access to these roadways should an evacuation be required. It is not anticipated that the Project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts will be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The proposed Project is not located within a very high fire hazard severity zone according to CalFire and the City. The Project is located in an urban area with no slopes and flat topography. The Project will not exacerbate wildlife risks, therefore, the Project will not exacerbate a wildfire risk and therefore expose Project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. There are no impacts.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The proposed Project is not located within a very high fire hazard severity zone according to CalFire and the City. The Project is located in an urban area with no slopes and flat topography; and therefore, does not require the installation or maintenance of associated wildfire prevention infrastructure that may exacerbate fire risk or result in temporary impacts to the environment. Project improvements include the installation of a fire sprinkler system to quickly eliminate a fire within the building. Therefore, there are no impacts.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The proposed Project is not located within a very high fire hazard severity zone according to CalFire and the City. The Project is located in an urban area with no slopes and flat topography. The proposed construction and operational activities would not expose people or structures to risks involving post-fire slope instability or drainage changes. No impacts would occur.

4.20.3 Mitigation Measures

No mitigation is required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL IMPACTS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XXI. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially 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?

Potentially Significant Impact. As stated in this Initial Study, although the proposed Project would not affect the quality of the environment with respect to the habitat of a plant or animal community, the mitigation identified in the Initial Study would reduce such impacts through the provision of adherence to the MTBA and its protection of nesting birds and the on-site trees through implementation of Mitigation Measure BIO-1 and Mitigation Measure BIO-2. With mitigation, impacts related to this issue are considered to be less than significant.

Pursuant to AB52, the City and the Kizh developed Mitigation Measures TCR-1 through TCR-3 to reduce potential impacts to tribal cultural resources. Therefore, the potential impacts to California pre-history can be mitigated to less than significant.

Additionally, Mitigation Measure CUL-1 provides a process to address potential buried, unanticipated cultural, archaeological and/or paleontological resources are discovered.

With respect to important examples of the major periods of California history or pre-history as discussed in Section 4.5, the San Marino Community Center is eligible for listing on the National Register of Historic places, is listed on the California Register of Historic Places, and is considered as a City landmark under the standards of the City's code. As such, CEQA requires that any proposed project activities should be consistent with "plans for rehabilitation to ensure that the undertaking maintains consistency with the Secretary of the Interior Standards for the Treatment of Historic Properties" (36 CFR, Part 68) in order to be less than significant. PRC Section 5020.1(q) defines a "substantial adverse change" to mean the demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired.

The Project, in its current design, does not meet the Secretary of the Interior Standards for the Treatment of Historic Properties. The current Project design would alter the building in a manner that the significance of the resource would be impaired; and therefore, there would be a Potentially Significant Impact in that it would eliminate an important example of a major period of San Marino history.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. The City of San Marino is currently built out. Most projects are commercial and residential remodeling projects. Any overlap of Project construction and construction with other projects in the City would be less than significant because of the small nature of the work and the short timing. Relative to operations, the Traffic Impact Study prepared for the Project (as discussed in Section 4.17), identified that assuming a 1 percent City growth rate by the time the Project is fully operational (assumed to be 2023), the Project would not cause a cumulative impact. Therefore, the impacts are less than significant, and no mitigation is required.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant With Mitigation Incorporated. Implementation of the proposed Project may result in direct and indirect impacts such as exposure to hazards associated with hazardous waste and public services. However, adherence to standard requirements and identified mitigation measures (Mitigation Measure HAZ-1, HAZ-2, and HAZ-3 and PS-1 through PS-5) would reduce these impacts to less than significant.

5 SUMMARY OF MITIGATION MEASURES

The following mitigation measures were identified to reduce impacts to less than significant:

BIOLOGICAL RESOURCES

BIO-1: If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can resume.

BIO-2: Prior to construction, a certified arborist shall be retained to flag trees that will be avoided and observe excavation activities that are planned within the root zone of the protected trees and assist the contractor in conducting excavation in a manner that will not impact the tree roots.

CULTURAL RESOURCES

CUL-1: **Provision for Unanticipated Cultural/Archaeological Buried Resources:** In the event that cultural resources are discovered during Project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease, and a qualified cultural/archaeologist specialist meeting Secretary of Interior standards shall be hired to assess the find. If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Project. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. Salvage operation requirements pursuant to Section 15064.5 of the CEQA Guidelines shall be followed, and the treatment of discovered Native American remains shall comply with State codes and regulations of the Native American Heritage Commission (NAHC). Any significant archaeological resources found shall be preserved as determined necessary by the Project

archaeologist and offered to a qualified repository for curation. Any resulting reports will be submitted to the South Central Coastal Information Center.

HAZARDS AND HAZARDOUS WASTE

HAZ-1: Unanticipated Encounters With Hazardous Waste: Following the abatement of hazardous materials by contractors licensed to remove said materials, should materials similar to those identified in "Comprehensive Hazardous Materials Survey Report" (Vista, November 2021), or if other forms of suspect hazardous materials are discovered during the remaining work activities, maintenance personnel and/or contractors must immediately cease work activities which may initiate an exposure episode, and notify the City Public Works Department manager. All such materials should be assumed to be hazardous and handled accordingly until properly tested and assessed.

HAZ-2: Construction Safety and Evacuation Plan: Prior to the start of Project construction, the City shall designate construction equipment and materials safety and staging areas for the City employees and contractors to follow during construction. The staging area plan shall be prepared collaboratively with and/or approved by the San Marino Unified School District and Huntington School personnel. Additional items to be addressed in the plan shall include but not be limited to safety barrier locations, identifying a clear walking path for students, posting hazard signs, and identifying a construction communication protocol between City and School staff.

Additionally, the plan shall address the evacuation protocol for the school, and procedures that the City and contractor must adhere to in the event of a school evacuation during SMC construction.

HAZ-3: Shared Evacuation Plan – Operations. The City shall work with the San Marino Unified School District and Huntington School to create an evacuation plan that addresses procedures if an emergency occurs that effects both facilities, as well as emergency communication protocols when an emergency would impact the parking lot for both facilities.

NOISE

NOI-1 The City will place the following noise-reducing best management practices on the Project construction plans:

- Construction Equipment Controls: require the contractor to utilize electric powered equipment as much as possible, heavy equipment should have proper mufflers installed, and locating any generators or compressors as far from the sensitive receptors as possible.

- Limit Operations Adjacent to Receivers: Limit the number of large pieces of equipment (i.e., bulldozers or concrete mixers) operating adjacent to receivers to one at any given time.

- Neighbor Notification. Provide notification to residential occupants nearest to the Project site at least 24 hours prior to initiation of construction activities that could result in substantial noise levels at outdoor or indoor living areas. This notification should include the anticipated hours and duration of construction and a description of noise reduction measures being implemented at the Project site. The notification should include a telephone number for local residents to call to submit complaints associated with construction noise. The notification should be posted along Huntington Drive and be visible from adjacent properties.

PUBLIC SERVICES

PS-1 **Shared Event Calendar**. The City and the Huntington Middle School should maintain an events calendar that is accessible and shared between the City (for library and SMC events) and the Huntington Middle School which would include the date, time and duration of the event, including the expected attendance figure for each event. Special SMC events/meetings where 40 attendees or more are expected would require further coordination with the Huntington Middle School and Crowell Public Library to ensure that any overlap of activities is minimized to the extent possible. To the extent feasible, the City and the Library shall avoid scheduling classes/meetings/events held at the SMC and the Crowell Public Library that begin or end such that it overlaps with the morning drop-off and afternoon pick-up peak time periods at the Huntington Middle School.

PS-2 **Managed Parking Collaboration**. The City and the Huntington Middle School should collaborate to implement managed parking for some spaces within the on-site parking facility (i.e., both valet parking spaces and tandem parking spaces) which would increase the effective parking supply as valet-attended parking could occur within drive aisles located throughout the on-site parking areas or other nearby lots (i.e., District Office parking lot).

PS-3 **Additional Parking Study for Huntington Drive.** The City will study the installation of additional parking spaces along the south side of Huntington Drive along the SMC frontage, similar to the spaces that are currently in front of the Crowell Public Library, and implement as feasible.

PS-4 **Encourage Alternative Transportation**. The SMC, Crowell Public Library and Huntington Middle School should encourage all of its users and employees to utilize alternative modes of transportation including but not limited to: bicycle, transit, ride-share, and other ride service opportunities to events where appropriate.

PS-5 **Conduct Future Parking Study**. The City will conduct a parking utilization monitoring study one year from issuance of the Project's Certificate of Occupancy. The parking utilization monitoring study must demonstrate that on-site parking is adequate to meet Project demand during both weekday and weekend conditions. If the study shows that Project parking demand exceeds the supply of parking within the Project, the City shall propose measures to reduce spillover parking impacts, subject to review and approval by the Director of Community Development. The parking reduction strategies may include, but are not limited to: 1) preparation of a Valet Parking Plan, 2) provision of transit passes

and/or ride-share subsidies for employees, and/or 3) subsidized off-site parking options in order to minimize on-site employee parking demand, if necessary.

TRIBAL CULTURAL RESOURCES

TCR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

D. The project applicant, lead agency or construction contractor shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations. "Ground- disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

E. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

F. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground- disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered tribal cultural resources (TCRs), including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., , as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TCR-2: Unanticipated Discovery of Human Remains and Associated Funerary Objects

G. Native American human remains are defined in Public Resources Code Section 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

H. If Native American human remains and/or grave goods are discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

I. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).

J. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh monitor determines in his/her sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)

K. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

L. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

TCR-3: Procedures for Burials and Funerary Remains:

H. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.

I. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

J. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.

K. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

L. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.

M. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

N. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

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Appendix A
Parking Agreement – City of San Marino and SMUSD

SAN MARINO UNIFIED SCHOOL DISTRICT AGREEMENT FOR NON-EXCLUSIVE USE OF PARKING FACILITIES WITH THE CITY OF SAN MARINO

THIS AGREEMENT ("**Agreement**") is dated as of November 21, 2019 ("**Execution Date**"), but effective as of August 26, 2016 ("**Effective Date**"), by and between the San Marino Unified School District, Los Angeles County (hereinafter referred to as the "**DISTRICT**"), and the City of San Marino, a municipal corporation (hereinafter referred to as the "**CITY**").

RECITALS

WHEREAS, DISTRICT is the owner of that certain real property located at 1700 Huntington Drive, San Marino, Los Angeles County, California 91108 (the "**Property**");

WHEREAS, the California State Legislature enacted Sections 10900 through 10914.5 of the California Code of Education ("**Community Recreations Program Legislation**") for purposes including "to authorize ... cities ... and school districts to organize, promote, and conduct programs of community recreation as will contribute to the attainment of general education and recreational objectives" for California children and adults ("**Community Recreation Purposes**") (CAL. EDUC. CODE §10900);

WHEREAS, CITY and DISTRICT are authorized and empowered by Section 10905 of the Community Recreations Program Legislation to cooperate with one another, enter into agreements with each other, and do "any and all things necessary or convenient to aid and cooperate in carrying out" the Community Recreation Purposes;

WHEREAS, DISTRICT is authorized and empowered by Section 10910 of the Community Recreations Program Legislation to grant the use of any building, grounds or equipment of the DISTRICT to any other public authority for Community Recreation Purposes, so long as such grant does not interfere with the use of such building, grounds or equipment for any other purpose of the public school system;

WHEREAS, pursuant to Section 10901.F of the Community Recreations Program Legislation, a "recreation center" includes "a place, structure, area, or other facility under the jurisdiction of a governing body of a public authority used for community recreation whether or not it may be used primarily for other purposes, playgrounds, ... swimming pools, gymnasiums, auditoriums, libraries, parks adjacent to school sites, recreational community gardens, rooms for arts and crafts, ... and meeting places";

WHEREAS, pursuant to that certain San Marino Unified School District Agreement for Use of Parking Facilities with the City of San Marino dated as of August 25, 2006 ("**Original Parking Agreement**"), by and between the CITY and the DISTRICT, since 2006, the CITY has used parking spaces on the Property (or a portion

thereof) as overflow parking for that certain library owned by the CITY, known as the San Marino City library and located at 1890 Huntington Drive, San Marino, California ("**San Marino City Library**");

WHEREAS, the parties hereto acknowledge and agree that the Original Parking Agreement expired by its terms on August 25, 2016 and is of no further force or effect except for the provisions thereof that expressly survived the expiration or termination of such Original Parking Agreement;

WHEREAS, the parties hereto acknowledge and agree that the terms and provisions of this Agreement are effective retroactively as of the Effective Date;

WHEREAS, the DISTRICT is constructing an athletics complex for the community to be known as the Barth Athletics Complex (the "**Barth Athletics Complex**") on or adjacent to the Property;

WHEREAS, the San Marino City Library and the Barth Athletics Complex both constitute community recreation centers within the spirit of the Community Recreations Programs Legislation; and

WHEREAS, the DISTRICT is willing to make available forty-eight (48) parking spaces located on the Property for non-exclusive use by the CITY for the San Marino City Library and other community recreation activities conducted on the CITY's adjacent real property, but only on the terms and conditions of this Agreement below.

NOW, THEREFORE, in consideration of the covenants and conditions contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the DISTRICT and the CITY, the DISTRICT and the CITY do hereby agree as follows:

Section I. Economic and other General Terms of Agreement

A. For the Term (as defined below) of this Agreement, the DISTRICT hereby leases to CITY, and CITY hereby leases from the DISTRICT, on a non-exclusive and shared basis, forty-eight (48) parking spaces located in the south parking lot on the Property (the "**Subject Spaces**"), as depicted on Exhibit A attached hereto.

B. Except as otherwise permitted in writing by the DISTRICT, at no point shall the Subject Spaces be used by the CITY or its invitees for other than employee and visitor parking for the San Marino City Library and/or the San Marino Center that is adjacent to the Property ("**San Marino Center**") (the "**Permitted Uses**"). The DISTRICT shall have no liability to the CITY if the Subject Spaces or any of them are not available for the San Marino City Library or San Marino Center or otherwise available to satisfy the CITY's parking needs at any time.

C. In consideration of the DISTRICT'S execution of this Agreement and the CITY's non-exclusive and shared use of the Subject Spaces during the Term, the CITY hereby agrees to pay to the DISTRICT rent ("**Rent**") as provided by this Section I.C. below.

(A) Within thirty (30) days after the Execution Date, the CITY shall pay to the DISTRICT the lump sum of Sixty-One Thousand Six Hundred and 00/100 Dollars ($61,600.00). A portion of the aforesaid $61,600 initial payment in the amount of Thirty Thousand Eight Hundred and 00/100 Dollars ($30,800.00) represents back-rent for the City's use of the Subject Spaces for the period commencing on the Effective Date through the Execution Date, and the remaining Thirty Thousand Eight Hundred and 00/100 Dollars ($30,800.00) portion of such initial payment represents Rent for the City's use of the Subject Spaces for the period commencing on the Execution Date through the day immediately preceding the first (1st) anniversary of the Execution Date. The 12-month period commencing on the Execution Date and on each anniversary of the Execution Date during the Term is referred to herein as a "**Lease Year**".

(B) On or before the first (1st) anniversary of the Execution Date and on each anniversary of the Execution Date thereafter throughout the remainder of the Term, the CITY shall pay to the DISTRICT as Rent an amount equal to the Rent paid for the prior Lease Year increased by two percent (2%) so that the Rent payable for each Lease Year will equal 102% of the total Rent payable for the immediately preceding Lease Year. For example, the Rent payable on or before the first (1st) anniversary of the Execution Date (*i.e.*, _____, 2020) will be Thirty-One Thousand Four Hundred Sixty-One and 00/100 Dollars ($31,416.00), and the Rent payable on or before the second (2nd) anniversary of the Execution Date (*i.e.*, _____, 2021) will be Thirty-Two Thousand Forty-Four and 32/100 Dollars ($32,044.32).

(C) In addition to the annual Rent payable by the CITY pursuant to this Section I.C. above, the CITY shall pay to the DISTRICT, within thirty (30) days after the Execution Date and on or before each anniversary of the Execution Date during the Term thereafter, the sum of Two Thousand and 00/100 Dollars ($2,000.00). The annual payment of $2,000 pursuant to this Section I.C.(C) is intended to compensate the DISTRICT for anticipated slurry seal repairs and needs over the Term of the Lease.

D. In further consideration of the non-exclusive right to use the

Subject Spaces together with the DISTRICT's use thereof throughout the Term, the CITY hereby agrees that the DISTRICT may use, subject to availability, the San Marino Center for school-sponsored events and PTA meetings. The DISTRICT shall reimburse to the CITY the actual cost of custodial and maintenance services provided in connection with the DISTRICT'S use of the San Marino Center.

E. The District may from time to time repair, restore and/or improve the Property, including the Subject Spaces, as the District may deem reasonably necessary from time to time, in which event the District may restrict or prohibit access to the Subject Spaces during the performance of such repair, restoration or other improvement work. The DISTRICT shall cause all repair, restoration and improvement work to be performed as the DISTRICT reasonably determines and in its reasonable discretion. In no event shall the CITY have any approval or other rights over any work or improvements by the DISTRICT on parking facilities or the Property (or other portions of the DISTRICT's property).

Section II. Term of Agreement

The term of this Agreement ("**Term**") shall commence on the Effective Date and expire on the tenth (10th) anniversary of the Execution Date, unless otherwise terminated as provided by this Agreement.

Section III. Use

(a) Permitted Use. CITY may use the Subject Spaces on a non-exclusive basis with the DISTRICT only for the Permitted Uses in accordance with Section I.B. of this Agreement.

(b) Use Restrictions. CITY shall: (i) not permit any objectionable or unreasonable noises, vibrations, odors or fumes in or to emanate from the Subject Spaces, (ii) not commit or permit any waste, improper, immoral or offensive use of the Subject Spaces, any public or private nuisance or anything that disturbs the quiet enjoyment of the DISTRICT or any other licensees or lessees of the Subject Spaces, (iv) not permit any dump trucks, tank trucks, concrete trucks and construction vehicles to use or park in any of the Subject Spaces or the Property, and (iv) use the Subject Spaces throughout the Term only for the Permitted Uses, and for no other purpose, unless CITY has obtained the prior written consent of DISTRICT for each such other use.

(c) Rules and Regulations. Notwithstanding any other provisions of this Agreement, including, without limitation, Sections I.A. and III(a), CITY shall not use, occupy, suffer or permit the Subject Spaces or any part thereof to be used in any manner, or suffer or permit anything to be brought into or kept therein, which would, in DISTRICT's reasonable judgment, violate the Rules and Regulations attached hereto as Exhibit B (as the same may be reasonably amended and supplemented by DISTRICT from time to time, by written notice to CITY in accordance with this Section III(c), the "**Rules and Regulations**"). If the DISTRICT chooses to amend the Rules and Regulations, the CITY agrees to comply with such changes thereto so long as such changes are enforced in a non-discriminatory manner vis-à-vis the DISTRICT.

The restrictions imposed by this Section III(c), and the application thereof, shall not be limited or modified by the terms of any other provision of this Agreement.

Section IV. Compliance with Laws

(a) In General. CITY shall, in the use of the Subject Spaces, promptly comply, and cause all persons claiming by, through or under CITY promptly to comply, with all laws, ordinances, certificates of occupancy, orders, rules, regulations and requirements of all federal, state, municipal and other governmental bodies and appropriate departments, commissions, boards and officers thereof.

(b) Contest. CITY shall have the right to contest by appropriate legal proceedings or in such other lawful manner as CITY may deem suitable in the name of CITY or DISTRICT, or both, but without cost or expense to DISTRICT, the validity of any law, ordinance, certificate, order, rule, regulation or requirement of the nature in Section IV(a) referred to, and if by the terms of any such law, ordinance, certificate, order, rule, regulation or requirement, compliance therewith may legally be held in abeyance without the incurrence of any lien, charge or liability of any kind against the Subject Spaces, the Property or any interest of the DISTRICT therein and without subjecting the DISTRICT to any liability, civil or criminal, of whatsoever nature for failure so to comply therewith, CITY may postpone compliance therewith until the final determination of any contest; provided, however, that all such proceedings shall be prosecuted with all due diligence and dispatch. DISTRICT shall cooperate with CITY, without cost or expense to DISTRICT, in any such contest hereunder; provided, however, that prior to initiating or carrying on any such contest in the name of DISTRICT, (i) CITY shall so advise DISTRICT in writing not less than ten (10) days before initiating such contest if practical, and (ii) CITY shall indemnify, defend and hold DISTRICT harmless from and against any costs, fees or other liabilities accruing in any such proceeding(s) initiated by CITY and arising following the Effective Date, unless such costs, fees or liabilities result from the negligence or willful misconduct of DISTRICT.

(c) Hazardous Materials. CITY covenants and agrees that CITY shall not use, or permit any person or persons to use, the Subject Spaces, the Property or any part thereof for the use, manufacture, storage, discharge or transportation of hazardous materials or substances in violation of any Environmental Laws (as defined hereinbelow). As used herein "**Environmental Laws**" shall mean any federal, state or local laws, ordinances, codes, statutes, regulations, administrative rules, policies and orders, and other authority, now or hereafter in effect, which classify, regulate, list or define hazardous substances, materials, wastes, contaminants, pollutants and/or hazardous materials, and any other legal authority, regulations or policies relating to or implementing such statues and regulations. CITY shall indemnify, defend and hold harmless DISTRICT from and against any and all claims, damages, liabilities and actions relating to the CITY's or any of its agents', employees', contractors', invitees', permittees', subtenants', licensees', representatives' or affiliates' storage, use or discharge of hazardous materials on the Subject Spaces or Property in violation of Environmental Laws; provided, however, the foregoing defense and indemnity provision shall not apply with respect to any hazardous materials or substances of any kind stored, used or discharged by DISTRICT or its agents, employees, contractors, invitees, permittees, tenants, subtenants, licensees, representatives or affiliates (excluding the CITY and its agents, employees, contractors, invitees, permittees,

tenants, subtenants, licensees, representatives, and/or affiliates). The provisions of this Section IV(c) shall survive the expiration or earlier termination of this Agreement.

Section V. As Is

(a) As-Is. CITY accepts the Subject Spaces in their present condition notwithstanding the fact that there may be certain defects in the Subject Spaces, whether or not known to either party as of the Effective Date, and CITY hereby represents that it has performed all investigations that it deems necessary or appropriate with respect to the condition of the Subject Spaces or any improvements located thereon. CITY hereby accepts the Subject Spaces on an "AS-IS, WITH ALL FAULTS" basis and CITY is not relying on any representation or warranty of any kind whatsoever, express or implied, from DISTRICT or any other governmental authority or public agency, or their respective agents or employees, as to any matters concerning the Subject Spaces or the Property, including without limitation, the quality, nature, adequacy and physical condition and aspects of the Subject Spaces, the Property or any improvements located thereon, including, but not limited to, (i) the quality, nature, adequacy and physical condition of soils, geology and any groundwater, (ii) the existence, quality, nature, adequacy and physical condition of utilities serving the Subject Spaces, the Property and any improvements located thereon, (iii) the fitness or the suitability, value or adequacy, of the Subject Spaces or any improvements located thereon for any particular purpose, (iv) the zoning, entitlements or other legal status of the Subject Spaces, the Property or any improvements located thereon, and any public or private restrictions affecting use of the Subject Spaces, (v) the compliance of the Subject Spaces, the Property or any improvements located thereon with any applicable codes, rules, regulations, statutes, resolutions, ordinances, covenants, conditions and restrictions or laws of DISTRICT, County, State, United States of America or any other local, state or federal governmental or quasi-governmental entity ("**Applicable Laws**"), including, without limitation, relevant provisions of the Americans with Disabilities Act, (vi) the presence of any underground storage tank or hazardous substances on, in, under or about the Subject Spaces, any improvements located thereon, the adjoining or neighboring property, or ground or other subsurface waters, (vii) the condition of title to the Subject Spaces, the Property or any improvements located thereon, and (viii) the operation of the Subject Spaces, the Property or any improvements located thereon (collectively, the "**As-Is Conditions**").

(b) Release. CITY HEREBY GENERALLY, FULLY AND IRREVOCABLY RELEASES DISTRICT, ITS BOARD, STAFF, AGENTS, EMPLOYEES, INDEPENDENT CONTRACTORS AND OTHER REPRESENTATIVES (COLLECTIVELY, THE "**DISTRICT PARTIES**") FROM AND AGAINST ANY AND ALL CLAIMS THAT CITY MAY NOW HAVE OR HEREAFTER ACQUIRE AGAINST ANY OF THE DISTRICT PARTIES FOR AND FROM ANY COST, LOSS, LIABILITY, DAMAGE, EXPENSE, ACTION OR CAUSE OF ACTION, WHETHER FORESEEN OR UNFORESEEN, KNOWN OR UNKNOWN, ARISING OUT OF OR RELATED TO THE PROPERTY OR THE SUBJECT SPACES (INCLUDING, WITHOUT LIMITATION, ANY PATENT, LATENT OR OTHER DEFECTS IN THE PROPERTY OR THE SUBJECT SPACES OR THE PHYSICAL OR ENVIRONMENTAL CONDITION OF THE PROPERTY OR THE SUBJECT SPACES AND THE AS-IS CONDITIONS).

WITH RESPECT TO THE FOREGOING RELEASES AND WAIVERS SET FORTH IN THIS SECTION, CITY EXPRESSLY WAIVES THE BENEFITS OF SECTION 1542 OF THE CALIFORNIA CIVIL CODE, WHICH PROVIDES AS FOLLOWS:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

CITY HAS BEEN ADVISED BY ITS LEGAL COUNSEL AND UNDERSTANDS THE SIGNIFICANCE OF THIS WAIVER OF SECTION 1542 RELATING TO UNKNOWN, UNSUSPECTED AND CONCEALED CLAIMS. BY ITS INITIALS BELOW, CITY ACKNOWLEDGES THAT CITY FULLY UNDERSTANDS, APPRECIATES AND ACCEPTS ALL OF THE TERMS OF THIS SECTION.

_____

CITY

Section VI. Indemnification

To the full extent permitted by law and by a court of competent jurisdiction, CITY shall defend, indemnify and hold harmless DISTRICT, its employees, agents and officials, from any liability, claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including without limitation, actual attorneys' fees, court costs, interest, defense costs, expert witness fees, and any other costs or expenses of any kind whatsoever without restriction or limitation incurred by DISTRICT and resulting from CITY's (or any of its agents', employees', contractors', invitees', permittees', subtenants', licensees', representatives' or affiliates') use of the Subject Spaces or access to or on the Property pursuant to this Agreement. All obligations and liabilities under this Section are to be paid by CITY as incurred by DISTRICT. This indemnity shall survive the expiration or termination of this Agreement.

Without affecting the rights of DISTRICT under any provision of this Section, CITY shall not be required to indemnify, defend and hold harmless DISTRICT as set forth above for liability attributable to the active gross negligence or willful misconduct of DISTRICT, provided such active gross negligence or willful misconduct is determined by agreement between the parties or the findings of a court of competent jurisdiction or referee, as applicable. This exception will apply only in instances where the DISTRICT is shown to have been actively and grossly negligent and not in instances where CITY is solely or partially at fault or in instances where DISTRICT's active gross negligence or willful misconduct accounts for only a percentage of the liability involved. In those instances, the obligation of CITY will be for that portion or percentage of liability not attributable to the active gross negligence or willful misconduct of DISTRICT as determined by written agreement between the parties or the findings of a court of competent jurisdiction or referee, as applicable.

Section VII. Independent Contractor Status

CITY is, and shall at all times remain to DISTRICT, a wholly independent contractor. CITY shall have no power to incur any debt, obligation, or liability on behalf of DISTRICT or otherwise act on behalf of DISTRICT as an agent. Neither DISTRICT nor any of its agents shall have control over the conduct of CITY or any of CITY's employees or independent contractors. CITY shall not, at any time, or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of DISTRICT.

Section VIII. Insurance

(a) CITY's Insurance. During the Term of this Agreement, the CITY shall maintain, at its own expense, (1) comprehensive general liability insurance in the amount of at least two million dollars ($2,000,000) per occurrence and four million dollars ($4,000,000) in the aggregate for bodily and personal injury, (2) a combined single limit of at least one million ($1,000,000) per occurrence for property damage and (3) workers' compensation insurance in the amount required by law. The comprehensive general liability insurance provided by the CITY shall be endorsed to name the DISTRICT, its Board, officers, and employees as additional insureds on the applicable policy or policies.

(b) Required Provisions. All insurance policies shall also be endorsed to provide that the insurance coverage shall not be canceled, reduced, or otherwise modified without the insurance carrier giving the DISTRICT thirty (30) days prior written notice thereof. The CITY agrees to provide certificates of insurance of adequate evidence of coverage, including copies of the required endorsements.

The CITY is a member of the California Joint Powers Insurance Authority, and the DISTRICT agrees that the coverage afforded the CITY by this entity satisfies the requirements of this Section.

(c) Failure to Procure Insurance. If CITY fails to procure or renew the herein required insurance and does not cure such failure within five (5) business days after written notice from DISTRICT, in addition to the other rights and remedies provided hereunder, DISTRICT may, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith. All monies so paid by DISTRICT shall be repaid by CITY, with interest thereon at the Applicable Rate, to DISTRICT within five (5) business days after CITY's receipt of written demand therefor.

(d) Notification of Incidents, Claims or Suits. CITY shall notify DISTRICT of any accident or incident on or about the Subject Spaces or Property which involves injury or property damage over Five Thousand Dollars ($5,000.00) in the aggregate and pursuant to which a claim against CITY and/or DISTRICT is made or threatened. Such notification shall be made in writing within 72 hours after CITY first becomes aware of the claim or threatened claim.

Section IX. No Assignment

The CITY may not assign or transfer, in any manner, its rights and obligations under this Agreement except that the CITY may allow its invitees and permittees to use the Subject Spaces for the permitted use. Any such attempted assignment or transfer shall result in the immediate and automatic termination of this Agreement.

Section X. Alterations and Maintenance

(a) Alterations by the CITY. The CITY may not alter the Subject Spaces or the Property without DISTRICT's prior written consent (which consent may be given or withheld in the DISTRICT's sole and absolute discretion). Any such approved alterations, additions or improvements shall be at the CITY's sole cost and expense and shall become the property of the DISTRICT and shall be surrendered upon the termination or expiration of this Agreement, except that DISTRICT may, by written notice given to CITY at least thirty (30) days prior to the end of the Term, require CITY to remove all or certain designated fixtures at the CITY's sole cost and expense.

(b) DISTRICT Maintenance. Notwithstanding anything to the contrary contained in this Agreement, the DISTRICT may at any time upon thirty (30) days' prior written notice, or a shorter period if additional damage may result, reasonably repair and maintain the Subject Spaces.

Section XI. Default; Remedies

(a) Defaults by CITY. The occurrence of any of the following shall constitute a default under this Agreement by CITY (each, a "**Default**"):

i. Any failure by CITY to pay any installment of Rent or any other amounts due and payable by the CITY hereunder when due, if the failure continues for ten (10) days after notice of default has been given to CITY;

ii. Any failure by CITY to observe and perform any other provisions of this Agreement to be observed and performed by CITY, when such failure is curable and continues uncured for thirty (30) days after notice by DISTRICT to CITY; provided that, if the nature of the default cannot be reasonably cured within thirty (30) days, CITY shall not be deemed in default if it shall commence curing the default within such thirty (30) day period and diligently prosecutes same to completion;

iii. The abandonment or vacation of the Subject Spaces and/or the cessation of business by CITY at the Subject Spaces; and

iv. A transfer or attempted assignment or transfer in violation of Section IX.

The notices required under this Section XI(a) are the only notices required to be given by DISTRICT to CITY in the event of CITY's Default and are not in addition to any statutory notices otherwise required by the unlawful detainer statutes of California.

(b) Termination of Agreement and Remedies. In the event of any Default by CITY, in addition to any and all other rights and remedies available to DISTRICT at law or in equity, DISTRICT shall have the right to immediately terminate this Agreement and all rights of CITY hereunder by giving written notice to CITY of such election by DISTRICT, whereupon the DISTRICT shall be entitled to retain all Rent and other amounts paid to the DISTRICT pursuant to this Agreement as of the date of such termination and to bring a claim against CITY for any Rent or other amounts accrued through the date of the termination and not yet paid.

(c) Default Interest. If the CITY fails to make any payment due to the DISTRICT hereunder when due and payable (including, without limitation, Rent), then the amount due shall bear and accrue interest from the date that such payment became due and payable until it is paid at the rate of fifteen percent (15%) per annum, compounded monthly (the "**Applicable Rate**").

Section XII. Surrender of Subject Spaces

Except as otherwise provided by Section X(a) above, CITY agrees that on expiration or termination of the Term, any improvements located on the Property shall become the property of DISTRICT, free from any liens or claims whatsoever, without any further compensation therefor from DISTRICT to CITY or any other person.

On expiration or termination of the Term, CITY shall surrender the Subject Spaces to DISTRICT, in good order, condition, and repair, reasonable wear and tear and obsolescence excepted.

Section XIII. Intentionally Omitted

Section XIV. Estoppel Certificates

Within fifteen (15) days after request by either party, the other party will execute and deliver an estoppel certificate in form reasonably satisfactory to the requesting party or its designees which will certify that this Agreement is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as modified and stating the modifications), and stating whether, to the best knowledge of the signer of such certificate, the other party is in default in performance of any covenant, agreement or condition contained in this Agreement and, if so, specifying each such default of which the signer may have knowledge. Any such statement delivered pursuant to this Section XIV may be relied upon by any prospective purchaser of the interest of DISTRICT or any mortgagee or assignee thereof.

Section XV. Casualty

(a) Reconstruction by DISTRICT. If, during the Term, the Subject Spaces are totally or partially destroyed by any casualty, the DISTRICT (in the DISTRICT's sole and absolute discretion) may elect by written notice to the CITY ("**Casualty Notice**") delivered within thirty (30) days after the date of such casualty to: (x) restore the Subject Spaces to

substantially the same condition as they were in immediately before destruction and as soon as reasonably possible or (y) not restore the Subject Spaces. If the DISTRICT elects to restore the Subject Spaces pursuant to Section XV.(a)(x), the costs and expenses incurred to reconstruct and/or restore the Subject Spaces, to the extent not covered by insurance, shall be paid by the DISTRICT. If the DISTRICT elects to restore the Subject Spaces pursuant to Section XV.(a)(x), but has not completed such restoration within two hundred seventy (270) days after delivery of the Casualty Notice, the CITY may terminate the Agreement by written notice to the DISTRICT delivered within thirty (30) days thereafter. If the DISTRICT elects to not restore the Subject Spaces pursuant to Section XV.(a)(y), either the CITY or DISTRICT may terminate the Agreement by written notice delivered to the other party within thirty (30) days after delivery of the Casualty Notice. All insurance proceeds paid or payable in connection with any casualty shall be the sole property of the DISTRICT; provided that, the DISTRICT will apply such proceeds to the restoration of the Subject Spaces if and to the extent that the DISTRICT elects to restore such Subject Spaces.

(b) Abatement or Reduction of Rent if DISTRICT Elects to Restore. If DISTRICT elects to repair the damage to all or part of the Subject Spaces pursuant to Section XV.(a)(x), the Rent payable by CITY hereunder shall be proportionately reduced based on the number of Subject Spaces which are thereby rendered unusable from the date of such casualty until five (5) days after completion by DISTRICT of the repairs to the Subject Spaces (or the part thereof rendered unusable) or until CITY again uses the Subject Spaces (or the part thereof rendered unusable), whichever first occurs.

(c) Inapplicability of Civil Code Sections. The provisions of California Civil Code §§1932(2) and 1933(4), and any successor statutes, are inapplicable with respect to any destruction of any part of the Subject Spaces or Property.

Section XVI. Condemnation

(a) Total Taking. If all Subject Spaces should be taken by any public or quasi-public authority under the power or threat of eminent domain, then, in such event, on the earlier of the date title to the Subject Spaces vests in such public or quasi-public authority, or the date on which the public or quasi-public agency takes possession of the Subject Spaces, this Agreement shall terminate and the parties shall be relieved of further obligations under this Agreement except those obligations and liabilities that arose before the effective date of termination, but termination of this Agreement shall not affect DISTRICT's and CITY's rights to seek from the condemning authority any compensation or damages for, on the account of, or arising out of, such taking.

(b) Partial Taking. If a taking shall occur that results in the permanent loss of more than fifty percent (50%) of the parking spaces on the Property, either party may elect to terminate this Agreement by written notice delivered to the other party within thirty (30) days after the commencement of such taking process. If neither party elects to terminate this Agreement within such thirty (30) day period, then (i) unless the DISTRICT agrees otherwise in its sole and absolute discretion, the number of Subject Spaces will be reduced proportionately by the percentage of parking spaces taken within the Project (*e.g.*, if 25% of the total parking spaces at the Property are taken, then the Subject Spaces will be reduced

from 48 to 36 parking spaces) and CITY will be permitted to continue to use such reduced number of Subject Spaces on a non-exclusive basis with the DISTRICT on the terms of this Agreement, (ii) if the number of Subject Spaces are reduced pursuant to clause (i) above, Rent payable by the CITY hereunder shall be proportionately adjusted and reduced by such percentage reduction in Subject Spaces, and (iii) DISTRICT shall retain the right to seek from the condemning authority, and shall be entitled to retain, any compensation or damages for, on the account of, or arising out of, such taking. If a taking shall occur that results in the permanent loss of fifty percent (50%) or less of the total parking spaces within the Property, then this Agreement shall not terminate but at the DISTRICT's election by notice to CITY in its sole and absolute discretion, the Subject Spaces and Rent payable by the CITY hereunder shall be proportionately reduced by the percentage reduction in parking spaces at the Property resulting from such taking as described in clauses (i) and (ii) above, and the DISTRICT shall be entitled to receive the entire award made in connection with any such partial taking.

(c) Temporary Taking. Notwithstanding anything to the contrary contained in this Section XVI, in the event of a temporary taking of all or any portion of the Subject Spaces for a period of one hundred eighty (180) days or less, then this Agreement shall not terminate but the Rent payable by the CITY hereunder shall be abated for the period of such taking in proportion to the ratio that the amount of Subject Spaces taken bears to the total amount of Subject Spaces. The DISTRICT shall be entitled to receive the entire award made in connection with any such temporary taking. In the event of a temporary taking of more than fifty percent (50%) of the Subject Spaces for a period of more than one hundred eighty (180) days, either party may elect to terminate this Agreement by written notice delivered to the other party within thirty (30) days after the commencement of such temporary taking process. If neither party elects to terminate this Agreement within such thirty (30) day period, (i) the CITY's right to continue to use the remaining Subject Spaces on a non-exclusive basis with the DISTRICT and otherwise on the terms of this Agreement shall continue, (ii) Rent payable by the CITY hereunder shall be proportionately abated, adjusted or reduced, and (iii) DISTRICT shall retain the right to seek from the condemning authority, and shall be entitled to retain, any compensation or damages for, on the account of, or arising out of, such temporary taking. In the event of a temporary taking of fifty percent (50%) or less of the Subject Spaces for a period of more than one hundred eighty (180) days, then this Agreement shall not terminate but the Rent payable by the CITY hereunder shall be abated for the period of such taking in proportion to the ratio that the amount of Subject Spaces taken bears to the total amount of Subject Spaces. The DISTRICT shall be entitled to receive the entire award made in connection with any such temporary taking.

(d) Inapplicability of Code Section. The provisions of California Code of Civil Procedure §1265.130, and any successor statute, are inapplicable with respect to any condemnation or taking of all or any portion of the Subject Spaces.

Section XVII. WAIVER OF JURY TRIAL

CITY AND DISTRICT EACH HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ANY RIGHT THEY MAY HAVE TO A TRIAL BY

JURY WITH RESPECT TO ANY CONTROVERSY OR CLAIM, WHETHER ARISING IN TORT OR CONTRACT OR BY STATUTE OR LAW, BASED HEREON, OR ARISING OUT OF, UNDER OR IN CONJUNCTION WITH THIS AGREEMENT (INCLUDING, WITHOUT LIMITATION, THE VALIDITY, INTERPRETATION, COLLECTION OR ENFORCEMENT HEREOF) OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN) OR ACTIONS OF ANY PARTY IN CONNECTION HEREWITH ("**DISPUTES**"). EACH PARTY ACKNOWLEDGES AND AGREES THAT NO REPRESENTATIONS OF FACT OR OPINION HAVE BEEN MADE BY ANY PERSON TO INDUCE THIS WAIVER OF TRIAL BY JURY OR TO IN ANY WAY MODIFY OR NULLIFY ITS EFFECT. THIS PROVISION IS A MATERIAL INDUCEMENT FOR CITY'S AND DISTRICT'S ENTERING INTO THIS AGREEMENT AND THE PARTIES WOULD NOT HAVE ENTERED INTO THIS AGREEMENT WITHOUT THIS WAIVER. CITY AND DISTRICT ARE EACH HEREBY AUTHORIZED TO FILE A COPY OF THIS SECTION XVII IN ANY PROCEEDING AS CONCLUSIVE EVIDENCE OF THIS WAIVER OF JURY TRIAL.

Section XVIII. CONSENT TO JUDICIAL REFERENCE

If and to the extent that Section XVII immediately above is determined by a court of competent jurisdiction to be unenforceable, each of the parties to this Agreement hereby consents and agrees that (a) any and all Disputes shall be heard by a referee in accordance with the general reference provisions of California Code of Civil Procedure Section 638, (b) such referee shall hear and determine all of the issues in any such Dispute (whether of fact or of law) and shall report a statement of decision, provided that, at the mutual agreement of the parties, any such issues pertaining to a "provisional remedy" as defined in California Code of Civil Procedure Section 1281.8 shall be heard and determined by the court, and (c) pursuant to California Code of Civil Procedure Section 640(a), judgment may be entered upon the decision of such referee in the same manner as if the Dispute had been tried directly by a court. The parties shall use their respective best efforts to agree upon and select such referee, provided that such referee shall be a retired California state or federal judge. Each party hereto acknowledges that this consent is a material inducement to enter into this Agreement and all other agreements and instruments provided for herein, and that each will continue to rely on this consent in their related future dealings. The parties shall share the cost of the referee and reference proceedings equally; provided that, the referee may award attorneys' fees and reimbursement of the referee and referenced proceeding fees and costs to the prevailing party, whereupon all referee and reference proceeding fees and charges will be payable by the non-prevailing party (as so determined by the referee). Each party hereto further warrants and represents that it has reviewed this consent with legal counsel of its own choosing, or has had an opportunity to do so, and that it knowingly and voluntarily gives this consent having had the opportunity to consult with legal counsel. This consent is irrevocable, meaning that it may not be modified either orally or in writing, and this consent shall apply to any subsequent amendments, renewals, supplements, or modifications to this Agreement or any other agreement or document entered into between the parties in connection with this Agreement. In the event of litigation, this Agreement may be filed as evidence of either or both parties' consent to have any and all Disputes heard and determined by a referee under California Code of Civil Procedure Section 638.

Section XIX. Attorney's Fees

In the event that legal action is necessary to enforce the provisions of this Agreement, the parties agree that the prevailing party shall be entitled to recover attorney's fees and expert witness fees and costs from the opposing party in any amount determined by the court or referee, as applicable, to be reasonable.

FOR PURPOSES OF THIS AGREEMENT, IF EITHER PARTY MAKES A SETTLEMENT OFFER TO THE OTHER PARTY IN CONNECTION WITH A DISPUTE, THEN THE TERM "PREVAILING PARTY" SHALL BE DEEMED TO INCLUDE AND CONSTITUTE A PREVAILING PARTY AS DEFINED IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 998, WHETHER OR NOT SUCH SETTLEMENT OFFER WAS MADE UNDER AND/OR PURSUANT TO SAID SECTION 998 OF THE CALIFORNIA CODE OF CIVIL PROCEDURE, AND THE PREVAILING PARTY IN SUCH EVENT WILL BE PERMITTED TO RECOVER ALL OF ITS ATTORNEYS' FEES, COSTS AND EXPENSES, AND NOT ONLY ITS LITIGATION COSTS OR ITS ATTORNEYS' FEES, COSTS AND EXPENSES INCURRED FROM AND AFTER THE DATE OF THE SETTLEMENT OFFER. The provisions of this Section XIX shall survive the entry of any judgment, and shall not merge, or be deemed to have merged, into any judgment.

Section XX. Real Estate Brokers

CITY and DISTRICT each represent that it has not had dealings with any real estate broker, finder, or other similar person with respect to this Agreement in any manner. CITY and DISTRICT each shall indemnify the other from all claims that may be asserted against the other by any broker, finder, or other similar person with whom it has purportedly dealt.

Section XXI. Authority

Each individual executing this Agreement on behalf of CITY covenants, warrants, and represents that (a) he or she is duly authorized to execute and deliver this Agreement on behalf of CITY; (b) this Agreement is binding on CITY; (c) CITY is a duly organized and legally existing municipal corporation in good standing in the state of California; and (d) the execution and delivery of this Agreement by CITY shall not result in any breach of, or constitute a default under, any mortgage, deed of trust, lease, loan, credit agreement, partnership agreement, or other contract or instrument to which CITY is a party or by which CITY may be bound.

Section XXII. Nondiscrimination

The DISTRICT shall not discriminate on the basis of race, color, sex, age, religion, national origin, or any other basis prohibited by law in making available its facilities to CITY pursuant to this Agreement. CITY shall not discriminate on the basis of race, color, sex, age, religion, national origin, or any other basis prohibited by law in connection with its use of the DISTRICT's facilities or the Property or operating its recreation programs at or adjacent to DISTRICT Property.

Section XXIII. Entire Agreement

This Agreement supersedes any and all other agreements (including, without limitation, the Original Parking Agreement), either oral or in writing, between the parties with respect to the subject matter herein and contains the entire agreement. Any modification of this Agreement will be effective only if it is in a writing signed by the CITY and the DISTRICT.

Section XXIV. Applicable Law

This Agreement shall be governed by the laws of the State of California.

Section XXV. Notice

Any notice which is required to be given by any provision of this Agreement will be in writing and will be deemed duly given: (i) when delivered by hand if delivered prior to 3:00 p.m. Pacific Time, otherwise on the next business day, (ii) one (1) business day after delivery to a recognized overnight courier service providing dated evidence of delivery, (iii) three (3) business days after being sent by U.S. certified mail, with a return receipt requested, or (iv) when sent by email, provided the email is sent prior to 3:00 p.m. Pacific Time on a business day, otherwise on the next business day. Each notice shall be addressed as follows unless a party notifies the other party in writing of a different address for receipt of notice:

If to the DISTRICT:

San Marino Unified School District
1665 West Drive
San Marino, CA 91108
Attention: Dr. Jeff Wilson
Email: jwilson@smusd.us
Phone: (626) 299-7000

If to the CITY:

City of San Marino
2200 Huntington
San Marino, CA 91108
Attention: City Manager Dr. Marcella Marlowe
Email: mmarlowe@cityofsanmarino.org
Phone: (626) 300-0700

Section XXVI. No Third Party Rights

Nothing herein is intended to nor shall be construed to create any rights of any kind whatsoever in third persons or entities not parties to this Agreement.

Section XXVII. Counterpart Execution

This Agreement may be executed in counterparts, each of which so executed shall be deemed an original irrespective of the date of the execution, and said counterparts shall together constitute one and the same agreement.

[*Remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first written above.

CITY:

CITY OF SAN MARINO,
a municipal corporation

By: Marcella Marlowe
Name: Marcella Marlowe
Title: City Manager

DISTRICT:

SAN MARINO UNIFIED SCHOOL DISTRICT, LOS ANGELES COUNTY

By: Jeffrey D. Wilson
Name: Jeffrey D. Wilson
Title: Superintendent

EXHIBIT A

DEPICTION OF SUBJECT SPACES

EXHIBIT A – DEPICTION OF SUBJECT SPACES

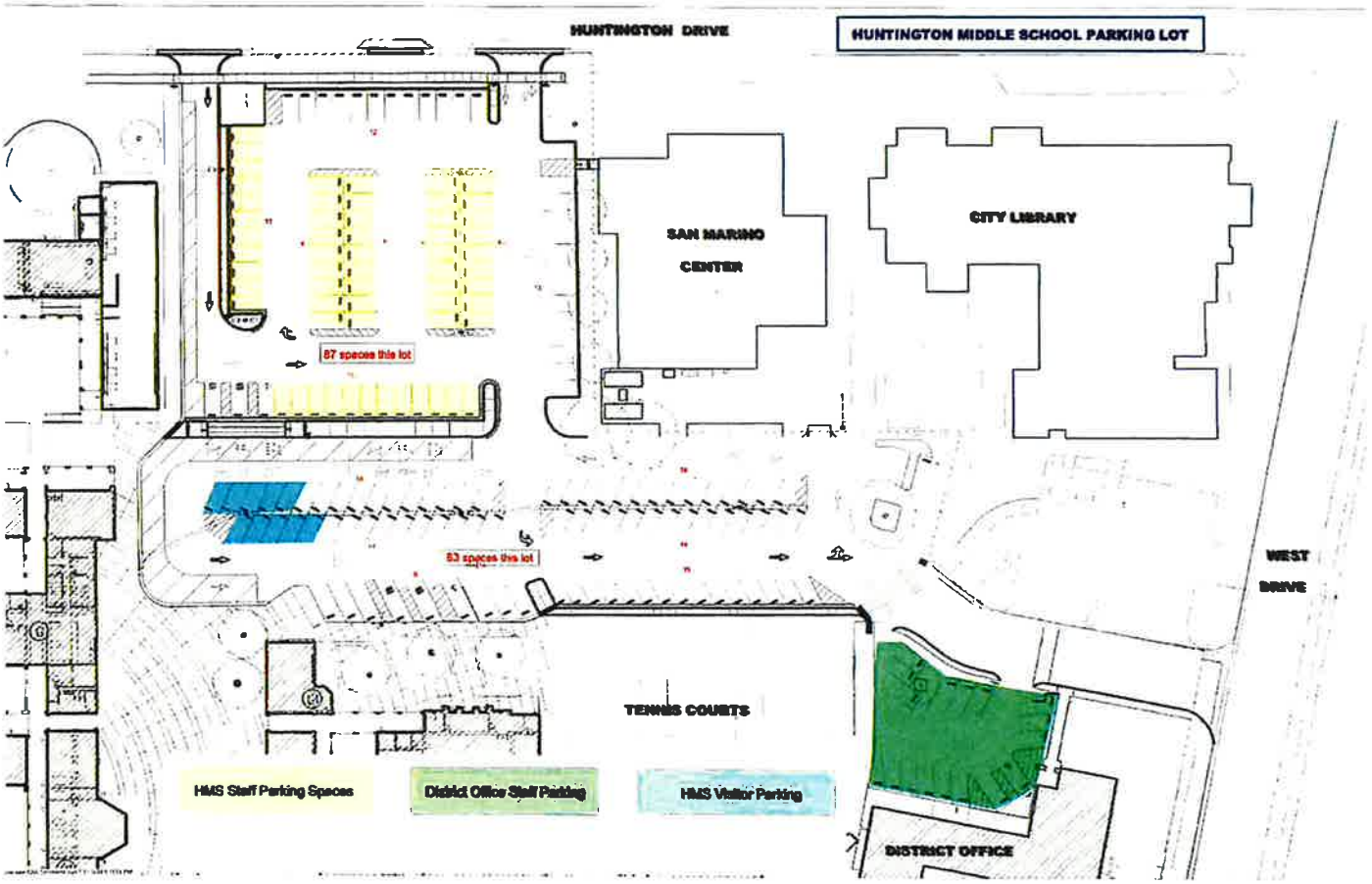

EXHIBIT B

RULES AND REGULATIONS AS OF THE EFFECTIVE DATE

The following rules and regulations shall apply, where applicable, to the Subject Spaces and other portions of the Property, and are subject to change and addition from time to time by DISTRICT in accordance with this Agreement. In the event of a direct conflict between the rules and regulations and the remainder of the terms of the Agreement to which these rules and regulations are attached, the terms and provisions of the Agreement shall control. Capitalized terms used herein have the same meanings as defined in the Agreement.

1. The sidewalks and public portions of the Property, such as entrances, passages, courts, stairways, or corridors shall not be obstructed or encumbered by any visitor or used for any purpose other than ingress and egress to and from the Subject Spaces. No rubbish, litter, trash, or material shall be placed, emptied, or thrown in those areas. At no time shall CITY permit CITY's employees or invitees to loiter in common areas or elsewhere about the Subject Spaces, the Property or the DISTRICT's adjacent real property.

2. No signs, advertisements or notices shall be exhibited, inscribed, painted or affixed to the Subject Spaces or Property, except those of such color, size, style and in such places as are first approved in writing by DISTRICT. In the event of the violation of the foregoing by CITY or its invitees or other representatives, DISTRICT may remove same without any notice or liability, and may charge the expense incurred by such removal to the CITY.

3. DISTRICT shall have the right to approve the weight, size, or location of heavy equipment or articles brought on and about the Subject Spaces or Property, which approval shall not be unreasonably withheld. Damage to the Subject Spaces or Property by the maintenance, operation, existence or removal of CITY's property shall be repaired at CITY's sole expense.

4. CITY and its invitees and representatives shall not: (a) make or permit any improper, objectionable or unpleasant noises or odors on the Subject Spaces or Property, or otherwise interfere in any way with persons on the Property; (b) solicit business or distribute or cause to be distributed, in any portion of the Property, handbills, promotional materials or other advertising; or (c) conduct or permit other activities by any of CITY or the agents, employees, invitees or licensees of CITY that might, in DISTRICT's reasonable opinion, constitute a nuisance.

5. No animals, except those assisting handicapped persons, shall be brought onto the Property or kept in or about the Subject Spaces.

6. No flammable, explosive or dangerous fluids or substances shall be brought on, used or kept by CITY on the Subject Spaces or on the Property, except for those substances as are typically found in similar premises used for parking and are being used by CITY in a safe manner and in accordance with all Applicable Laws. CITY shall not use, store, install, spill, remove, release or dispose of within or about the Subject Spaces or any other portion of the Property, any solid, liquid or gaseous

material now or subsequently considered toxic or hazardous by any applicable environmental law which may now or later be in effect. CITY shall comply with all Applicable Laws pertaining to and governing the use of these materials by CITY and shall remain solely liable for the costs of abatement and removal.

7. CITY shall not use or occupy the Subject Spaces in any manner or for any purpose which might injure the reputation or impair the present or future value of the Subject Spaces, the Property or the DISTRICT. CITY shall not use, or permit any part of the Subject Spaces to be used for lodging, sleeping or for any illegal purpose.

8. CITY shall not take any action which would violate DISTRICT's labor contracts or which would cause a work stoppage, picketing, labor disruption or dispute or interfere with DISTRICT or with the rights and privileges of any person lawfully on the Property ("**Labor Disruption**"). CITY shall take the actions necessary to resolve the Labor Disruption, and shall have pickets removed and, at the request of DISTRICT, immediately terminate any work in the Subject Spaces, on the Property, or at the San Marino City Library that gave rise to the Labor Disruption, until DISTRICT gives its written consent for the work to resume. CITY shall have no claim for damages against DISTRICT as a result of the above actions.

9. DISTRICT may from time to time adopt systems and procedures for the security and safety of the Property, the Subject Spaces and DISTRICT's visitors' entry and use of the Property. CITY, its agents, employees, guests and invitees shall comply with DISTRICT's systems and procedures.

10. Neither CITY nor its agents, employees, contractors, guests or invitees shall smoke or permit smoking on the Subject Spaces or the Property, unless a portion the Property has been declared a designated smoking area by DISTRICT. DISTRICT shall have the right to designate the entire Property (including the Subject Spaces) as non-smoking.

11. Neither CITY nor its agents, employees, guests or invitees shall make, or permit to be made, any unseemly or disturbing noises or disturb or interfere with any person on the Property or neighboring buildings or premises.

Appendix B
Air Quality / Greenhouse Gas Analysis

SAN MARINO CENTER IMPROVEMENT PROJECT

AIR QUALITY/GREENHOUSE GAS STUDY

Prepared for:

ELMT Consulting, Inc.
2201 North Grand Avenue, Suite 10098
Santa Ana, CA 92711

Prepared by:

BPG
BIRDSEYE
PLANNING GROUP

September 2021

SAN MARINO CENTER IMPROVEMENT PROJECT
SAN MARINO, CALIFORNIA

AIR QUALITY and GREENHOUSE GAS STUDY

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SAN MARINO COMMUNITY CENTER IMPROVEMENT PROJECT
SAN MARINO, CALIFORNIA

AIR QUALITY and GREENHOUSE GAS STUDY

This report is an analysis of the potential air quality and greenhouse gas impacts associated with the proposed San Marino Community Center Improvement project in the City of San Marino, California located in Los Angeles County. This report has been prepared by Birdseye Planning Group (BPG) under contract to ELMT Consulting, Inc., to support preparation of the environmental documentation pursuant to the California Environmental Quality Act (CEQA). This study analyzes the potential for temporary impacts associated with construction activity and long-term impacts associated with operation of the proposed project.

PROJECT DESCRIPTION

The San Marino Center Improvement Project (Project) is located at 1800 Huntington Drive, San Marino, which is the south side of Huntington Drive, adjacent and east of the Huntington Middle School and west and adjacent to the Crowell Public Library, identified by Los Angeles County Assessor's Parcel Number (APNs) 5334-024-903.The site currently supports an existing community center. The Project proposes to change the San Marino Center (SMC) building façade from a Modern Colonial Revival to a Spanish Mediterranean architectural style which is similar to adjacent buildings. Other upgrades include rehabilitation of the building interior to include additional offices to accommodate six City Recreation Department staff, optimize the interior public gathering space, and repair/replace the heating/air conditioning, plumbing and electrical systems and light fixtures to current building code standards.

The proposed interior space reconfiguration will allow for an occupancy rating of 1,083. Access to the site is via two driveways – one fronting Huntington Drive and the other along West Street east of the site. Access would not be changed with implementation of the project.

Exterior improvements include the following are comprised of the following:

- Replace the decorative wrought iron posts with stucco columns;
- Replace the wood shingled roof with the terra cotta tile;
- Replace doors and windows to match existing rectangular and square shapes but with grid patterns similar to the library windows as appropriate;
- Add wood accents where appropriate and complimentary such as around windows and the entry door;
- Add an open patio area at the back of the building that will have a stucco wall and a wood trellis ceiling similar to the open space areas at the library;
- Remove canopies that were added to the building after its original construction will be removed.
- New paint and stucco repair that will match the color of the library.

Exterior features that will remain intact or will not be impacted by the proposed improvements include the following:

- The cornerstone of the building inscribed with "San Marino Women's Club" near the building entry;
- Concrete walkway and concrete front patio; and
- Landscaping, including the large oak tree adjacent to the front entry, grassy areas and urban landscaping around the west and south of the building.

The project would not require ground disturbances associated with or grading. Minor demolition would be required. The majority of the work would be completed with hand tools or small pieces of equipment.

Adjacent land uses are vacant land to the Crowell Library to the east, a parking lot to the west; San Marino Unified School District offices to the south and Huntington Drive to the north. The proposed project is expected to be begin construction in early 2022 and be completed within 6-8 months. The project site is shown in Figure 1. The proposed floor plans is shown in Figure 2.

SETTING

Air Pollution Regulation

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate emissions of airborne pollutants and have established ambient air quality standards for the protection of public health. The EPA is the federal agency designated to administer air quality regulation, while the California Air Resources Board (ARB) is the state equivalent in California. Federal and state standards have been established for six criteria pollutants, including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$), and lead (Pb). California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Table 1 lists the current federal and state standards for each of these pollutants. Standards have been set at levels intended to be protective of public health. California standards are generally more restrictive than federal standards for each of these pollutants except lead and the eight-hour average for CO.

Local control in air quality management is provided by the ARB through county-level or regional (multi-county) Air Pollution Control Districts (APCDs). The ARB establishes air quality standards and is responsible for control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The ARB has established 15 air basins statewide. The project site is located within the South Coast Air Basin (Basin), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality conditions in the Basin are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is required to

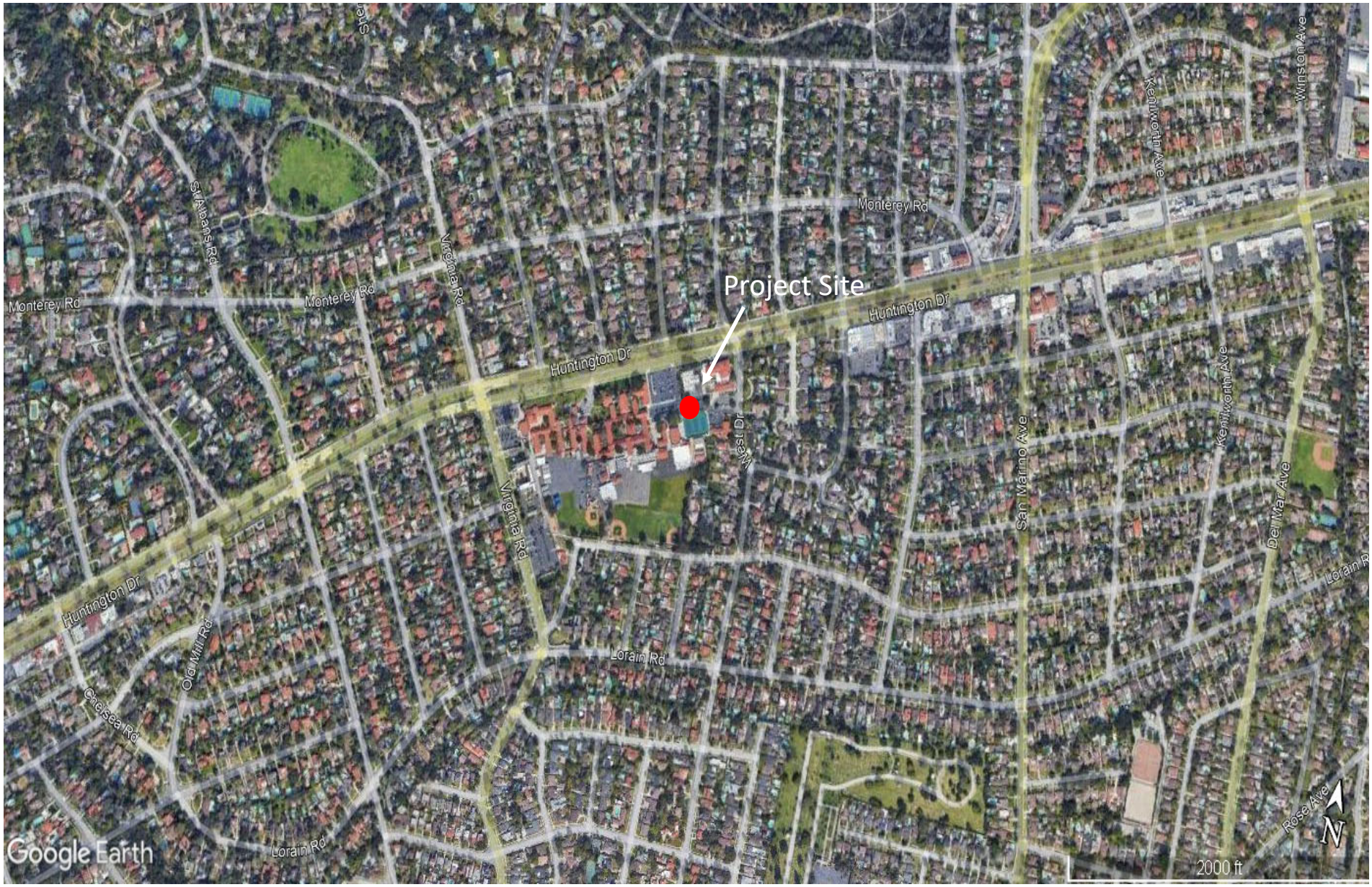

Figure 1—Vicinity Map

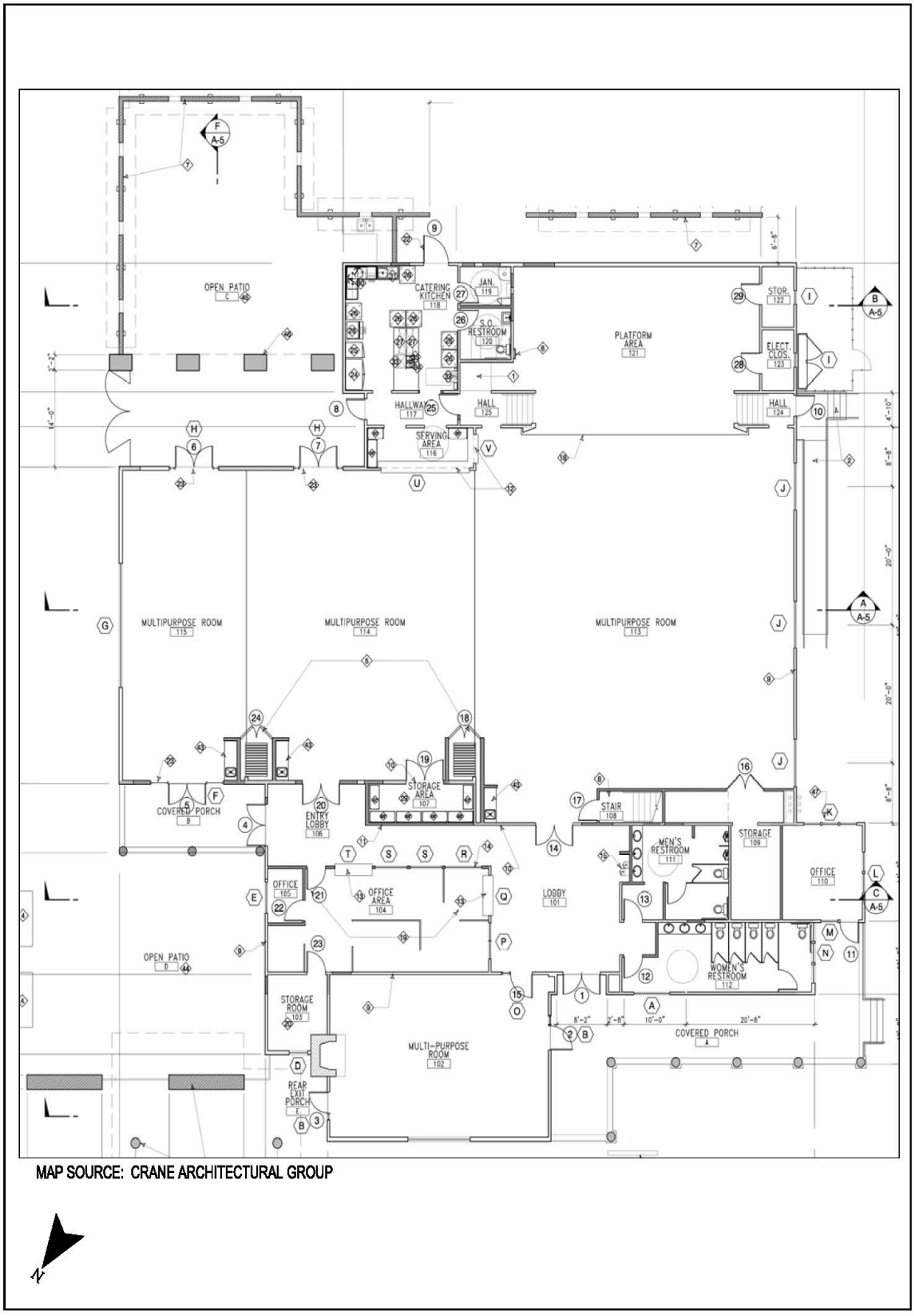

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Figure 2—Site Plan

Table 1
State and Federal Ambient Air Quality Standards

POLLUTANT	AVERAGE TIME	CALIFORNIA STANDARDS[1]		NATIONAL STANDARDS[2]		
		Concentration[3]	Method[4]	Primary[3, 5]	Secondary[3, 6]	Method[7]
Ozone[8] (O_3)	1 hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 hours	0.070 ppm (137µg/m³)		0.070 ppm (137 µg/m³)		
Carbon Monoxide (CO)	8 hours	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared Spectroscopy (NDIR)	9 ppm (10 mg/m³)	--	Non-Dispersive Infrared Spectroscopy (NDIR)
	1 hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
Nitrogen Dioxide (NO_2)[10]	Annual Average	0.030 ppm (57 µg/m³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (339 µg/m³)		100 ppb (188 µg/m³)	--	
Sulfur Dioxide (SO_2)[11]	Annual Average	--	Ultraviolet Fluorescence	0.03 ppm (80 µg/m³)	--	Pararosaniline
	24 hours	0.04 ppm (105 µg/m³)		0.14 ppm (365 µg/m³)	--	
	3 hours	--		--	0.5 ppm (1300 µg/m³)	
	1 hour	0.25 ppm (655 µg/m³)		75 ppb (196 µg/m³)	--	
Respirable Particulate Matter (PM_{10})[9]	24 hours	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	150 µg/m³	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		--	--	
Fine Particulate Matter ($PM_{2.5}$)[9]	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12 µg/m³	15 µg/m³	Inertial Separation and Gravimetric Analysis
	24 hours	--		35 µg/m³	Same as Primary Standard	
Sulfates	24 hours	25 µg/m³	Ion Chromatography	--	--	--
Lead[12, 13] (Pb)	30-day Average	1.5 µg/m³	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m³		

	3-month Rolling Average	--		0.15 μg/m^3	Same as Primary Standard	
Hydrogen Sulfide (H_2S)	1 hour	0.03 ppm (42 μg/m^3)	Ultraviolet Fluorescence	--	--	--
Vinyl Chloride[12]	24 hours	0.010 ppm (26 μg/m^3)	Gas Chromatography	--	--	--

Notes:

ppm = parts per million
μg/m^3 = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
Source: California Air Resources Board 2017

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/ m^3 to 12.0 μg/ m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/ m^3, as was the annual secondary standard of 15 μg/ m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/ m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units

of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/ m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "non-attainment." The Basin, in which the project area is located, is a non-attainment area for both the federal and state standards for ozone and $PM_{2.5}$. The Basin is designated nonattainment for state standards and a maintenance area for federal PM_{10} standards. For nitrogen oxide and carbon monoxide, the Basin is designated attainment for state standards and unclassified/attainment for federal standards. Characteristics of ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_X) and reactive organic gases (ROG)[1]. Nitrogen oxides are formed during the combustion of fuels, while reactive organic compounds are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include

[1] Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, from an air quality perspective two groups are important: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC).

children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide. Carbon monoxide is a local pollutant that is found in high concentrations only near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Nitrogen Dioxide. Nitrogen dioxide (NO_2) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. Nitrogen dioxide is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

Suspended Particulates. PM_{10} is particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates and sulfates. Both PM_{10} and $PM_{2.5}$ are by-products of fuel combustion and wind erosion of soil and unpaved roads and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates ($PM_{2.5}$) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Toxic Air Contaminants/Diesel Particulate Matter. Hazardous air pollutants, also known as toxic air pollutants (TACs) or air toxics, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. Examples of toxic air pollutants include:

- benzene, which is found in gasoline;
- perchloroethylene, which is emitted from some dry-cleaning facilities; and
- methylene chloride, which is used as a solvent.

Transportation related emissions are focused on particulate matter constituents within diesel exhaust and TAC constituents that comprise a portion of total organic gas (TOG) emissions from both diesel and gasoline fueled vehicles. Diesel engine emissions are comprised of exhaust particulate matter and TOGs which are collectively defined for the purpose of an HRA, as Diesel Particulate Matter (DPM). DPM and TOG emissions from both diesel and gasoline fueled vehicles is typically composed of carbon particles and carcinogenic substances including polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and oxides of nitrogen (NO_x). Information on TAC and DPM is provided herein for reference only. The project would not be a sensitive air emission receptor. Temporary construction emissions would be limited to contractor vehicles, material deliveries and equipment use. While diesel fueled vehicles would generate DPM and TACs, the quantities would not justify further evaluation.

Regional Climate and Local Air Quality

South Coast Air Basin. The combination of topography, low mean mixing height, abundant sunshine, and emissions from the second largest urban area in the United States gives the SCAB the worst air pollution problem in the nation. Climate in the SCAB is determined by its terrain and geographical location. The SCAB consists of a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border, and high mountains surround the rest of the SCAB. The SCAB lies in the semi-permanent high-pressure zone of the eastern Pacific. The resulting climate is mild and is tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms or easterly Santa Ana wind conditions can occur.

Annual average temperatures vary little throughout the SCAB, ranging from the low-to-middle 60s, measured in degrees Fahrenheit. With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The majority of annual rainfall in the SCAB occurs between October and March. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the SCAB and along the coastal side of the mountains. Average temperatures in winter months in the project area range from a low of 34 degrees F to a high of 68 degrees F. In the summer, average temperatures range from a low of 59 degrees F to a high of 98 degrees F. During an average year, the greatest amount of precipitation, 2.86 inches, occurs in February.

The SCAQMD operates a network of 38 ambient air monitoring stations throughout the South Coast Air Basin. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California and federal standards. The air quality monitoring station located nearest to the project site is the Pasadena station, located approximately 1.3 miles northwest of the project site at 725 South Wilson Avenue. As referenced in Table 2, PM_{10} data were obtained from the Los Angles 1630 North Main Street monitoring station located approximately 8 miles southwest of the project site.

Table 2
Ambient Air Quality Data

Pollutant	2018	2019	2020
Ozone, ppm – First High 8-Hour Average (2015 Standard)	0.090	0.098	0.115
Number of days of above 2015 standard (>0.070 ppm)	19	24	60
Nitrogen Dioxide, ppm – First High National	68.2	59.1	61.2
Nitrogen Dioxide, ppm – First High State	68	59	61
Days above the State standard (>0.18 ppm)	0	0	0
Days above the national standard (>100 ppb)	0	0	0
Particulate Matter <10 microns, μg/m^3 First High Federal	68.2	62.4	83.7
Particulate Matter <10 microns, μg/m^3 First High State	81.2	93.9	185.2
Estimated number of days greater than national 24-hour standard (>150 μg/m^3)	0	*	0
Estimated number of days greater than state standard (>50 μg/m^3)	31	15	34
Particulate Matter <2.5 microns, μg/m^3 First High	32.5	41.8	67.7
Annual average (exceedances of 12 μg/m^3 standard not reported)	*	*	*
Number of samples of Federal exceedances (>12 μg/m^3)	0	1	2

Pasadena – 725 South Wilson Street Monitoring Station
Los Angeles – 1630 North Main Street
Note – Ozone, Nitrogen Dioxide and PM2.5 data from Pasadena Station; PM_{10} data from Los Angeles Station
**Data insufficient to determine the value*
Source: California Air Resources Board, 2018, 2019, 2020 Annual Air Quality Data Summaries available at https://www.arb.ca.gov/adam/topfour/topfour1.php

Table 2 provides a summary of monitoring data from the Pasadena station for ozone and nitrogen oxide and $PM_{2.5}$ and PM_{10} data from the Los Angeles monitoring station.

As shown, both the federal and state ozone standards were exceeded at the Pasadena monitoring station during each of the last three years. The federal PM_{10} standard was not exceeded during the last three years. Insufficient data was available to determine whether the state standard was exceeded.

Air Quality Management Plan

Under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The SCAQMD updates the plan every three years. Each iteration of the SCAQMD's Air Quality Management Plan (AQMP) is an update of the previous plan and has a 20-year horizon. SCAQMD adopted the 2016 AQMP in March 2017. The 2016 AQMP incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP.

The 2016 AQMP was prepared to ensure continued progress towards clean air and comply with state and federal requirements. This AQMP builds upon the approaches taken in the 2012 AQMP for the South Coast Air Basin for the attainment of State and federal ozone air quality standards. The 2016 AQMP incorporates the 2016 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for applicable source

categories. The 2016 AQMP also includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The 2016 AQMP is available to download at http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp.

Sensitive Receptors

Sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to air pollutants. Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare as well that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. Nearby sensitive receptors are the Valentine Elementary School and Huntington Middle School located adjacent to and south/southwest and single-family residences located across Huntington Drive approximately 200 feet north/northwest and northeast of the site and adjacent to the site on the east side of West Drive.

AIR QUALITY IMPACT ANALYSIS

Methodology and Significance Thresholds

This air quality analysis conforms to the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook* (1993). The handbook includes thresholds for emissions associated with both construction and operation of proposed projects. All emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2020.4.0.

Construction activities such as clearing, grading and excavation are common sources of diesel and dust emissions. Construction equipment that would generate criteria air pollutants includes excavators, graders, dump trucks, and loaders. The proposed project would not require grading or exterior ground disturbance. Improvements would primarily be limited to the building interior. Exterior improvements would consist of concrete demolition/removal, concrete work, landscaping and painting. Construction emissions associated with development of the proposed project by estimating the types of equipment (including the number) that would be used on-site during the demolition, building construction and painting phases. Construction emissions are analyzed using the regional thresholds established by the SCAQMD and published in the *CEQA Air Quality Handbook.*

Operational emissions include mobile source emissions, energy emissions, and area source emissions. Mobile source emissions are generated by motor vehicle trips associated with operation of the project. Emissions attributed to energy use include electricity and natural gas consumption for space and water heating. Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings (i.e., paints).

To determine whether a regional air quality impact would occur, the increase in emissions are compared with the SCAQMD's recommended regional thresholds for operational emissions.

Regional Thresholds. Based on Appendix G of the *CEQA Guidelines (2021)*, a project would have a significant air quality impact if it would:

a) *Conflict with or obstruct implementation of the applicable air quality plan;*
b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;*
c) *Expose sensitive receptors to substantial pollutant concentrations;*
d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

The SCAQMD has developed specific quantitative thresholds that apply to projects within the SCAB. The following significance thresholds apply to short-term construction activities:

- *75 pounds per day of ROG*
- *100 pounds per day of NO_X*
- *550 pounds per day of CO*
- *150 pounds per day of SOx*
- *150 pounds per day of PM_{10}*
- *55 pounds per day of $PM_{2.5}$*

The following significance thresholds apply to long-term operational emissions:

- *55 pounds per day of ROG*
- *55 pounds per day of NO_X*
- *550 pounds per day of CO*
- *150 pounds per day of SO_X*
- *150 pounds per day of PM_{10}*
- *55 pounds per day of $PM_{2.5}$*

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from construction vehicles, work crew vehicle trips in addition to ROG that would be released during the drying

phase upon application of paint and other architectural coatings. Construction would generally consist of demolition, construction of the proposed building improvements and architectural coating (i.e., paint) application.

This analysis assumes the project would be required to comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the South Coast Air Basin. Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for site preparation and grading phases of construction. It is assumed that only those applicable to the scope of construction activities would be implemented if needed.

1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least three times daily, preferably in the late morning and after work is done for the day.
3. **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
4. **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
5. **Street Sweeping.** Construction contractors should sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Construction emissions modeling for demolition, building construction and architectural coating application is based on the overall scope of the proposed development and construction phasing which is expected to begin mid-2022 and extend through late 2022. The total area

disturbed as a result of the project would be limited to the building interior and exterior landscape and hardscape. For modeling purposes, it was assumed the site would be watered two times daily. In addition to SCAQMD Rule 403 requirements, emissions modeling also accounts for the use of low-VOC paint (50 g/L for non-flat coatings) and 100 g/L for parking lot coating as required by SCAQMD Rule 1113. Table 3 summarizes the estimated maximum mitigated daily emissions of pollutants occurring during construction.

Table 3
Estimated Maximum Mitigated Daily Construction Emissions

Construction Phase		Maximum Emissions (lbs/day)				
	ROG	NO_x	CO	SOx	PM_{10}	$PM_{2.5}$
2022 Maximum lbs/day	20.2	7.1	7.8	0.01	0.45	0.36
SCAQMD Regional Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded 2022	**No**	**No**	**No**	**No**	**No**	**No**

As shown in Table 3, construction of the proposed project would not exceed the SCAQMD regional thresholds. No mitigation in addition to compliance with SCAQMD Rule 403 and Rule 1113 would be required to reduce construction emissions to less than significant.

Localized Significance Thresholds. The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. Construction-related emissions reported by CalEEMod are compared to the localized significance threshold lookup tables. In this case, the project does not require the use of heavy equipment for site preparation or grading work. However, some activities occurring on-site would generate dust; thus, the LST analysis is included herein to satisfy common methodology requirements for project in the SCAB. The CalEEMod output in Appendix A shows the equipment assumed for this analysis.

LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size and distance to the sensitive receptor. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NO_x, CO, PM_{10} and $PM_{2.5}$. LSTs are not applicable to mobile sources such as cars on a roadway (Final Localized Significance Threshold Methodology, SCAQMD, June 2003). However, according to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site; such as restaurants with drive thru windows

and warehouse/transfer facilities. The proposed project does not include such uses. Therefore, because there would be no stationary source emissions or on-site mobile equipment, no long-term LST analysis is needed.

LSTs have been developed for emissions within areas up to five acres in size, with air pollutant modeling recommended for activity within larger areas. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. Based the mix of construction used on-site, less than one acre would be disturbed during demolition, building construction and painting. site preparation and grading. To provide a conservative evaluation of project consistency with the LSTs, look up table values for a one acre were used. The project site is located in Source Receptor Area 11 (SRA-11, South San Gabriel Valley). LSTs for construction related emissions in the SRA 11 at varying distances between the source and receiving property are shown in Table 4.

Table 4
SCAQMD LSTs for Construction

Pollutant	Allowable emissions as a function of receptor distance in meters from a one-acre site (lbs/day)				
	25	50	100	200	500
Gradual conversion of NO_x to NO_2	83	84	96	123	193
CO	673	760	1,113	2,110	6,884
PM_{10}	5	13	29	60	153
$PM_{2.5}$	4	5	9	20	83

Source: http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf, October 2009.

As referenced, the nearest sensitive receptors to the project site are the Valentine Elementary School and Huntington Middle School located adjacent to and southwest of the site. To provide a conservative evaluation of construction emissions relative to LST thresholds, allowable emissions for 25 meters were used. As shown in Table 3, total emissions of NOx, CO, PM_{10} and $PM_{2.5}$ would not exceed the LST thresholds shown in Table 4 for 25 meters.

Construction-Related Toxic Air Contaminant Impacts

The greatest potential for toxic air contaminant emissions is related to diesel particulate emissions associated with heavy equipment operations during project construction. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". The California Office of Environmental Health Hazard Assessment (OEHHA) health risk guidance states that a residential receptor should be evaluated based on a 30-year exposure period. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given the short-term construction schedule and the fact that no site preparation or grading activities would be

required, the proposed project would not result in a long-term (i.e., 30 or 70 year) exposure to a substantial source of toxic air contaminant emissions; and thus, would not be exposed to the related individual cancer risk. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project.

Construction-Related Odor Impacts

Potential sources of odor during construction activities include equipment exhaust. The objectionable odors that may be produced during the construction process would occur periodically and end when construction is completed. No significant impact related to odors would occur during construction of the proposed project per threshold (d) referenced above.

Long-Term Regional Impacts

Regional Pollutant Emissions

Table 5 summarizes emissions associated with operation of the proposed project. Operational emissions include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), and area sources including landscape equipment and architectural coating emissions as the structures are repainted over the life of the project. The majority of operational emissions are associated with vehicle trips to and from the project site. Trip volumes are based on the trip generation rates in the Traffic Impact Assessment prepared for the proposed project by Linscott, Law and Greenspan, Inc. (September 2021).

Area source emissions from the project include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as energy), yard and landscape maintenance, consumer use of solvents and personal care products, and an average building square footage to be repainted each year. As shown in Table 5, daily unmitigated emissions would not exceed the SCAQMD thresholds for ROG, NO_X, CO, SO_X, PM_{10} or $PM_{2.5}$. Therefore, the project's regional air quality impacts (including impacts related to criteria pollutants, sensitive receptors and violations of air quality standards) would be less than significant per threshold b. Further, the project would not contribute to a cumulatively considerable impact. Impacts relative to threshold c would be less than significant.

Objectionable Odors

The proposed project would not have any components that would generate odors. No odor impacts would occur per threshold (d).

AQMP Consistency

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. The 2016

Table 5
Estimated Operational Emissions

	Estimated Emissions (lbs/day)					
	ROG	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Proposed Project						
Area	0.2	0.01	0.01	0.0	0.0	0.0
Energy	0.01	0.06	0.4	0.01	0.01	0.01
Mobile	0.7	0.6	6.5	0.01	1.3	0.3
Maximum lbs/day	**1.0**	**0.7**	**6.5**	**0.01**	**1.3**	**0.3**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

See Appendix for CalEEMod version. 2020.4.0 computer model output - summer emissions shown.

AQMP, the most recent AQMP adopted by the SCAQMD, incorporates local city General Plans and the Southern California Association of Government's (SCAG) Regional Transportation Plan socioeconomic forecast projections of regional population, housing and employment growth.

The proposed project involves remodeling the existing San Marino Center building. Vehicle trips associated with the project would be consistent with similar community center uses; and as discussed herein, project-related emissions would not exceed thresholds recommended by the SCAQMD. Thus, the project would be consistent with the AQMP and not cause an adverse impact under threshold (a).

Friant Ranch Case Overview and Project Applicability

In response to the California Supreme Court decision on December 24, 2018, Sierra Club v. County of Fresno (Friant Ranch), this section provides a discussion on the potential for identifiable health impacts to result from air pollutants analyzed in environmental documents prepared pursuant to the California Environmental Quality Act (CEQA). The discussion focuses on significant impacts and the feasibility of directly relating any identified significant adverse air quality impact to likely health consequences. The Supreme Court opinion in Friant Ranch requires projects with significant air quality impacts to relate the expected adverse air quality impacts to likely health consequences or explain why it is not feasible at the time of drafting to provide such an analysis, so that the public may make informed decisions regarding the costs and benefits of the project.

The purpose of CEQA is to inform the public as to the potential for a proposed project to result in one or more significant adverse effects on the environment (including health effects). This includes the potential for a project to result in a considerable contribution towards one or more significant cumulative impacts. CEQA does not require detailed analysis of impacts that are found to be less than significant or less than a considerable contribution to a significant cumulative impact. In accordance with CEQA requirements and the CEQA review process, air

quality impacts associated with proposed local plans and development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The State CEQA Guidelines Section 15064.7 states that the significance criteria established by the applicable air quality management district or air pollution control district, when available, may be relied upon to make determinations of significance.

As stated, the project is located within the SCAB under the jurisdiction of the SCAQMD. Riverside County defers to threshold guidance established by the SCAQMD and utilizes the SCAQMD's CEQA Air Quality Handbook (approved by the AQMD Governing Board in 1993) and subsequent guidance provided on the SCAQMD website. Note the SCAQMD is currently in the process of developing an Air Quality Analysis Guidance Handbook to replace the 1993 Handbook. In addition, when considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within proximity to land uses that emit TACs. CARB has published and adopted the Air Quality and Land Use Handbook: A Community Health Perspective (2005), which considers impacts to sensitive receptors from facilities that emit TAC emissions. CARB has also published Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory, a supplement to the handbook that is intended to provide scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways to protect public health and promote equity and environmental justice. The SCAQMD has also adopted land use planning guidelines in the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning (2005). Together, the documents introduce land use-related policies and strategies that rely on design and distance parameters to minimize emissions and lower potential health risks.

Federal and state ambient air quality standards are designed to prevent the harmful effects of air pollution. These standards are continually updated based on evolving research, including research which relates air quality impacts with health effects. At the regional level, plans such as the SCAQMD's AQMP and SCAG's RTP/SCS work to ensure that the South Coast Air Basin reaches and maintains attainment with these federal and state standards. At the local level, environmental documents evaluate a plan or project's consistency with applicable policies identified in the SCAQMD's AQMP and SCAG's RTP/SCS as well as regulatory compliance measures which work to limit risk and exposure to TACs. In addition, in evaluating air quality impacts at the project-level, the City of San Marino utilizes thresholds guidance and air quality models established by the SCAQMD, which have been developed to implement these regional plans for attainment and protection of public health. For local projects that exceed any identified SCAQMD air quality threshold, CEQA documents typically identify and disclose generalized health effects of certain air pollutants but are currently unable to establish a reliable connection between any local plan or project and a particular health effect. In addition, no expert agency has yet to approve a quantitative method to reliably and meaningfully do so. Many factors contribute to this uncertainty, including the regional scope of air quality monitoring and planning, technological limitations for modeling at a local plan- or project-level, and the intrinsically complex nature between air pollutants and health effects in conjunction with local environmental variables. Therefore, at the time, it is infeasible for CEQA documents

to directly link a project's significant air quality impacts with a specific health effect. However, as air quality modeling and research on health effects advances over time, the City will continue to seek the latest guidance from local air quality agencies and experts and refine its approach based on future information as it becomes available.

As stated herein, the proposed project will not exceed the daily emission thresholds established by the SCAQMD nor will operation expose nearby sensitive properties to levels of TACs that would cause or contribute to a health risk. Thus, for the purpose of this evaluation, potential project impacts have been adequately evaluated with respect to the Friant Ranch case and related findings.

GREENHOUSE GAS EMISSION DISCUSSION

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and sulfur hexafluoride (SF_6) (California Environmental Protection Agency [CalEPA], 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2E), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a GWP of one. By contrast, methane (CH_4) has a GWP of 28, meaning its global warming effect is 28 times greater than carbon dioxide on a molecule per molecule basis (IPCC, 2014).

Total U.S. GHG emissions were 6,577 MMT CO_2E in 2019 (U.S. EPA, February 2021). Total U.S. emissions decreased from 2018 to 2019 by 1.8 percent primarily as a result of less fossil fuel combustion. Total U.S. emissions have increased by 2.0 percent from 1990 to 2019, down from a high of 15.7 percent above 1990 levels in 2007. Emissions decreased from 2018 to 2019 by 1.7 percent (116.0 MMT CO2e). Net emissions (including sinks) were 5,788 MMT CO2e. Overall, net emissions decreased 1.8 percent from 2018 to 2019 and decreased 12.9 percent from 2005 levels. The decline reflects many long-term trends, including population, economic growth, energy market trends, technological changes including energy efficiency and carbon intensity of energy

fuel choices. Between 2018 and 2019, the decrease in total greenhouse gas emissions was largely driven by the decrease in CO2 emissions from fossil fuel combustion. The decrease in CO2 emissions from fossil fuel combustion was a result of a 1.3 percent decrease in total energy use and reflects a continued shift from coal to less carbon intensive natural gas and renewables. (U.S. EPA, February 2021).

In 2018, statewide emissions from GHG emitting activities statewide were 425 million metric tons of carbon dioxide equivalent (MMTCO2e), 0.8 MMTCO2e higher than 2017 levels and 6 MMTCO2e below the 2020 GHG Limit of 431 MMTCO2e. California statewide GHG emissions dropped below the 2020 GHG Limit in 2016 and have remained below the 2020 GHG Limit since then. Transportation emissions decreased in 2018 compared to the previous year, which is the first year over year decrease since 2013. Since 2008, California's electricity sector has followed an overall downward trend in emissions. In 2018, solar power generation has continued to grow. Emissions from high-GWP gases increased 2.3 percent in 2018 (2000-2018 average year-over year increase is 6.8 percent), continuing the increasing trend as Ozone Depleting Substances (ODS) are phased out under the 1987 Montreal Protocol.

The largest source of GHG in California is transportation, contributing 39.9 percent of the state's total GHG emissions. The industrial sector is the second largest source, contributing 21 percent of the state's GHG emissions. California emissions result in part to its geographic size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. In July 2017, California's state legislature passed Assembly Bill (AB) 398 to reauthorize and extend until 2030 the state's economy-wide greenhouse gas (GHG) reduction program. The bill sets a new GHG target of at least 40% below the 1990 level of emissions by 2030.

California Regulations

In 2005, former Governor Schwarzenegger issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 states that by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels (CalEPA, 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA, 2006). The 2006 CAT Report recommended various strategies that the state could pursue to reduce GHG emissions. These strategies could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture.

Assembly Bill 32 and CARB's Scoping Plan

To further the goals established in EO S-3-05, the Legislature passed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG

emissions to 1990 levels by 2020. Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO_2E). CARB's adoption of this limit is in accordance with Health and Safety Code, Section 38550.

Further, in 2008, CARB adopted the Scoping Plan in accordance with Health and Safety Code, Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33%;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions;
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan (CARB 2008), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020) absent GHG reducing laws and regulations (referred to as Business-As-Usual (BAU)). To calculate this percentage reduction, CARB assumed that all new electricity generation would be supplied by

natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (CARB 2011a), CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (RPS) (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the BAU conditions.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update; CARB 2014). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050" (CARB 2014). The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32 and noted that California could reduce emissions further by 2030 to levels needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050" (CARB 2014). Those six areas are (1) energy, (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure), (3) agriculture, (4) water, (5) waste management, and (6) natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal (CARB 2014).

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050" (CARB 2014). Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent GWPs identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO_2E) and the revised 2020-emissions-level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the BAU conditions (CARB 2014).

In January 2017, CARB released, *The 2017 Climate Change Scoping Plan Update (*Second Update; CARB 2017b), for public review and comment. This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below), including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The Second Update incorporates approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017), acknowledges the need for reducing emissions in agriculture, and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy, and Transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2016). The Second Update has not been considered by CARB's Governing Board at the time this analysis was prepared.

Executive Order S-01-07 was enacted on January 18, 2007. The order mandates that a Low Carbon Fuel Standard ("LCFS") for transportation fuels be established for California to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

Other regulations affecting state and local GHG planning and policy development are summarized as follows:

Assembly Bill 939 and Senate Bill 1374
Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

Senate Bill 1368
Senate Bill 1368 (SB 1368) is the companion Bill of AB 32 and was adopted September, 2006. SB 1368 required the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007 and for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas-fired plant. Furthermore, the legislation states that all electricity provided to the State, including imported electricity, must be generated by plants that meet the standards set by California Public Utilities Commission (CPUC) and California Energy Commission (CEC).

Senate Bill 97
Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is an environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the

effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010. Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed sections of the CEQA Guidelines and incorporated GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.

- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.

- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.

- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."

- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.

- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

Senate Bills 1078, 107, and X1-2 and Executive Orders S-14-08 and S-21-09
Senate Bill 1078 (SB 1078) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) changed the target date to 2010. Executive

Order S-14-08 was signed on November 2008 and expands the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

California Code of Regulations (CCR) Title 24, Part 6

CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008 and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. All buildings for which an application for a building permit is submitted on or after July 1, 2014 must follow the 2013 standards. The 2013 commercial standards are estimated to be 30 percent more efficient than the 2008 standards; 2013 residential standards are at least 25 percent more efficient. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

Senate Bill 375

Senate Bill 375 (SB 375) was adopted in September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable community's strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG) jurisdiction, which has authority to develop the SCS or APS. For the SCAG region, beginning October 2018, the targets set by CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 19 percent below 2005 per capita GHG emissions levels by 2035. In April 2016, SCAG adopted the 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), which meets the CARB emission reduction requirements.

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS or APS. However, CEQA incentivizes, through streamlining

and other provisions, qualified projects that are consistent with an approved SCS or APS and categorized as "transit priority projects."

Senate Bill X7-7

Senate Bill X7-7 (SB X7-7), enacted on November 9, 2009, mandates water conservation targets and efficiency improvements for urban and agricultural water suppliers. SB X7-7 requires the Department of Water Resources (DWR) to develop a task force and technical panel to develop alternative best management practices for the water sector. Additionally, SB X7-7 required the DWR to develop criteria for baseline uses for residential, commercial, and industrial uses for both indoor and landscaped area uses. The DWR was also required to develop targets and regulations that achieve a statewide 20 percent reduction in water usage.

California Green Building Standards

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402(b)(1)). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402(d)) and cost effectiveness (California Public Resources Code, Sections 25402(b)(2) and (b)(3)). These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 building energy efficiency standards and became effective on January 1, 2020. In general, single-family homes built to the 2019 standards are anticipated to use approximately 7% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2016 standards, and nonresidential buildings built to the 2019 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015a).

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as "CALGreen," and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-

rise residential, and state-owned buildings and schools and hospitals. The CALGreen 2019 standards became effective on January 1, 2020. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance;
- Diversion of 65% of construction and demolition waste from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle board.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements, stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs (24 CCR Part 11).

The California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. The key policy timelines include the following: (1) all new residential construction in California will be ZNE by 2020, and (2) all new commercial construction in California will be ZNE by 2030 (CPUC 2013).[2] As most recently defined by the CEC in its 2015 Integrated Energy Policy Report (CEC 2015b), a ZNE code building is "one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building" using the CEC's Time Dependent Valuation metric.

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing

[2] It is expected that achievement of the ZNE goal will occur through revisions to the Title 24 standards.

fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Executive Order B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO2E. EO B-30-15 also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set new statewide GHG reduction targets, make changes to CARB's membership, increase legislative oversight of CARB's climate change–based activities, and expand dissemination of GHG and other air quality–related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

SB 350— Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.

- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly-owned utilities.

- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

SB 100

On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18

On September 10, 2018, Governor Brown signed Executive Order B-55-2018 which established a new statewide goal to achieve carbon neutrality as soon as possible and no later than 2045. The executive order also states that California will achieve and maintain net negative emissions thereafter.

AB 2127

AB 2127 promotes better planning for EV infrastructure build-out across all vehicle classes. AB 2127 would help the state meet the goal of 5 million zero-emission vehicles (ZEV) on the road by 2030.

Local Regulations and CEQA Requirements

As referenced, pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, but contain no suggested thresholds of significance for GHG emissions. Instead, lead agencies are given the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The general approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG

emissions needed to move the state towards climate stabilization. If a project would generate GHG emissions above the threshold level, its contribution to cumulative impacts would be considered significant. To date, the Bay Area Air Quality Management District (BAAQMD), the South Coast Air Quality Management District (SCAQMD), and the San Joaquin Air Pollution Control District (SJVAPCD) have adopted quantitative significance thresholds for GHGs. However, in March 2013 the Bay Area's thresholds were overruled by the Alameda County Superior Court (*California Building Industry Association v. Bay Area Air Quality Management District*), on the basis that adoption of the thresholds constitutes a "project" under CEQA, but did not receive the appropriate environmental review. As a result, BAAQMD has elected to not recommend specific GHG thresholds for use in CEQA documents.

The SCAQMD threshold, which was adopted in December 2008, considers emissions of over 10,000 metric tons CO2E /year to be significant. However, the SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency. Although not formally adopted, the SCAQMD has developed a draft quantitative threshold for all land use types of 3,000 metric tons CO_2E /year (SCAQMD, September 2010). Note that lead agencies retain the responsibility to determine significance on a case-by-case basis for each specific project.

CLIMATE CHANGE IMPACT ANALYSIS

Thresholds of Significance

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed project. According to the adopted CEQA Guidelines, impacts related to GHG emissions from the proposed project would be significant if the project would:

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or*
- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a

Climate Action Plan). The City of San Marino does not have an approved CAP; thus, for the purpose of evaluating potential project related impacts, the SCAQMD threshold of 3,000 annual metric tons is used herein.

Methodology

GHG emissions associated with construction and operation of the proposed project have been estimated using California Emissions Estimator Model (CalEEMod) version 2020.4.0.

Construction Emissions

Construction of the proposed project would generate temporary GHG emissions primarily associated with the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest emission quantities because the use of heavy equipment is greatest during this phase of construction. Emissions associated with the construction period were estimated based on the projected maximum amount of equipment that would be used on-site at one time. Air districts such as the SCAQMD have recommended amortizing construction-related emissions over a 30-year period to calculate annual emissions. Complete CalEEMod results and assumptions can be viewed in the Appendix.

Operational Emissions

Default values used in CalEEMod version 2020.4.0 are based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. CalEEMod provides operational emissions of CO_2, N_2O and CH_4. This methodology has been subjected to peer review by numerous public and private stakeholders, and in particular by the CEC; and therefore, is considered reasonable and reliable for use in GHG impact analysis pursuant to CEQA. It is also recommended by CAPCOA (January 2008).

Emissions associated with area sources (i.e., consumer products, landscape maintenance, and architectural coating) were calculated in CalEEMod based on standard emission rates from CARB, USEPA, and district supplied emission factor values (CalEEMod User Guide, 2021). Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide, 2021). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California. Emissions from mobile sources were quantified based on trip generation estimates included in CalEEMod version 2016.3.2 for commercial projects.

Estimate of GHG Emissions

Construction Emissions

Construction activity is assumed to occur over a period of approximately 12 months beginning in mid-2022 and concluding in late 2022. Based on CalEEMod results, construction activity for the project would generate an estimated 61 metric tons of carbon dioxide equivalent (CO_2E), as shown in Table 6. Amortized over a 30-year period (the assumed life of the project), construction of the proposed project would generate 2 metric tons of CO_2E per year.

Table 6
Estimated Construction Related Greenhouse Gas Emissions

Year	Annual Emissions (metric tons CO_2E)
2022	61
Total	**61**
Amortized over 30 years	**2 metric tons per year**

See Appendix for CalEEMod software program output

Operational Indirect and Stationary Direct Emissions

Long-term emissions relate to energy use, solid waste, water use, and transportation. Each source is discussed below and includes the emissions associated with existing development and the anticipated emissions that would result from the proposed project.

Energy Use. Operation of onsite development would consume both electricity and natural gas (see Appendix for CalEEMod results). The generation of electricity through combustion of fossil fuels typically yields CO_2, and to a smaller extent, N_2O and CH_4. Natural gas emissions can be calculated using default values from the CEC sponsored CEUS and RASS studies which are built into CalEEMod. As shown in Table 7, the overall net increase in energy use at the project site would result in approximately 31 metric tons of CO_2E per year.

Water Use Emissions**.** The CalEEMod results indicate that the project would use approximately 1.0 million gallons of water per year. Based on the amount of electricity generated to supply and convey this amount of water, as shown in Table 8, the project would generate approximately 3 metric tons of CO_2E per year.

Solid Waste Emissions. Implementation of a municipal recycling program that would achieve a 75% diversion rate statewide is required for residential uses per the California Integrated Waste Management Act of 1989 (AB 939). However, no requirements exist for community centers. The CalEEMod results indicate that the project would result in

approximately 31 metric tons of CO_2E per year associated with solid waste disposed within landfills.

Table 7
Estimated Annual Energy-Related Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO_2E)
Proposed Project	
Electricity	21 metric tons
Natural Gas	10 metric tons
Total	**31 metric tons**

See Appendix for CalEEMod software program output.

Table 8
Estimated Annual
Solid Waste and Water Use Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO_2E)
Water	3 metric tons
Solid Waste	31 metric tons
Total Water and Solid Waste	**34 metric tons**

See Appendix for CalEEMod software program output.

Transportation Emissions. Mobile source GHG emissions were estimated using the trip generation rates provided in the Traffic Impact Assessment (Linscott, Law and Greenspan, Inc., September 2021). Table 9 shows the estimated mobile emissions of GHGs for the project based on the estimated annual VMT of 636,607. As shown in Table 9, the project would generate approximately 221 metric tons of CO_2E associated with new vehicle trips.

Combined Construction, Stationary and Mobile Source Emissions

Table 10 combines the net new construction, operational, and mobile GHG emissions associated with the proposed project. As discussed above, temporary emissions associated with construction activity (approximately 2 metric tons CO_2E) are amortized over 30 years (the anticipated life of the project).

For the proposed project, the combined annual emissions would total approximately 288 metric tons per year in CO_2E. The majority (77%) of the project's GHG emissions are associated with motor vehicular travel. The proposed project is evaluated based on the threshold of 3,000 MT CO_2E annually. Project-related annual GHG emissions would not exceed the threshold of 3,000 metric tons per year; therefore, impacts from GHG emissions would be less than significant per threshold a.

Table 9
Estimated Annual Mobile Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO_2E)
Proposed Project	
Mobile Emissions (CO_2 & CH_4)	221 metric tons
Total	**221 metric tons**

See Appendix for CalEEMod software program output.

Table 10
Combined Annual Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO_2E)
Construction	2 metric tons
Operational Energy Solid Waste Water	 31 metric tons 31 metric tons 3 metric tons
Mobile	221 metric tons
Total	**288 metric tons**

See Appendix for CalEEMod software program output (demolition and new construction).

GHG Cumulative Significance. As referenced, the proposed project would be designed consistent with Title 24 requirements that include those addressing energy and water use reduction, promotion of green building measures, waste reduction, and reduction in vehicle miles traveled. The proposed project would also be required to implement all mandatory green building measures for new commercial development under the CALGreen Code. This would require the project be designed to reduce water consumption, increase building system efficiencies, divert construction waste from landfills, and install low pollutant emitting finish materials. Implementation of these building and appliance standards would result in water, energy, and construction waste reductions for the proposed project. This would result in a less than significant impact under threshold b.

Consistency with EO S-3-05 and SB 32

EO S-3-05. This EO establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

SB 32. This bill establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-

effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030.

The proposed project would not exceed the 3,000 MT CO2e annual screening threshold recommended by the SCAQMD; and thus, is not considered a cumulatively considerable source of GHG emissions. As stated, the project would be required to implement efficiency strategies intended to reduce overall energy and water demand and related GHG emissions associated with generating and conveying energy to the site as well the energy required to treat and convey potable water to the project site.

CARB has indicated that statewide, California is on track to achieving both the 2030 and 2050 goals. CARB stated in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014, p. ES2).This is confirmed in the 2017 Scoping Plan, which states that the Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets. As stated, the project would not generate enough GHG emissions to cumulatively contribute to global climate change; and thus, would not adversely impact the attainment of statewide reductions in GHG emissions referenced above. The project would be consistent with EO S-3-05, SB 32 as well as the initial GHG reduction goals established by AB 32.

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Appendix A

CalEEMod Air Quality and Greenhouse Gas Emissions Model Results – Summer/Annual, and N_2O from Mobile Emissions Sources

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

San Marino Center Rehabilitation

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Racquet Club	10.83	1000sqft	0.25	10,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Vehicle Trips - Trip rate modified to match Traffic Impact Analysis

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	PhaseEndDate	11/18/2022	11/11/2022
tblConstructionPhase	PhaseStartDate	11/12/2022	11/5/2022
tblVehicleTrips	ST_TR	21.35	28.82
tblVehicleTrips	SU_TR	17.40	28.82
tblVehicleTrips	WD_TR	14.03	28.82

2.0 Emissions Summary

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2022	20.2905	7.1364	7.8629	0.0130	0.1161	0.3732	0.4543	0.0303	0.3434	0.3619	0.0000	1,251.2467	1,251.2467	0.3599	7.3200e-003	1,257.3604
Maximum	**20.2905**	**7.1364**	**7.8629**	**0.0130**	**0.1161**	**0.3732**	**0.4543**	**0.0303**	**0.3434**	**0.3619**	**0.0000**	**1,251.2467**	**1,251.2467**	**0.3599**	**7.3200e-003**	**1,257.3604**

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	lb/day										lb/day					
2022	20.2905	7.1364	7.8629	0.0130	0.1137	0.3732	0.4519	0.0299	0.3434	0.3619	0.0000	1,251.2467	1,251.2467	0.3599	7.3200e-003	1,257.3604
Maximum	**20.2905**	**7.1364**	**7.8629**	**0.0130**	**0.1137**	**0.3732**	**0.4519**	**0.0299**	**0.3434**	**0.3619**	**0.0000**	**1,251.2467**	**1,251.2467**	**0.3599**	**7.3200e-003**	**1,257.3604**

	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**	**2.02**	**0.00**	**0.52**	**1.19**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	lb/day										lb/day					
Area	0.2421	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.3700e-003	2.3700e-003	1.0000e-005		2.5300e-003
Energy	5.7500e-003	0.0523	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003		62.7052	62.7052	1.2000e-003	1.1500e-003	63.0778
Mobile	0.7649	0.6812	6.5851	0.0134	1.3402	9.8900e-003	1.3500	0.3570	9.1700e-003	0.3661		1,360.6696	1,360.6696	0.1014	0.0613	1,381.4685
Total	**1.0128**	**0.7335**	**6.6301**	**0.0137**	**1.3402**	**0.0139**	**1.3540**	**0.3570**	**0.0131**	**0.3701**		**1,423.3771**	**1,423.3771**	**0.1026**	**0.0624**	**1,444.5488**

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	lb/day										lb/day					
Area	0.2421	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.3700e-003	2.3700e-003	1.0000e-005		2.5300e-003
Energy	5.7500e-003	0.0523	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003		62.7052	62.7052	1.2000e-003	1.1500e-003	63.0778
Mobile	0.7649	0.6812	6.5851	0.0134	1.3402	9.8900e-003	1.3500	0.3570	9.1700e-003	0.3661		1,360.6696	1,360.6696	0.1014	0.0613	1,381.4685
Total	**1.0128**	**0.7335**	**6.6301**	**0.0137**	**1.3402**	**0.0139**	**1.3540**	**0.3570**	**0.0131**	**0.3701**		**1,423.3771**	**1,423.3771**	**0.1026**	**0.0624**	**1,444.5488**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	6/1/2022	6/14/2022	5	10	
2	Building Construction	Building Construction	6/18/2022	11/4/2022	5	100	
3	Architectural Coating	Architectural Coating	11/5/2022	11/11/2022	5	5	

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: 16,248; Non-Residential Outdoor: 5,416; Striped Parking Area: 0 (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
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

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	lb/day										lb/day					
Fugitive Dust					4.2800e-003	0.0000	4.2800e-003	6.5000e-004	0.0000	6.5000e-004			0.0000			0.0000
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**	**4.2800e-003**	**0.3375**	**0.3418**	**6.5000e-004**	**0.3225**	**0.3232**		**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0346	0.0253	0.3936	1.0200e-003	0.1118	7.2000e-004	0.1125	0.0296	6.6000e-004	0.0303		103.3442	103.3442	2.8200e-003	2.5000e-003	104.1603
Total	**0.0346**	**0.0253**	**0.3936**	**1.0200e-003**	**0.1118**	**7.2000e-004**	**0.1125**	**0.0296**	**6.6000e-004**	**0.0303**		**103.3442**	**103.3442**	**2.8200e-003**	**2.5000e-003**	**104.1603**

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	lb/day										lb/day					
Fugitive Dust					1.9300e-003	0.0000	1.9300e-003	2.9000e-004	0.0000	2.9000e-004			0.0000			0.0000
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**	**1.9300e-003**	**0.3375**	**0.3395**	**2.9000e-004**	**0.3225**	**0.3228**	**0.0000**	**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0346	0.0253	0.3936	1.0200e-003	0.1118	7.2000e-004	0.1125	0.0296	6.6000e-004	0.0303		103.3442	103.3442	2.8200e-003	2.5000e-003	104.1603
Total	**0.0346**	**0.0253**	**0.3936**	**1.0200e-003**	**0.1118**	**7.2000e-004**	**0.1125**	**0.0296**	**6.6000e-004**	**0.0303**		**103.3442**	**103.3442**	**2.8200e-003**	**2.5000e-003**	**104.1603**

3.3 Building Construction - 2022

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	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**		**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Building Construction - 2022

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9400e-003	0.0980	0.0336	3.9000e-004	0.0128	9.3000e-004	0.0137	3.6900e-003	8.9000e-004	4.5800e-003		42.0923	42.0923	1.4100e-003	6.0700e-003	43.9350
Worker	0.0173	0.0126	0.1968	5.1000e-004	0.0559	3.6000e-004	0.0563	0.0148	3.3000e-004	0.0152		51.6721	51.6721	1.4100e-003	1.2500e-003	52.0801
Total	**0.0212**	**0.1106**	**0.2304**	**9.0000e-004**	**0.0687**	**1.2900e-003**	**0.0700**	**0.0185**	**1.2200e-003**	**0.0197**		**93.7644**	**93.7644**	**2.8200e-003**	**7.3200e-003**	**96.0152**

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	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**	**0.0000**	**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Building Construction - 2022

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9400e-003	0.0980	0.0336	3.9000e-004	0.0128	9.3000e-004	0.0137	3.6900e-003	8.9000e-004	4.5800e-003		42.0923	42.0923	1.4100e-003	6.0700e-003	43.9350
Worker	0.0173	0.0126	0.1968	5.1000e-004	0.0559	3.6000e-004	0.0563	0.0148	3.3000e-004	0.0152		51.6721	51.6721	1.4100e-003	1.2500e-003	52.0801
Total	**0.0212**	**0.1106**	**0.2304**	**9.0000e-004**	**0.0687**	**1.2900e-003**	**0.0700**	**0.0185**	**1.2200e-003**	**0.0197**		**93.7644**	**93.7644**	**2.8200e-003**	**7.3200e-003**	**96.0152**

3.4 Architectural Coating - 2022

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	lb/day										lb/day					
Archit. Coating	20.0825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**20.2871**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Architectural Coating - 2022

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4600e-003	2.5300e-003	0.0394	1.0000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		10.3344	10.3344	2.8000e-004	2.5000e-004	10.4160
Total	**3.4600e-003**	**2.5300e-003**	**0.0394**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**10.3344**	**10.3344**	**2.8000e-004**	**2.5000e-004**	**10.4160**

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	lb/day										lb/day					
Archit. Coating	20.0825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**20.2871**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Architectural Coating - 2022

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4600e-003	2.5300e-003	0.0394	1.0000e-004	0.0112	7.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0300e-003		10.3344	10.3344	2.8000e-004	2.5000e-004	10.4160
Total	**3.4600e-003**	**2.5300e-003**	**0.0394**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0113**	**2.9600e-003**	**7.0000e-005**	**3.0300e-003**		**10.3344**	**10.3344**	**2.8000e-004**	**2.5000e-004**	**10.4160**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	lb/day										lb/day					
Mitigated	0.7649	0.6812	6.5851	0.0134	1.3402	9.8900e-003	1.3500	0.3570	9.1700e-003	0.3661		1,360.6696	1,360.6696	0.1014	0.0613	1,381.4685
Unmitigated	0.7649	0.6812	6.5851	0.0134	1.3402	9.8900e-003	1.3500	0.3570	9.1700e-003	0.3661		1,360.6696	1,360.6696	0.1014	0.0613	1,381.4685

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Racquet Club	312.18	312.18	312.18	636,607	636,607
Total	312.18	312.18	312.18	636,607	636,607

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
Racquet Club	16.60	8.40	6.90	11.50	69.50	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Racquet Club	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	lb/day										lb/day					
NaturalGas Mitigated	5.7500e-003	0.0523	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003		62.7052	62.7052	1.2000e-003	1.1500e-003	63.0778
NaturalGas Unmitigated	5.7500e-003	0.0523	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003		62.7052	62.7052	1.2000e-003	1.1500e-003	63.0778

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	lb/day										lb/day					
Racquet Club	532.994	5.7500e-003	0.0523	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003		62.7052	62.7052	1.2000e-003	1.1500e-003	63.0778
Total		**5.7500e-003**	**0.0523**	**0.0439**	**3.1000e-004**		**3.9700e-003**	**3.9700e-003**		**3.9700e-003**	**3.9700e-003**		**62.7052**	**62.7052**	**1.2000e-003**	**1.1500e-003**	**63.0778**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

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	lb/day										lb/day					
Racquet Club	0.532994	5.7500e-003	0.0523	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003		62.7052	62.7052	1.2000e-003	1.1500e-003	63.0778
Total		**5.7500e-003**	**0.0523**	**0.0439**	**3.1000e-004**		**3.9700e-003**	**3.9700e-003**		**3.9700e-003**	**3.9700e-003**		**62.7052**	**62.7052**	**1.2000e-003**	**1.1500e-003**	**63.0778**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	lb/day										lb/day					
Mitigated	0.2421	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.3700e-003	2.3700e-003	1.0000e-005		2.5300e-003
Unmitigated	0.2421	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.3700e-003	2.3700e-003	1.0000e-005		2.5300e-003

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	lb/day										lb/day					
Architectural Coating	0.0275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.3700e-003	2.3700e-003	1.0000e-005		2.5300e-003
Total	**0.2421**	**1.0000e-005**	**1.1100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.3700e-003**	**2.3700e-003**	**1.0000e-005**		**2.5300e-003**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	lb/day										lb/day					
Architectural Coating	0.0275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-004	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.3700e-003	2.3700e-003	1.0000e-005		2.5300e-003
Total	**0.2421**	**1.0000e-005**	**1.1100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.3700e-003**	**2.3700e-003**	**1.0000e-005**		**2.5300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Racquet Club	10.83	1000sqft	0.25	10,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Vehicle Trips - Trip rate modified to match Traffic Impact Analysis

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	PhaseEndDate	11/18/2022	11/11/2022
tblConstructionPhase	PhaseStartDate	11/12/2022	11/5/2022
tblVehicleTrips	ST_TR	21.35	28.82
tblVehicleTrips	SU_TR	17.40	28.82
tblVehicleTrips	WD_TR	14.03	28.82

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2022	0.0898	0.3929	0.4124	6.9000e-004	3.9700e-003	0.0206	0.0245	1.0700e-003	0.0190	0.0201	0.0000	60.5548	60.5548	0.0173	3.5000e-004	61.0926
Maximum	**0.0898**	**0.3929**	**0.4124**	**6.9000e-004**	**3.9700e-003**	**0.0206**	**0.0245**	**1.0700e-003**	**0.0190**	**0.0201**	**0.0000**	**60.5548**	**60.5548**	**0.0173**	**3.5000e-004**	**61.0926**

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					
2022	0.0898	0.3929	0.4124	6.9000e-004	3.9500e-003	0.0206	0.0245	1.0600e-003	0.0190	0.0201	0.0000	60.5547	60.5547	0.0173	3.5000e-004	61.0925
Maximum	**0.0898**	**0.3929**	**0.4124**	**6.9000e-004**	**3.9500e-003**	**0.0206**	**0.0245**	**1.0600e-003**	**0.0190**	**0.0201**	**0.0000**	**60.5547**	**60.5547**	**0.0173**	**3.5000e-004**	**61.0925**

	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**	**0.50**	**0.00**	**0.04**	**0.93**	**0.00**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2022	8-31-2022	0.2460	0.2460
2	9-1-2022	9-30-2022	0.0840	0.0840
		Highest	0.2460	0.2460

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	0.0442	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	1.0500e-003	9.5400e-003	8.0100e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	31.2437	31.2437	1.9600e-003	4.0000e-004	31.4130
Mobile	0.1329	0.1354	1.1986	2.3500e-003	0.2392	1.8000e-003	0.2410	0.0638	1.6700e-003	0.0655	0.0000	217.5097	217.5097	0.0173	0.0106	221.1109
Waste						0.0000	0.0000		0.0000	0.0000	12.5306	0.0000	12.5306	0.7405	0.0000	31.0441
Water						0.0000	0.0000		0.0000	0.0000	0.2032	2.2526	2.4558	0.0211	5.2000e-004	3.1361
Total	**0.1781**	**0.1450**	**1.2067**	**2.4100e-003**	**0.2392**	**2.5200e-003**	**0.2417**	**0.0638**	**2.3900e-003**	**0.0662**	**12.7338**	**251.0062**	**263.7400**	**0.7809**	**0.0116**	**286.7044**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0442	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	1.0500e-003	9.5400e-003	8.0100e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	31.2437	31.2437	1.9600e-003	4.0000e-004	31.4130
Mobile	0.1329	0.1354	1.1986	2.3500e-003	0.2392	1.8000e-003	0.2410	0.0638	1.6700e-003	0.0655	0.0000	217.5097	217.5097	0.0173	0.0106	221.1109
Waste						0.0000	0.0000		0.0000	0.0000	3.1327	0.0000	3.1327	0.1851	0.0000	7.7610
Water						0.0000	0.0000		0.0000	0.0000	0.1626	1.8021	1.9646	0.0169	4.1000e-004	2.5089
Total	**0.1781**	**0.1450**	**1.2067**	**2.4100e-003**	**0.2392**	**2.5200e-003**	**0.2417**	**0.0638**	**2.3900e-003**	**0.0662**	**3.2952**	**250.5557**	**253.8509**	**0.2213**	**0.0114**	**262.7941**

	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**	**74.12**	**0.18**	**3.75**	**71.66**	**0.95**	**8.34**

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	6/1/2022	6/14/2022	5	10	
2	Building Construction	Building Construction	6/18/2022	11/4/2022	5	100	
3	Architectural Coating	Architectural Coating	11/5/2022	11/11/2022	5	5	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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: 16,248; Non-Residential Outdoor: 5,416; Striped Parking Area: 0 (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
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

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					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5500e-003	0.0321	0.0374	6.0000e-005		1.6900e-003	1.6900e-003		1.6100e-003	1.6100e-003	0.0000	5.2068	5.2068	9.6000e-004	0.0000	5.2308
Total	**3.5500e-003**	**0.0321**	**0.0374**	**6.0000e-005**	**2.0000e-005**	**1.6900e-003**	**1.7100e-003**	**0.0000**	**1.6100e-003**	**1.6100e-003**	**0.0000**	**5.2068**	**5.2068**	**9.6000e-004**	**0.0000**	**5.2308**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.4000e-004	1.8500e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4506	0.4506	1.0000e-005	1.0000e-005	0.4546
Total	**1.7000e-004**	**1.4000e-004**	**1.8500e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4506**	**0.4506**	**1.0000e-005**	**1.0000e-005**	**0.4546**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

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					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5500e-003	0.0321	0.0374	6.0000e-005		1.6900e-003	1.6900e-003		1.6100e-003	1.6100e-003	0.0000	5.2068	5.2068	9.6000e-004	0.0000	5.2308
Total	**3.5500e-003**	**0.0321**	**0.0374**	**6.0000e-005**	**1.0000e-005**	**1.6900e-003**	**1.7000e-003**	**0.0000**	**1.6100e-003**	**1.6100e-003**	**0.0000**	**5.2068**	**5.2068**	**9.6000e-004**	**0.0000**	**5.2308**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.4000e-004	1.8500e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4506	0.4506	1.0000e-005	1.0000e-005	0.4546
Total	**1.7000e-004**	**1.4000e-004**	**1.8500e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4506**	**0.4506**	**1.0000e-005**	**1.0000e-005**	**0.4546**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Building Construction - 2022

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	0.0343	0.3513	0.3576	5.7000e-004		0.0186	0.0186		0.0171	0.0171	0.0000	50.0739	50.0739	0.0162	0.0000	50.4787
Total	**0.0343**	**0.3513**	**0.3576**	**5.7000e-004**		**0.0186**	**0.0186**		**0.0171**	**0.0171**	**0.0000**	**50.0739**	**50.0739**	**0.0162**	**0.0000**	**50.4787**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	5.1400e-003	1.7100e-003	2.0000e-005	6.3000e-004	5.0000e-005	6.8000e-004	1.8000e-004	4.0000e-005	2.3000e-004	0.0000	1.9096	1.9096	6.0000e-005	2.8000e-004	1.9933
Worker	8.6000e-004	7.1000e-004	9.2700e-003	2.0000e-005	2.7400e-003	2.0000e-005	2.7600e-003	7.3000e-004	2.0000e-005	7.4000e-004	0.0000	2.2531	2.2531	6.0000e-005	6.0000e-005	2.2731
Total	**1.0600e-003**	**5.8500e-003**	**0.0110**	**4.0000e-005**	**3.3700e-003**	**7.0000e-005**	**3.4400e-003**	**9.1000e-004**	**6.0000e-005**	**9.7000e-004**	**0.0000**	**4.1627**	**4.1627**	**1.2000e-004**	**3.4000e-004**	**4.2663**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Building Construction - 2022

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	0.0343	0.3513	0.3576	5.7000e-004		0.0186	0.0186		0.0171	0.0171	0.0000	50.0738	50.0738	0.0162	0.0000	50.4787
Total	**0.0343**	**0.3513**	**0.3576**	**5.7000e-004**		**0.0186**	**0.0186**		**0.0171**	**0.0171**	**0.0000**	**50.0738**	**50.0738**	**0.0162**	**0.0000**	**50.4787**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	5.1400e-003	1.7100e-003	2.0000e-005	6.3000e-004	5.0000e-005	6.8000e-004	1.8000e-004	4.0000e-005	2.3000e-004	0.0000	1.9096	1.9096	6.0000e-005	2.8000e-004	1.9933
Worker	8.6000e-004	7.1000e-004	9.2700e-003	2.0000e-005	2.7400e-003	2.0000e-005	2.7600e-003	7.3000e-004	2.0000e-005	7.4000e-004	0.0000	2.2531	2.2531	6.0000e-005	6.0000e-005	2.2731
Total	**1.0600e-003**	**5.8500e-003**	**0.0110**	**4.0000e-005**	**3.3700e-003**	**7.0000e-005**	**3.4400e-003**	**9.1000e-004**	**6.0000e-005**	**9.7000e-004**	**0.0000**	**4.1627**	**4.1627**	**1.2000e-004**	**3.4000e-004**	**4.2663**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Architectural Coating - 2022

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	0.0502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0507**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0225	0.0225	0.0000	0.0000	0.0227
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0225**	**0.0225**	**0.0000**	**0.0000**	**0.0227**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Architectural Coating - 2022

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	0.0502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0507**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0225	0.0225	0.0000	0.0000	0.0227
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0225**	**0.0225**	**0.0000**	**0.0000**	**0.0227**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1329	0.1354	1.1986	2.3500e-003	0.2392	1.8000e-003	0.2410	0.0638	1.6700e-003	0.0655	0.0000	217.5097	217.5097	0.0173	0.0106	221.1109
Unmitigated	0.1329	0.1354	1.1986	2.3500e-003	0.2392	1.8000e-003	0.2410	0.0638	1.6700e-003	0.0655	0.0000	217.5097	217.5097	0.0173	0.0106	221.1109

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Racquet Club	312.18	312.18	312.18	636,607	636,607
Total	312.18	312.18	312.18	636,607	636,607

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
Racquet Club	16.60	8.40	6.90	11.50	69.50	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Racquet Club	0.544785	0.062844	0.187478	0.127235	0.023089	0.006083	0.010475	0.008012	0.000925	0.000611	0.024394	0.000698	0.003374

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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						0.0000	0.0000		0.0000	0.0000	0.0000	20.8621	20.8621	1.7600e-003	2.1000e-004	20.9698
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	20.8621	20.8621	1.7600e-003	2.1000e-004	20.9698
NaturalGas Mitigated	1.0500e-003	9.5400e-003	8.0100e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3815	10.3815	2.0000e-004	1.9000e-004	10.4432
NaturalGas Unmitigated	1.0500e-003	9.5400e-003	8.0100e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3815	10.3815	2.0000e-004	1.9000e-004	10.4432

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
Racquet Club	194543	1.0500e-003	9.5400e-003	8.0100e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3815	10.3815	2.0000e-004	1.9000e-004	10.4432
Total		**1.0500e-003**	**9.5400e-003**	**8.0100e-003**	**6.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**10.3815**	**10.3815**	**2.0000e-004**	**1.9000e-004**	**10.4432**

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					
Racquet Club	194543	1.0500e-003	9.5400e-003	8.0100e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3815	10.3815	2.0000e-004	1.9000e-004	10.4432
Total		**1.0500e-003**	**9.5400e-003**	**8.0100e-003**	**6.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**10.3815**	**10.3815**	**2.0000e-004**	**1.9000e-004**	**10.4432**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Racquet Club	117636	20.8621	1.7600e-003	2.1000e-004	20.9698
Total		**20.8621**	**1.7600e-003**	**2.1000e-004**	**20.9698**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Racquet Club	117636	20.8621	1.7600e-003	2.1000e-004	20.9698
Total		**20.8621**	**1.7600e-003**	**2.1000e-004**	**20.9698**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Use Low VOC Paint - Non-Residential Exterior

	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	0.0442	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Unmitigated	0.0442	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-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	5.0200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0391					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	**0.0442**	**0.0000**	**1.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**2.9000e-004**

San Marino Center Rehabilitation - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	5.0200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0391					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	**0.0442**	**0.0000**	**1.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**2.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.9646	0.0169	4.1000e-004	2.5089
Unmitigated	2.4558	0.0211	5.2000e-004	3.1361

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Racquet Club	0.64052 / 0.392577	2.4558	0.0211	5.2000e-004	3.1361
Total		**2.4558**	**0.0211**	**5.2000e-004**	**3.1361**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Racquet Club	0.512416 / 0.314062	1.9646	0.0169	4.1000e-004	2.5089
Total		**1.9646**	**0.0169**	**4.1000e-004**	**2.5089**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.1327	0.1851	0.0000	7.7610
Unmitigated	12.5306	0.7405	0.0000	31.0441

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Racquet Club	61.73	12.5306	0.7405	0.0000	31.0441
Total		**12.5306**	**0.7405**	**0.0000**	**31.0441**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Racquet Club	15.4325	3.1327	0.1851	0.0000	7.7610
Total		**3.1327**	**0.1851**	**0.0000**	**7.7610**

9.0 Operational Offroad

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B-1
Energy Analysis

September 23, 2021

Ms. Julie Gilbert, Project Manager
ELMT Consulting, Inc.
2201 North Grand Avenue, Suite 10098
Santa Ana, CA 92711-0098

SUBJECT: Energy Calculation Memorandum for the San Marino Center Improvement Project

Dear Ms. Gilbert;

Birdseye Planning Group (BPG) is pleased to submit this memorandum quantifying energy consumption associated with the construction of the San Marino Center Improvement Project. The proposed action is subject to a discretionary review process by the City of San Marino; thus, an Environmental Impact Report (EIR) is being prepared to demonstrate California Environmental Quality Act (CEQA) compliance.

Project Description

The San Marino Center Improvement Project (Project) is located at 1800 Huntington Drive, San Marino, which is the south side of Huntington Drive, adjacent and east of the Huntington Middle School and west and adjacent to the Crowell Public Library, identified by Los Angeles County Assessor's Parcel Number (APNs) 5334-024-903.The site currently supports an existing community center. The Project proposes to change the San Marino Center (SMC) building façade from a Modern Colonial Revival to a Spanish Mediterranean architectural style which is similar to adjacent buildings. Other upgrades include rehabilitation of the building interior to include additional offices to accommodate six City Recreation Department staff, optimize the interior public gathering space, and repair/replace the heating/air conditioning, plumbing and electrical systems and light fixtures to current building code standards.

The proposed interior space reconfiguration will allow for an occupancy rating of 1,083. Access to the site is via two driveways – one fronting Huntington Drive and the other along West Street east of the site. Access would not be changed with implementation of the project.

Exterior improvements include the following are comprised of the following:

- Replace the decorative wrought iron posts with stucco columns;

- Replace the wood shingled roof with the terra cotta tile;
- Replace doors and windows to match existing rectangular and square shapes but with grid patterns similar to the library windows as appropriate;
- Add wood accents where appropriate and complimentary such as around windows and the entry door;
- Add an open patio area at the back of the building that will have a stucco wall and a wood trellis ceiling similar to the open space areas at the library;
- Remove canopies that were added to the building after its original construction will be removed.
- New paint and stucco repair that will match the color of the library.

Exterior features that will remain intact or will not be impacted by the proposed improvements include the following:

- The cornerstone of the building inscribed with "San Marino Women's Club" near the building entry;
- Concrete walkway and concrete front patio; and
- Landscaping, including the large oak tree adjacent to the front entry, grassy areas and urban landscaping around the west and south of the building.

The project would not require ground disturbances associated with or grading. Minor demolition would be required. The majority of the work would be completed with hand tools or small pieces of equipment.

After construction, the proposed project is expected to generate 19 new vehicle trips (13 inbound trips and 6 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 25 new vehicle trips (12 inbound trips and 13 outbound trips). Over a 24-hour period, the proposed project is forecast to generate approximately 312 new daily trip ends (156 inbound trips and 156 outbound trips) during a typical weekday.

Energy Calculations

Based on the scope and sequence of construction activities, daily emissions were conservatively estimated using the most intensive mix of equipment over the 180-day construction period extending from June 2022 to November 2022. The common method is to calculate fuel demand based on the six phases of construction defined in California Emission Estimator Model (CalEEMod) 2020.4.0; demolition, site preparation, grading, building construction, paving and painting (i.e., architectural coating). However, for the purpose of determining maximum daily air emissions and annual greenhouse gas (GHG) emissions, three phases were used; demolition, building construction/improvements and architectural coating (i.e., painting). These data were used to conservatively estimate gasoline and diesel fuel demand during construction using the most equipment intensive operation as the basis for the calculations. Construction would require the following or a similar mix of equipment;

- Air compressor, 78 horsepower at 0.48 load factor;
- Concrete/Industrial saws; 81 horsepower at 0.73 load factor;
- Crane (or similar heavy lift equipment); 231 horsepower at 0.29 load factor;
- Fork-Lift (2); 89 horsepower, 0.2 load factor;
- Rubber-tired dozer; 287 horsepower, 0.4 load factor; and
- Tractor/Loader/Backhoe (2), 97 horsepower, 0.37 horsepower.

Because this equipment mix would not be required daily throughout the duration of the project, fuel consumption calculations likely overestimate actual diesel fuel demand. During operation, fuel demand associated with daily vehicle trips referenced above were estimated. Energy consumption (i.e., natural gas and electricity) estimated for operation of the San Marino Center post-construction are also provided herein.

Tables 1 and 2 show estimated gasoline demand for construction workers and construction equipment. All fuel calculations are based on the total Carbon Dioxide Equivalent (CO2e) value calculated for the demolition, construction of the building improvements and application of architectural coating and off-site construction worker, vendor and hauling trips using CalEEMod 2020.4.0. Data are reported in annual metric tons of CO2e. Metric tons are converted to kilogram CO2e and then divided by a conversion factor used by the U.S. Environmental Protection Agency to estimate gallons of gasoline (8.87) and diesel fuel (10.18) consumed based on carbon emissions.

Table 1 shows the gasoline demand for construction workers for work occurring in 2022. Table 2 shows the diesel fuel demand for equipment operation in 2022.

Table 1
Construction Worker Gasoline Demand

2022	CO2E MT	Kg CO2e	Gallons
Worker Fuel	4.22	4,220	476

Table 2
Construction Equipment Diesel Demand

2022	CO2E MT	Kg CO2e	Gallons
Equipment Fuel	56.2	56,200	5,521

Table 3 shows annual gasoline demand projected for operation of the San Marino Center assuming a total of 312 daily trips and an average trip length of 16.6 miles. This is a default value in CalEEMod 2020.4.0 and likely overestimates actual fuel demand associated with daily trips to/from the San Marino Center.

Table 3
Operational Gasoline Demand

Post-construction	CO2E MT	Kg CO2e	Gallons
User Fuel	221	24,915	24,915

Operation of the San Marino Center post-construction would generate an annual demand of 194,543 kBTU of natural gas and 117,636 kWh of electricity.

Please let me know if you have questions. You can reach me via e-mail at 760-712-2199 or via e-mail ryan@birdseyeplanninggroup.com.

Regards,

Ryan Birdseye
Principal

Appendix C
Cultural Resources Report

CULTURAL RESOURCES ASSESSMENT

San Marino Center Renovation Project

City of San Marino, Los Angeles County, California

Prepared for:

Julie Gilbert
Project Manager
ELMT Consulting
julie.gilbert@elmtconsulting.com
909-496-5960

Prepared by:

David Brunzell, M.A., RPA
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BCR Consulting LLC
505 West Eighth Street
Claremont, California 91711

Project No. EMT2101

Database Information:
Type of Study: Intensive Survey
Study Area: 1800 Huntington Drive, San Marino
Keywords: San Marino Woman's Club
USGS Quadrangle: 7.5-minute *El Monte, California* 1981

BCRCONSULTING LLC

September 2, 2021

MANAGEMENT SUMMARY

BCR Consulting LLC is under contract to ELMT Consulting to conduct a Cultural Resources Assessment of 1800 West Huntington Boulevard (the subject property) located in the City of San Marino (City), Los Angeles County, California. The City of San Marino is proposing to change the architectural style of the building façade from its current style to a "Spanish Mediterranean" style that is similar to the current adjacent Crowell Library (project). This study is being conducted to determine whether the project could potentially cause a significant impact to any historical resources, pursuant to the California Environmental Quality Act (CEQA). A cultural resources records search, additional research, intensive field survey, sacred land file search, and paleontological overview were conducted for the study.

The records search and additional research revealed that three previous cultural resource studies have taken place resulting in the recording of six cultural resources within a half-mile radius of the subject property. The subject property was subject to one previous cultural resource assessment that resulted in one cultural resource (the San Marino Woman's Club) identified within its boundaries. This previous study recommended that the San Marino Woman's Club was eligible for listing in the National Register of Historic Places (National Register) under Criterion A, which also means it is eligible for listing in the California Register of Historical Resources (California Register) under Criterion 1, for association with an event important to the history of the San Marino community. The study also recommended that the property retained sufficient integrity to convey its historic eligibility. The California State Historic Preservation Officer (SHPO) concurred with this recommendation on August 5, 2011. It is recognized as listed in the California Register in the California Office of Historic Preservation (OHP) Built Environment Resource Directory (BERD). During the fieldwork, BCR Consulting identified the San Marino Woman's Club and confirmed that its condition is good and that it continues to retain sufficient integrity to convey California Register eligibility. No other cultural resources were identified within the subject property boundaries.

Based on these results, BCR Consulting has discovered that the San Marino Woman's Club is listed in the California Register under Criterion 1, and recommends that this resource retains integrity of location, setting, design, materials, workmanship, feeling, and association. To avoid a substantial adverse impact to a historic property, any proposed project activities should be consistent with "plans for rehabilitation to ensure that the undertaking maintains consistency with the Secretary of the Interior Standards for the Treatment of Historic Properties" (36 CFR part 68; see https://www.nps. gov/tps/standards/rehabilitation.htm). The Standards are intended to pertain to rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility while ensuring that the historic character of a property be retained and preserved. Preservation is generally understood to include the avoidance of removal of historic materials and alterations to its visible characteristics. Project design should be carried out in consultation with a professional that meets the U.S. Secretary of the Interior Professional Qualification Standards for Historic Architecture (see http://www.nps. gov/history/local-law/arch_stnds_9.htm).

The project, as currently designed, does not meet the Secretary of Interior Standards for Rehabilitation. Therefore, the Project will materially alter a historic resource and cause a potentially significant impact in accordance with 14 CCR Section 15064.5 (b).

A summary of the recommendations for options are as follows and are detailed further in the Conclusions and Recommendations Section.

1. Redesign the project to reduce its impacts to less than significant as described in 14 CCR Section 15064.5 (b)(3) and 14 CCR Section 15126.4 (b)(1) by designing it to conform the Secretary of Interior Standards for Rehabilitation, in consultation with a professional architect who meets the U.S. Secretary of the Interior Professional Qualification Standards for Historic Architecture. OR

2. Prepare Historical American Building Survey (HABS)-type documentation for local curation. This would reduce project impacts but would not reduce the negative impact to less than significant as identified in 14 CCR Section 15126.4 (b)(2).

Other recommendations are made to reduce impacts to less than significant as follows:

Accidental Discoveries. If previously undocumented cultural resources are identified during earthmoving activities associated with development of the project site, a qualified archaeologist should be contacted to assess the nature and significance of the find, diverting construction excavation if necessary.

Human Remains. If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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E: PROPOSED PROJECT EXHIBIT

INTRODUCTION

BCR Consulting LLC (BCR Consulting) is under contract to ELMT Consulting to conduct a Cultural Resources Assessment of 1800 West Huntington Boulevard (the subject property) located in the City of San Marino (City), Los Angeles County, California. The project site is located within Section 2 of Township 1 South, Range 12 West, San Bernardino Baseline and Meridian. It is depicted on the U.S. Geological Survey (USGS) *El Monte, California* (1981) 7.5-minute topographic quadrangle (Figure 1). The current study is being conducted to determine whether a development project could potentially cause a significant impact to any historical resources, pursuant to the California Environmental Quality Act (CEQA). A cultural resources records search, additional research, intensive field survey, sacred land file search, and paleontological overview were conducted for the study.

PROJECT DESCRIPTION

Exterior Alterations

Exterior alterations include the following (see Appendix E for project renderings):

- Replace the decorative wrought iron posts along the front patio with stucco columns;
- Replace the wood shingled roof with the terra cotta tile;
- Replace doors and windows to include grid patterns similar to the library windows; type of windows will be newer energy efficient;
- Add wood accents where appropriate and complementary such as around windows and the entry door consistent with features of architectural style of neighboring library;
- Add an open patio area at the back of the building that will have a stucco wall and a wood trellis ceiling similar to the open space areas at the library;
- Modify concrete walkway and front patio to enhance design elements and ADA compliance;
- Remove canopies over patio and windows that were added to the building after its original construction; new paint and stucco repair that will match the color of the library; and,
- Various upgrades for ADA compliance.

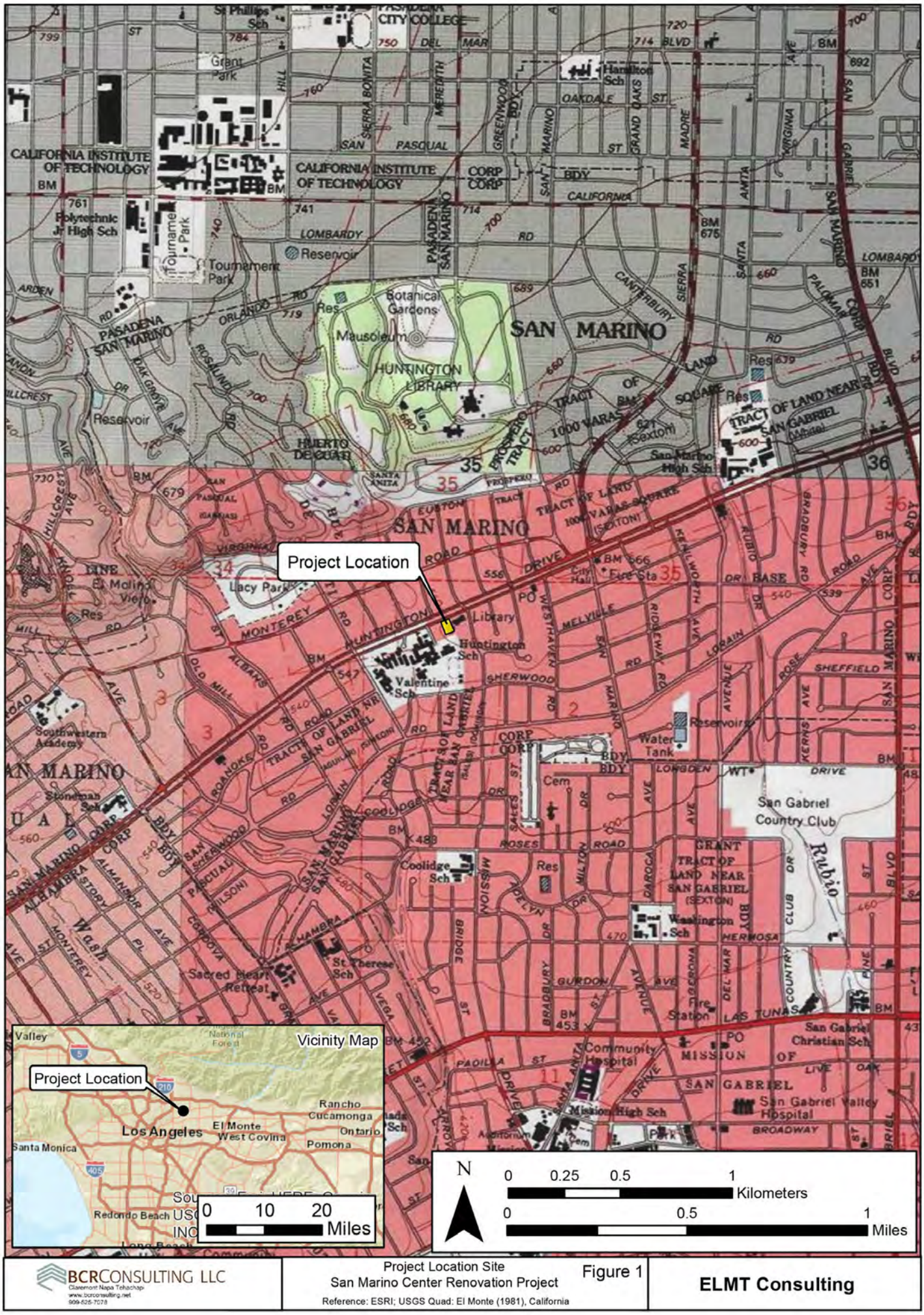
Exterior features that will remain intact or will not be impacted by the proposed alterations include the following:

- The cornerstone of the building inscribed with “San Marino Women’s Club” near the building entry (plans require that this will be protected in place), and;
- Landscaping, including the two large oak trees adjacent to the front entry, grassy areas and urban landscaping around the west and south of the building.

Interior Alterations

The features to be renovated and/or replaced include the following.

- Add two offices (for a total of three offices);
- Install a folding wall in the main room;



BCR CONSULTING LLC
Claremont Napa Tehachapi
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909-625-7078

Project Location Site
San Marino Center Renovation Project
Reference: ESRI; USGS Quad: El Monte (1981), California

Figure 1

ELMT Consulting

- Upgrade the kitchen, bathrooms, ceiling tiles, and electrical and mechanical systems to current code standards;
- Remove and replace light and plumbing fixtures with current-style fixtures
- Various upgrades for ADA compliance;
- Update paint and carpet; and
- Conduct other deferred maintenance items.

Interior features that are not anticipated to be impacted by the proposed alterations include the following:

- Entryway flooring containing the San Marino Women's Club insignia (plans require to protect in place)
- Fireside room fireplace and cabinetry; and
- Stage.

Building Grounds Alterations

Some changes will occur outside of the building envelope. Site preparation for new ADA parking and loading, sidewalk repair, parking lot paving, and landscaping alterations as necessary will only require surficial disturbance. Other alterations will require excavation that will generally vary between 2 to 3 feet wide by 1 to 3 feet deep, depending on the activity. The activities that require excavation include but are not limited to the following:

- Install new domestic water service and sewer lines to be installed in the same area as the existing lines;
- Install new landscape irrigation meter, with pipe replacements, as necessary, in the same location;
- Install new, separate water service for the fire sprinkler system;
- Install new footings for new patio walls and pilasters, trash enclosure, building columns; and,
- Repair existing building footings and slab where applicable.
- Replace overhead electrical service with new underground electrical service;

REGULATORY CONTEXT

Federal and state regulations recognize the public's interest in historical resources and the public benefit of preserving such resources. These regulations include federal historical resource registration programs designed to assist in the identification and evaluation of resources and to determine whether these resources should be considered historical resources. Properties eligible for the National Register of Historic Places (National Register) are subject to federal laws that require consideration of potential impacts of proposed projects on historical resources. These properties should also receive special consideration in the planning processes, or merit consideration as candidates for individual protection.

Federal

Compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 Code of Federal Regulations, Part 800 (36 CFR 800) is

required for an undertaking that receives federal funding. 36 CFR 800 implements Section 106, which must "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register." It defines the steps required to identify historic properties (i.e. resources eligible for or listed in the National Register).

National Register of Historic Places. The criteria for significance for the National Register are defined by the U.S. Department of the Interior under the National Park Service and published in the National Register Bulletin, listed below. The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of significant persons in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded or may be likely to yield, information important in history or prehistory.

Ordinarily cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register (National Park Service 1997).

State

CEQA (PRC Chapter 2.6, Section 21083.2 and CCR Title 14, Division 6, Chapter 3, Article 5, Section 15064.5) calls for the evaluation and recordation of historic resources. The criteria for determining the significance of impacts to cultural resources are based on Section 15064.5 of the CEQA Guidelines and Guidelines for the Nomination of Properties to the California Register. Properties eligible for listing in the California Register and subject to review under CEQA are those meeting the criteria for listing in the California Register, National Register, or designation under a local ordinance.

California Register of Historical Resources. For a property to be eligible for inclusion on the California Register, one or more of the following criteria (CCR 4852 [b]). must be met:

1. It is associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; and/or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources" (CCR 4852 [d][2]). Fifty years is normally considered sufficient time for a potential historical resource, and in order that the evaluation remain valid for a minimum of five years after the date of this report, all resources older than 45 years will be evaluated.

The California Register also requires that a resource possess integrity (CCR 4852 [c]). Integrity is the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Historical resources that have been rehabilitated or restored may be evaluated for listing. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.

Assembly Bill 52. California Assembly Bill 52 was approved on September 25, 2014. As stated in Section 11 of AB 52, the act applies only to projects that have a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015.

AB 52 establishes "tribal cultural resources" (TCRs) as a new category of resources under CEQA. As defined under Public Resources Code Section 21074, TCRs are "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either: (1) included or determined to be eligible for inclusion in the California Register; included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) determined by the lead agency to be significant pursuant to the criteria for inclusion in the California Register set forth in Public Resources Code Section 5024.1(c), if supported by substantial evidence and taking into account the significance of the resource to a California Native American tribe. A "historical resource" as defined in Public Resources Code Section 21084.1, a "unique archaeological resource" as defined in Public Resources Code Section 21083.2(g), or a "nonunique archaeological resource" as defined in Public Resources Code Section 21083.2(h) may also be TCRs.

AB 52 further establishes a new consultation process with California Native American tribes for proposed projects in geographic areas that are traditionally and culturally affiliated with that tribe. Per Public Resources Code Section 21073, “California Native American tribe” includes federally and non-federally recognized tribes on the NAHC contact list. Subject to certain prerequisites, AB 52 requires, among other things, that a lead agency consult with the geographically affiliated tribe before the release of an environmental review document for a proposed project regarding project alternatives, recommended mitigation measures, or potential significant effects, if the tribe so requests in writing. If the tribe and the lead agency agree upon mitigation measures during their consultation, these mitigation measures must be recommended for inclusion in the environmental document (Public Resources Code Sections 21080.3.1, 21080.3.2, 21082.3, 21084.2, and 21084.3).

City of San Marino

The City of San Marino has established its own historic preservation ordinance codified in article 18 of its municipal code. Its purpose is to provide for “the identification, designation, protection, enhancement, and ongoing use of historical resources that represent the City's cultural, architectural, social, economic, and political heritage.” Its designation and integrity criteria are based on the state and national criteria. Section 23.18.03: Designation of Historic Landmarks stipulates:

A. Automatic Designation: Any property within the City that is listed in the National Register of Historic Places or the California Register of Historic Places [sic] is automatically designated as a historic landmark for purposes of this article.

B. Prior Designations: Any historic landmark previously designated as such by the City on or before the effective date of this article shall continue to be a historic landmark as previously designated for purposes of this article and shall be subject to all provisions herein.

C. New Designations: The Council may designate any structure, property, or properties as a historic landmark or historic resource subject to criteria in this article.

D. Amendment Or Rescission: The Council may amend or rescind the designation of any historic landmark, for the purposes of this article, subject to the same procedures required for their designation, including without limitation, hearing and recommendation of the Director.

1. Criteria for Amendment: Once a historic landmark has been designated, the designation shall not be amended unless the City Council determines the findings required under section 23.18.04 of this article can still be made.

2. Criteria For Rescission: Once a historic landmark has been designated, the designation shall not be rescinded unless the City Council finds that: a) the evidence supporting the designation was erroneous; or b) the findings required under section 23.18.04 of this article can no longer be made. (Ord. 0-18-1336, 4-11-2018)

NATURAL SETTING

The local geologic region coincides with the physiographic area known as the Los Angeles Basin. It is characterized as a transverse-oriented lowland basin and coastal plain approximately 50 miles long and 20 miles wide. The basin originated as a deep marine trough during the Pliocene (7-2 million years ago) that eventually filled with shallow water fossil bearing sediments. By the beginning of the Pleistocene (after 2 million years ago) uplifting created the series of plains and mesas along the coast that now characterize the area (Lambert 1994, Mendenhall 1905, Woodford et al. 1954). Local rainfall ranges from 5 to 15 inches annually (Jaeger and Smith 1971:36-37). Local vegetation communities are naturally dominated by coastal sage scrub and riparian vegetation, although urbanization prevents its proliferation in much of the project region (Williams et al. 2008:117, 122). See Bean and Saubel (1972) for use of these biotic communities by prehistoric and historic inhabitants.

CULTURAL SETTING

Prehistoric Context

The local prehistoric cultural setting has been organized into many chronological frameworks (see Warren and Crabtree 1986; Bettinger and Taylor 1974; Lanning 1963; Hunt 1960; Wallace 1958, 1962, 1978; Campbell and Campbell 1935), although there is no definitive sequence for the region. The difficulties in establishing cultural chronologies for southern California are a function of its enormous size and the small amount of archaeological excavations. Moreover, throughout prehistory many groups have occupied the area and their territories often overlap spatially and chronologically resulting in mixed artifact deposits. Due to dry climate and capricious geological processes, these artifacts rarely become integrated in-situ. Lacking a milieu hospitable to the preservation of cultural midden, local chronologies have relied upon temporally diagnostic artifacts, such as projectile points, or upon the presence/absence of other temporal indicators, such as groundstone. Such methods are instructive, but can be limited by prehistoric occupants' Concurrent use of different artifact styles, or by artifact re-use or re-sharpening, as well as researchers' mistaken diagnosis, and other factors (see Flenniken 1985; Flenniken and Raymond 1986; Flenniken and Wilke 1989). Recognizing the shortcomings of comparative temporal indicators, this study recommends review of Warren and Crabree (1986), who have drawn upon this method to produce a relatively comprehensive chronology.

Ethnography

The Gabrielino probably first encountered Europeans when Spanish explorers reached California's southern coast during the 15th and 16th centuries (Bean and Smith 1978; Kroeber 1925). The first documented encounter, however, occurred in 1769 when Gaspar de Portola's expedition crossed Gabrielino territory (Bean and Smith 1978). Other brief encounters took place over the years, and are documented in McCawley 1996 (citing numerous sources). The Gabrielino name has been attributed by association with the Spanish mission of San Gabriel, and refers to a subset of people sharing speech and customs with other Cupan speakers (such as the Juaneño/Luiseño/Ajachemem) from the greater Takic branch of the Uto-Aztecan language family (Bean and Smith 1978). Gabrielino villages occupied the watersheds of various rivers (locally including the Santa Ana) and intermittent streams. Chiefs were usually descended through the male line and often administered several villages. Gabrielino society was somewhat stratified and is thought to have contained three hierarchically ordered social classes which dictated ownership rights and social status and obligations (Bean and Smith

1978:540-546). Plants utilized for food were heavily relied upon and included acorn-producing oaks, as well as seed-producing grasses and sage. Animal protein was commonly derived from rabbits and deer in inland regions, while coastal populations supplemented their diets with fish, shellfish, and marine mammals (Boscana 1933, Heizer 1968, Johnston 1962, McCawley 1996). Dog, coyote, bear, tree squirrel, pigeon, dove, mud hen, eagle, buzzard, raven, lizards, frogs, and turtles were specifically not utilized as a food source (Kroeber 1925).

History

Historic-era California is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present).

Spanish Period. The first European to pass through the area is thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up quarters at the Mission San Gabriel in 1771 near what today is Pasadena (Beck and Haase 1974). Garces was followed by Alta California Governor Pedro Fages, who briefly explored the region in 1772. Searching for San Diego Presidio deserters, Fages had traveled through Riverside to San Bernardino, crossed over the mountains into the Mojave Desert, and then journeyed westward to the San Joaquin Valley (Beck and Haase 1974).

Mexican Period. In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes (Beattie and Beattie 1974).

American Period. The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by a significant drought further diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that continue to this day (Beattie and Beattie 1974; Cleland 1941).

San Marino. The references for this section are provided in Appendix A. The land of the City of San Marino, which was part of the San Gabriel Mission, was initially occupied by Gabrielino (Tongva) Indians, who had a village located on what is now the Huntington Middle School. In 1852, Tennessee native Benjamin Davis Wilson acquired a vast tract of land that included the area that later became San Marino as well as several neighboring towns. Wilson went on to serve as the second elected mayor of Los Angeles, on the Los Angeles County Board of Supervisors, and was elected to three terms in the California State Senate. In 1873, Benjamin Wilson gave 500 acres of his land to his son in law James Debarth Shorb. Shorb then named

the ranch on his land “San Marino” which was inspired by his grandfather’s plantation in Maryland which in turn got its name from the Republic of San Marino, Italy.

Both Wilson and Shorb had capitalized on the rich agricultural resources and railroad industries that were present at the time in California. They had become very wealthy after growing a large number of fruits and crops. Wilson gained a majority of his profit from selling wine grapes. Shorb became well-known for introducing a very intricate irrigation system that included 300,000 feet of iron pipe and old tiles that were used to regulate the flow of water to crops. He sold this irrigation system to neighboring farmers for a profit. In 1903, the San Marino land was purchased from James Shorb by Henry E. Huntington, a businessman who was the owner of the Pacific Electric Railway Company in Southern California. Henry Huntington played a major role in shaping the economy of Southern California. The prominent Patton family in San Marino was related to the Wilsons. George S. Patton Jr. was a general in the U.S. Army who gained recognition during World War II. His father, George Patton Sr. was also in the military and married the daughter of Benjamin Wilson. Thus, their family became the heirs to the Lake Vineyard estate which was connected to Huntington’s ranch. Huntington and Patton Sr. joined with another landowner to incorporate San Marino in 1913. They also spearheaded a campaign to prevent their properties from being developed by the city. Their advocacy for restrictive zoning has prevented the development of strip malls and mansions in San Marino. The first school in San Marino was established in 1917 in the vicinity of the subject property; its first high school did not open until 1955. With a population boom in the 1980s and the creation of the San Marino Schools Foundation, the schools were remodeled. During this time, San Marino’s neighborhoods were 99.7 percent white, however, many overseas buyers were attracted to San Marino because of its association with wealth and the reputation of its public schools. By 1986, San Marino High School’s student body was thirty-six percent Asian, a big increase from the year before. Demographic change led to incidents of racist actions and racial tensions, and prompted the city to establish an Ethnic Harmony Commission. Today, San Marino is roughly sixty percent Asian and thirty percent white.

METHODS

Research

Records Search. Prior to fieldwork, SCCIC staff completed a records search electronically through the SCCIC archive located in Fullerton, California. This included a review of all prerecorded built environment cultural resources, as well as a review of known cultural resource reports generated from projects located within one mile of the subject property. A review was also conducted of the National Register, the California Register California Register, and documents and inventories from the California Office of Historic Preservation (OHP) including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures. BCR Consulting also performed research to find out whether any of the resources identified in the records search radius are known to be eligible for listing in the National Register, or the California Register (i.e. *a historical resource* or significant under CEQA). This information is based on a review of available site records and the Built Environment Resource Directory (BERD) maintained by the California OHP.

Additional Research. Additional research was carried out through records provided by the City, Los Angeles County Assessor's Office, City resources online, and various internet resources. Research methodology focused on the review of a variety of primary and secondary source materials relating to the history and development of the local neighborhood and the City of San Marino. Sources included, but were not limited to, historic maps, aerial photographs, historic photographs, tax records, building records and permits, and written histories of the area.

Sacred Lands File Search. BCR Consulting requested a Sacred Lands File Search with the Native American Heritage Commission (NAHC). This is intended to indicate whether lands that have been considered sacred have been filed with the NAHC. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Field Survey

David Brunzell conducted the intensive pedestrian field survey of the subject property on January 19, 2021. The building on the subject property was examined, described in detail, and photographed during the field survey. Building descriptions are provided in the Results section of the report. The subject property is also thoroughly documented on California Department of Parks and Recreation (DPR) 523 forms (see Appendix A). All visible soil exposures were also carefully inspected for evidence of cultural resources.

Personnel

BCR Consulting Principal David Brunzell, M.A., RPA acted as Project Manager for the study. Mr. Brunzell authored the technical report with contributions from Principal Architectural Historian Kara Brunzell, M.A. Staff from the South Central Coastal Information Center (SCCIC) performed the cultural resources records search electronically through the SCCIC archive in Fullerton, California. Ms. Brunzell completed the additional research, and the DPR 523 forms. Mr. Brunzell completed the field survey.

RESULTS

Research

Records Search. The records search and additional research revealed that three previous cultural resource studies have taken place resulting in the recording of six cultural resources within a half-mile radius of the subject property. The subject property was subject to one previous cultural resource assessment that resulted in one cultural resource (the San Marino Woman's Club) identified within its boundaries. This previous study recommended that the San Marino Woman's Club was eligible for listing in the National Register under Criterion A, which also means it is eligible for listing in the California Register under Criterion 1, for association with an event important to the history of the San Marino community. The California State Historic Preservation Officer concurred with this recommendation on August 5, 2011. It is also recognized as such on the California Office of Historic Preservation (OHP) BERD. The BERD assigned the property a code of 2S2, which indicates that it has been determined eligible for the National Register through the Section 106 process and that it is listed on the

CRHR.[1] The property is therefore automatically designated as a local historic landmark under San Marino municipal code Article 18 Chapter 23. The records search results are summarized in Tables A and B. Further background for the San Marino Woman's Club is provided below.

Table A. Cultural Resource Reports Within One Half-Mile of the Subject Property

USGS Quad.	Previous Cultural Resource Studies Within 1/2 Mile of Subject Property
El Monte, Calif. (1981)	LA-3583, 11527; Triem 2011

Table B. Cultural Resources Within One Half-Mile of the Subject Property

USGS Quad.	Built Resources Within 1/2 Mile of Subject Property
El Monte, California (1996)	Historic San Marino Woman's Club: Within Subject Property P-19-00516: Prehistoric Habitation and Historic Ranch (1/2 Mile NW) P-19-179694: Historic-Period Huntington Library (1/4 Mile N) P-19-179695: Historic-Period Edwin Powell Hubble House (1/2 Mile NW) P-19-192489: Historic-Period Wilbert E. McHenry Residence (1/2 Mile SW) P-19-192691: Historic-Per. Franz Henry/Carmen Wiedey Residence (1/4 Mile SE)

Additional Research/The San Marino Woman's Club. Please see Appendix A for references. For architectural references, please see Robinson & Associates, Inc. et al. (2005), Rifkind (1998) and McAlester (2015). The San Marino Woman's Club is one of the oldest established groups in the city. During the 1930s, there were many organizations in the community in San Marino that gathered for music, book reviews, and various other activities. However, there were few organizations for women and on June 8th, 1936, a group of 52 women gathered at the San Marino Police Department courtroom to organize a local women's club. By the time the San Marino Woman's Club was completely organized, the club already had around 420 members. The club catered to elite married white women who could afford to pay the $10 dues and had time to attend frequent events and do charity work. Most of these women had live-in domestic help in the 1930s and 1940s; those who took on leadership roles were in their forties and fifties, with grown or nearly-grown children. Georgina Cornwell, who was a housewife and mother, was the club's first president. Her husband was in the fruit-growing business, which during that era was still one of the most important regional economic activities.

The San Marino Woman's Club held nine regular annual meetings as well as four evening meetings to which husbands (unmarried women do not appear to have been members) were invited. The members of the club were required to wear black dresses and black hats with a pair of white gloves. There were sixteen different guilds within in the club: music, drama, literature, writers, home craft, philanthropy, foreign language, current events, travel, bible, home interior, language, sports, public affairs, flower, and garden. Regular meetings were held at Henry E. Huntington Middle School auditorium while the guild meetings were held at homes of the members. The club raised funds for a slightly used ambulance, which it donated

[1] California OHP does not maintain a comprehensive list of properties on the CRHR and refers inquiries to the Information Centers.

to the city in 1940. This was just one of many charitable contributions the group made to the community over the decades.

Prior to its acquisition by the women's club, the property held a residence (one of only one or two on the block) and was surrounded by open fields since the area was mostly undeveloped. In 1940, Los Angeles County Health Department physician George Hodel [1] lived in the house with his wife Dorothy and their toddler son. They lived in the house only for a year or so before moving elsewhere. The build date and other details about the residence are unknown. The house was demolished prior to development of the Woman's Club and is unrelated to its historical significance.

In 1939, the club purchased the property at 1800 Huntington Drive for $6,000 to build a clubhouse for its growing membership. It was not until ten years later that the clubhouse was completed. Fundraising efforts were suspended when the US entered World War II in 1942, and construction remained difficult immediately after the war in the late 1940s. Sybil Ivey, who had served as club president from 1940 to 1942, was the chair of the building committee. A mother of two who was originally from Australia, Ivey was a schoolteacher before her marriage to bank president Herbert Ivey. Members raised most of the funds to complete the clubhouse through bazaars, rummage sales, parties, and various entertainment events over a ten-year period. They also made an appeal to the public for funds. In 1949, the club requested and received variances from San Marino City Council because the parcel was zoned for residential use and required setbacks that did not fit in with the club's plans for the property. By the end of the decade, the club had $57,000 on hand, and was able to borrow an additional $35,000 in 1951, enabling them to plan completion of the project.

Designed by Marion J. Varner in 1950 as one of his early projects, the building is a simple example of Midcentury Modern architecture.[2] When completed, the San Marino Woman's Club had a dining room, auditorium, lounge (fireside room at the north end of the building), and a craft room at the rear of the building. There were also storage rooms, a large kitchen for catering events, a large women's restroom with a powder room, a dressing room, and a men's restroom. The southwest corner of the building had a small caretaker's apartment with its own bathroom and kitchenette. There were two unfinished upstairs rooms, one of which was intended to become a projection room. The building has served as a community focal point for many years while the club pursued its charitable work. The building was constructed to serve the entire community, not just the Woman's Club, although they funded its construction. The first meeting in the building was in April 1952.

Over the years, the club's charitable contributions have been numerous and include the endowment of a bed at the Orthopedic Hospital, nursing scholarships, Toys for Tots, and others. They also provided help to the Assistance League, American Red Cross and the City of Hope. The building was made available to the community for meetings and events. The

[1] Hodel has gained notoriety in recent years after his son, retired police detective Steve Hodel, investigated the unsolved 1947 "Black Dahlia" murder and accused his father of being the killer. The case remains unsolved.

[2] Although the 2011 DPR calls the building architecture "Modern Colonial Revival," the meaning of this term is unknown to the preparers of this document and not a style that appears in the literature on architectural history.

San Marino Woman's Club moved its organization to Pasadena in 2004, and the City purchased the property in 2005. In the past decades, the San Marino Center at 1800 Huntington Drive was available to rent as a venue for special events.

Additional Research/Architect Marion J. Varner. Born February 8, 1912 in Kansas, Marion Jesse Varner moved to Pomona, California by 1920 with his parents Clarence and Mabel Varner and siblings. His father owned a plastering company. Marion worked as a baker in his late teens, and married June Bupp in 1934. He studied architecture at USC, graduating first in his class in 1936. During the Depression, however, there was little construction, and he had to work as a gas station attendant. He served as a naval architect during World War II. By 1947, he had opened Marion J. Varner and Associates in Pasadena. In 1951, he designed a 24-house tract in Anaheim shortly after completing the San Marino Woman's Club drawings. Varner went on to a very prolific career through the end of the century, designing primarily public buildings (and specializing in police stations and detention facilities) throughout Los Angeles County and nationwide. Some of his major projects include Hawthorne Police Station, 1955; Torrance Fire Station, 1955; San Fernando Police Station, 1956; Compton Community Center, 1956; Gardena Medical Clinic, 1956; Glendora Hospital, 1956; El Segundo Fire Station, 1957; Hawthorne Fire Station, 1957; Downey Civic Center, 1958; San Gabriel Police Station, 1961; Gardena City Hall, police building and library, 1963 for which he received an award from the Society of American Registered Architects (SARA); Arcadia high-rise office, 1963; and Bell Gardens City Hall in 1966. Varner also won an award from SARA for his design for the Vernon City Hall and Police Station in 1975. In 1978 Varner joined W. Gayle Daniel and Samuel E. Hart of the SARA to design the first energy-effective case study house in Rancho California and the first to be sponsored by a chapter of a professional society. Varner was active professionally serving as president of the National Board of the Society of American Registered Architects and in 1968 he served as president of the local chapter. He died on April 10, 2005 in San Marino. His Glendale Police Department (1960) was recommended eligible to the California Register in 2006.

Sacred Lands File Search. Results of the Sacred Lands File search with the NAHC were positive. The NAHC does not share details or locations for its Sacred Lands File search. They did recommend contacting the Gabrieleno Band of Mission Indians – Kizh Nation for more information. This should occur when the City initiates AB52 Native American consultation.

Field Survey

During the field survey, BCR Consulting Principal Archaeologist David Brunzell inspected 100% of the subject property. The San Marino Woman's Club building was identified and documented on DPR 523 forms. The forms include references as well as photographs and maps (see Appendix A). No other cultural resources (including historic-period buildings or prehistoric or historic-period archaeological sites) were identified during the field survey. Ground surface visibility for the unbuilt and non-paved portions of the project site was approximately 40 percent, and sediments consisted of fine sandy silt. The construction of the San Marino Woman's Club building, and excavation and paving for roads, alleys, and parking lots have resulted in grading of the entire subject property.

The San Marino Woman's Club Building Description (Trien 2011:1). Located on Huntington Drive between the San Marino Library and the Henry E. Huntington School, the

former San Marino Woman's Club building is a large primarily one-story building with a flat roof and raised parapet along the rear and side elevations. The front elevation features a side-facing medium gable roof with an offset front gable wing. An l-shaped porch runs across the front elevation and is supported by decorative wrought iron posts. The roof is covered with wood shingles. A large multi-paned steel framed window is located below the main front gable. Underneath the window is brick trim. A tall exterior brick chimney is located on the northeast elevation. Windows are primarily multi-paned steel casements. Siding is stucco and foundation is concrete. The interior of the building when first built contained a large auditorium, dining room, meeting room and office.

Character-defining Features. Only minor alterations to the building have occurred since it was originally evaluated in 2011; the only visible exterior change is the removal of the planter adjacent to the main façade. The character-defining features of the building include:

- T-shaped plan with single-story massing
- Flat/low-pitch primary roof with raised parapet
- Entry porch with decorative wrought-iron posts and wood shake (shingle) roof
- Dining room (east) porch with decorative wrought-iron posts and wood shake (shingle) roof
- Low-pitch gabled roof with wood shake (shingle) at center of main façade
- Steel casement windows
- Multiple-light picture windows at the dining room (north, south, east elevations)
- Smooth stucco cladding
- San Marino Woman's Club plaque

The interior of the building has been more heavily altered over the decades than its exterior architecture, but limited elements of its original historic fabric remain. Interior Character-defining features include:

- San Marino Woman's Club seal in linoleum floor
- Original rounded hanging light fixtures

Features of the building that are not character defining:

- Non-original partially-glazed entry doors
- Contemporary awnings installed above main-façade entrances
- Security bars installed over windows
- Utilitarian doors and windows at the rear (south) of building

California Register Evaluation

In 2011, the property was evaluated for historic eligibility pursuant to NHPA Section 106 compliance for a FEMA-funded project and formally determined eligible under Criterion A of the National Register for its historic associations as a woman's club and community meeting place that was a focal point for many years.

The 2011 DPR form. recommended that the building retained integrity sufficient for historic eligibility as quoted below:

- Location: “The property at 1800 Huntington Drive is in its original location.”
- Design: “The original design of the 1952 building is primarily intact except for changes to the front entrance doors and two small additions in 1958 done in the same style.”
- Setting: “The historic setting of the property is partially intact. The relationship to the adjacent library and school remain. However, the original 1950 library was replaced with a new library building within the last few years.”
- Materials: “The integrity of materials was found to be somewhat intact.”
- Feeling and Association: “The feeling and association as a woman’s club is no longer intact since the building is now the San Marino Community Center, but it continues to function to serve the community.”
- Workmanship: The 2011 DPR 523 form did not specifically address integrity of workmanship.
- Summary: “Overall, the integrity of the building appears sufficient for eligibility.”

The evaluation received State Historic Preservation Officer (SHPO) concurrence, and the property was added to the California Register. San Marino municipal code Article 18 Chapter 23 States that properties listed on the California Register automatically become local San Marino Historic Landmarks.

Since the property was placed on the California Register, the only apparent alterations to the building have been the removal of the brick planter on the main façade. The property therefore retains integrity as a historical resource and qualifies as a historical resource under CEQA.

Environmental Impacts to Historical Resources

Because the San Marino Woman’s Club is listed on the California Register of Historical Resources, it qualifies as a historical resource under CEQA (14 CCR 15064.5[a][1].

A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment (14 CCR 15064.5[b]). A “substantial adverse change” is further defined in 14 CCR 15064.5(b)1 and 2 as follows:

(1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

(2) The significance of an historical resource is materially impaired when a project:

(A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources;

Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource (14 CCR 15064.5[b][3]). The Standards are intended to pertain to rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility. A project should also be consistent with City requirements and carried out in consultation with a professional that meets the U.S. Secretary of the Interior Professional Qualification Standards for Historic Architecture.

14 CCR Section 15126.4(b) addresses impacts to historical resources in additional detail:

> *(1) Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.*
>
> *(2) In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.*

Project Conformance to Secretary of Interior's Standards for Rehabilitation.

The Secretary of Interior's Standards for Rehabilitation (36 CFR 67.7) state:

1. *A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.*

   Project Evaluation: The property was originally used as a woman's club and as a community meeting space. Although the woman's club moved to a different location in 2004, the building's community functions have persisted. It will continue in use as a community building if the proposed project is completed. However, although its use will remain similar to its original use, distinctive materials and features will be significantly altered by the proposed project, which proposes to alter its exterior architecture to mimic that of a nearby building. Therefore the proposed project does not conform to Standard 1.

2. *The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.*

Project Evaluation: The historic character of the property will not be retained and preserved. The project proposes to alter its architectural style and change exterior details and materials to make the historic building conform aesthetically to the style of the adjacent contemporary library building. The proposed project would therefore remove distinctive exterior materials and substantially alter historic features that characterize the property. The proposed project does not conform to Standard 2.

3. *Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.*

   Project Evaluation: The proposed project will alter the building in a manner where it will not be recognized as a physical record of its time, place and use. Its architectural style and character-defining exterior features will be altered, therefore the project does not conform to Standard 3.

4. *Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

   Project Evaluation: Standard 4 does not apply to the project; research has not revealed any changes to the property that have acquired historic significance in their own right.

5. *Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

   Project Evaluation: Distinctive materials, features, and finishes of the building will not be preserved. As discussed above, the project proposes a wholesale removal of the historic building's most important character-defining features including its decorative wrought iron porch supports, wood shake roof, and original steel casement and picture windows. The proposed project does not conform to Standard 5.

6. *Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.*

   Project Evaluation: The project proposes to replace rather than repair deteriorated historic features. The proposed project does not conform to Standard 6.

7. *Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.*

   Project Evaluation: Standard 7 does not apply to the project; the project does not propose chemical or physical treatments.

8. *Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

Project Evaluation: The property is not the location of any known archaeological site. If archaeological resources are disturbed, appropriate mitigation measures will be undertaken.

9. *New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*

   Project Evaluation: The proposed project will destroy historic materials and features that characterize the property by altering its materials and decorative features to change its architectural style. The proposed project does not conform to Standard 9.

10. *New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

    Project Evaluation: The essential form and integrity of the historic property would be impaired if the proposed project (alteration of its architectural style and materials) is undertaken. Such a project is permanent in nature and cannot be reversed in the future. The proposed project does not conform to Standard 10.

The Secretary of Interior's Standards for the Treatment of Historic Properties is a set of guidelines established by the National Park Service to encourage historic preservation by providing flexible guidance in repairing and rehabilitating historical resources. Its primary purpose is as a set of practical recommendations for property owners wishing to update function, repair deteriorated features, and/or create new economic uses for qualified historical resources. The goal of the Standards is preservation of the qualities that allow a historical resource to convey its historic significance, i.e. the visible characteristics of a building or structure. A project intended to redesign the exterior elements of a building to create the appearance of a new architectural style cannot conform to either the spirit of the Standards or the more specific guidelines that comprise them.

Therefore, the proposed project does not conform to the Secretary of Interior's Standards for the Treatment of Historic Properties and therefore will cause a substantial adverse change to a historical resource pursuant to CEQA (14 CCR § 15126.4(b)(1)).

CONCLUSIONS AND RECOMMENDATIONS

Based on these results, BCR Consulting has discovered that the San Marino Woman's Club has been formally determined eligible for listing on the National Register under Criterion A and listed in the California Register under Criterion 1. Furthermore, because it is listed on the California Register, it also qualifies as a San Marino Historic Landmark.

BCR Consulting recommends that this resource retains the integrity of location, setting, design, materials, workmanship, feeling, and association identified in the 2011 evaluation.

Thus it retains the historic qualities that resulted in its listing on the California Register. A complete redesign of the building as proposed by the project would materially alter key elements that convey its historical association to the period in which it was constructed and utilized as a women's club. The character-defining features that would be lost if the proposed project were completed include:

- Main (north) façade entry porch with decorative wrought-iron posts and wood shake (shingle) roof
- Dining room (east) porch with decorative wrought-iron posts and wood shake (shingle) roof
- Original wood shake (shingle) roofs on other parts of the building
- Original steel casement windows throughout the building
- Original multiple-light picture windows at the dining room (north, south, east elevations)
- Original (interior) rounded hanging light fixtures

As such, the project would destroy most character-defining features of the historic property, leading to a loss of integrity; a substantial adverse impact to a historical resource.

BCR Consulting recommends the following:

Redesign Project to Conform to Secretary of Interior Standards. 14 CCR Section 15126.4(b) states that a less than significant impact could occur if the proposed project activities are consistent with "plans for rehabilitation to ensure that the undertaking maintains consistency with the Secretary of the Interior Standards for the Treatment of Historic Properties" (36 CFR part 68; see http://www.nps.gov/tps/standards/rehabilitation/rehab/stand.htm).

Project redesign should be carried out in consultation with a professional architect who meets the U.S. Secretary of the Interior Professional Qualification Standards for Historic Architecture (see http://www.nps.gov/history/local-law/arch_stnds_9.htm). A project could potentially be designed that updates this building's function, connect it to the library and upgrades its ADA accessibility while preserving the physical characteristics that convey its historical significance as listed on California Register of Historical Resources.

Data Collection Mitigation. As identified by 14 CCR Section 15126.4(b)**,** documentation does not mitigate the impacts to less than significant.

14 CCR Section 15126.4(b) also states that *documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect.* CEQA requires that all feasible mitigation be undertaken even if it does not mitigate below a level of significance. In this context, recordation serves a legitimate archival purpose. The level of documentation required as a mitigation should be proportionate with the level of significance of the resource (http://ohp.parks.ca.gov/?page_id=21727).

If documentation is the chosen recommendation, the City would complete or require the completion of Historic American Building Survey (HABS) *style* photographic documentation of

the subject property prior to the start of construction. While the photographs would meet HABS standards, only local curation (and no federal curation or involvement) would be necessary. The photographic documentation will be provided to the City (and any required local repositories) for curation.

Accidental Discoveries. If previously undocumented cultural resources are identified during earthmoving activities associated with development of the project site, a qualified archaeologist should be contacted to assess the nature and significance of the find, diverting construction excavation if necessary.

Human Remains. If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has determined origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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Additional resources are provided in Appendix A.

APPENDIX A

DEPARTMENT OF PARK AND RECREATION 523 FORMS/ SHPO CONCURRENCE

San Marino Historic Context

The land of the City of San Marino, which was part of the San Gabriel Mission, was initially occupied by Gabrielino (Tongva) Indians, who had a village located on what is now the Huntington Middle School. In 1852, Tennessee native Benjamin Davis Wilson acquired a vast tract of land that included the area that later became San Marino as well as several neighboring towns. Wilson went on to serve as the second elected mayor of Los Angeles, on the Los Angeles County Board of Supervisors, and was elected to three terms in the California State Senate. In 1873, Benjamin Wilson gave 500 acres of his land to his son in law James Debarth Shorb. Shorb then named the ranch on his land "San Marino" which was inspired by his grandfather's plantation in Maryland which in turn got its name from the Republic of San Marino, Italy.[1]

Both Wilson and Shorb had capitalized on the rich agricultural resources and railroad industries that were present at the time in California. They had become very wealthy after growing a large number of fruits and crops. Wilson gained a majority of his profit from selling wine grapes. Shorb became well=known for introducing a very intricate irrigation system that included 300,000 feet of iron pipe and old tiles that were used to regulate the flow of water to crops. He sold this irrigation system to neighboring farmers for a profit. In 1903, the San Marino land was purchased from James Shorb by Henry E. Huntington, a businessman who was the owner of the Pacific Electric Railway Company in Southern California. Henry Huntington played a major role in shaping the economy of Southern California.[2]

The prominent Patton family in San Marino was related to the Wilsons. George S. Patton Jr., a general in the U.S. Army who gained recognition during World War II. His father, George Patton Sr. was also in the military and married the daughter of Benjamin Wilson. Thus, their family became the heirs to the Lake Vineyard estate which was connected to Huntington's ranch. Huntington and Patton Sr. joined with another landowner to incorporate San Marino in 1913. They also spearheaded a campaign to prevent their properties from being developed by the city. Their advocacy for restrictive zoning has prevented the development of strip malls and mansions in San Marino.[3]

The first school in San Marion was established in 1917 in the vicinity of the subject property; its first high school did not open until 1955. With a population boom in the 1980s and the creation of the San Marino Schools Foundation, the schools were remodeled. During this time, San Marino's neighborhoods were 99.7 percent white, however, many overseas buyers were attracted to San Marino because of its association with wealth and the reputation of its public schools including. By 1986, San Marino High School's student body was thirty-six percent Asian, a big increase from the year before. Demographic change led to incidents of racist actions and racial tensions, and prompted the city to establish an Ethnic Harmony Commission. Today, San Marino is roughly sixty percent Asian and thirty percent white.[4]

San Marino Woman's Club

The San Marino Woman's Club is one of the oldest established groups in the city. During the 1930s, there were many organizations in the community in San Marino that gathered for music, book reviews, and various other activities. However, there were few organizations for women and on June 8th, 1936, a group of 52 women gathered at the San Marino police department courtroom to organize a local women's club. By the time the San Marino Woman's Club was completely organized, the club already had around 420 members. The club catered to elite married white women who could afford to pay the $10 dues and had time to attend frequent events and do charity work. Most of these women had live-in domestic help in the 1930s and 1940s; those who took on leadership roles were in their forties and fifties, with grown or nearly-grown children. Georgina

[1] "San Marino, CA," History of San Marino, https://www.cityofsanmarino.org/government/history_of_san_marino_/index.php, Accessed February 23, 2021, https://www.cityofsanmarino.org/government/history_of_san_marino_/index.php.
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[3] Scott Garner, "Neighborhood Spotlight: San Marino's Exclusivity Was Always the Plan," *Los Angeles Times*, Mar. 23, 2018.
[4] "San Marino High School," Our History – About Us – San Marino High School, Accessed February 23, 2021, https://www.sanmarinohs.org/apps/pages/index.jsp?uREC_ID=223775&type=d&pREC_ID=491709; Merlin Chowkwanyun and Jordan Segall, "How an Exclusive Los Angeles Suburb Lost Its Whiteness," *Bloomberg.com,* Aug. 27, 2012, Accessed February 23, 2021, https://www.bloomberg.com/news/articles/2012-08-27/how-an-exclusive-los-angeles-suburb-lost-its-whiteness.

Cornwell, a housewife and mother who was about 50 years old during this period, was the club's first president. Her husband was in the fruit-growing business, which during that era was still one of the most important regional economic activities. [5]

The San Marino Woman's Club held nine regular annual meetings as well as four evening meetings to which husbands (unmarried women do not appear to have been members) were invited. The members of the club were required to wear black dresses and black hats with a pair of white gloves. There were sixteen different guilds within in the club: music, drama, literature, writers, home craft, philanthropy, foreign language, current events, travel, bible, home interior, language, sports, public affairs, flower, and garden. Regular meetings were held at Henry E. Huntington Middle School auditorium while the guild meetings were held at homes of the members. The club raised funds for a slightly used ambulance, which it donated to the city in 1940. This was just one of many charitable contributions the group made to the community over the decades. [6]

Prior to its acquisition by the women's club, the property held a residence (one of only one or two on the block) and was surrounded by open fields since the area was mostly undeveloped. In 1940, Los Angeles County Health Department physician George Hodel[7] lived in the house with his wife Dorothy and their toddler son. They lived in the house only for a year or so before moving elsewhere. The build date and other details about the residence are unknown. The house was demolished prior to development of the Woman's Club and is unrelated to its historical significance.[8]

In 1939, the club purchased the property at 1800 Huntington Drive for $6,000 to build a clubhouse for its growing membership. It was not until ten years later that the clubhouse was completed. Fundraising efforts were suspended when the US entered World War II in 1942, and construction remained difficult immediately after the war in the late 1940s. Sybil Ivey, who had served as club president from 1940 to 1942, was the chair of the building committee. A mother of two who was originally from Australia, Ivey was a schoolteacher before her marriage to bank president Herbert Ivey. Members raised most of the funds to complete the clubhouse through bazaars, rummage sales, parties, and various entertainment events over a ten-year period. They also made an appeal to the public for funds. In 1949, the club requested and received variances from San Marino City Council because the parcel was zoned for residential use and required setbacks that did not fit in with the club's plans for the property. By the end of the decade, the club had $57,000 on hand, and was able to borrow an additional $35,000 in 1951, enabling them to plan completion of the project. [9]

Designed by Marion J. Varner in 1950 as one of his early projects, the building is a simple example of Midcentury Modern architecture. When completed, the San Marino Woman's Club had a dining room, auditorium, lounge (fireside room at the north end of the building), and a craft room at the rear of the building. There were also storage rooms, a large kitchen for catering events, a large women's restroom with a powder room, a dressing room, and a men's restroom. The southwest corner of the building had a small caretaker's apartment with its own bath room and kitchenette. There were two unfinished upstairs rooms, one of which was intended to become a projection room. The building has served as a community focal point for many years while the club pursued its charitable work. The building was constructed to serve the entire community, not just the Woman's Club, although they funded its construction. The first meeting in the building was in April 1952.[10]

Over the years, the club's charitable contributions have been numerous and include the endowment of a bed at the Orthopedic Hospital, nursing scholarships, Toys for Tots, and others. They also provided help to the Assistance League, American Red Cross and the City of Hope. The building was made available to the community for meetings

[5] Graziella Almanza, "The San Marino Woman's Club," The Grapevine, San Marino Historical Society, Fall 2000.
[6] Almanza, 2000.
[7] Hodel has gained notoriety in recent years after his son, retired police detective Steve Hodel, investigated the unsolved 1947 "Black Dahlia" murder and accused his father of being the killer. The case remains unsolved.
[8] US Census Records, 1940; World War II Registration Card, George Hodel, October 16, 1940
[9] City of San Marino, Application for Variance, June 8, 1949.
[10] Almanza, 2000.

and events. The San Marino Woman's Club moved its organization to Pasadena in 2004, and the City purchased the property in 2005. In the past decades, the San Marino Center at 1800 Huntington Drive was available to rent as a venue for special events.[11]

Marion J. Varner

Born February 8, 1912 in Kansas, Marion Jesse Varner moved to Pomona, California by 1920 with his parents Clarence and Mabel Varner and siblings. His father owned a plastering company. Marion worked as a baker in his late teens, and married June Bupp in 1934. He studied architecture at USC, graduating first in his class in 1936. During the Depression, however, there was little construction, and he had to work as a gas station attendant. He served as a naval architect during World War II. By 1947, he had opened Marion J. Varner and Associates in Pasadena. In 1951, he designed a 24-house tract in Anaheim shortly after completing the San Marino Woman's Club drawings. Varner went on to a very prolific career through the end of the century, designing primarily public buildings (and specializing in police stations and detention facilities) throughout Los Angeles County and nationwide. Some of his major projects include Hawthorne Police Station, 1955; Torrance Fire Station, 1955; San Fernando Police Station, 1956; Compton Community Center, 1956; Gardena Medical Clinic, 1956; Glendora Hospital, 1956; El Segundo Fire Station, 1957; Hawthorne Fire Station, 1957; Downey Civic Center, 1958; San Gabriel Police Station, 1961; Gardena City Hall, police building and library, 1963 for which he received an award from the Society of American Registered Architects (SARA); Arcadia high-rise office, 1963; and Bell Gardens City Hall in 1966. Varner also won an award from SARA for his design for the Vernon City Hall and Police Station in 1975. In 1978 Varner joined W. Gayle Daniel and Samuel E. Hart of the SARA to design the first energy-effective case study house in Rancho California and the first to be sponsored by a chapter of a professional society. Varner was active professionally serving as president of the National Board of the Society of American Registered Architects and in 1968 he served as president of the local chapter. He died on April 10, 2005 in San Marino. His Glendale Police Department (1960) was recommended eligible to the CRHR in 2006. [12]

[11] Judy Triem, "San Marino Woman's Club," San Buenaventura Research Associates, DPR, 2011.
[12] US Census, Los Angeles, 1940; Los Angeles Times, "Obituary Marion Jesse Varner," 12 April 2005, "Contemporary Homes Exhibit, 19 January 1947, "24 Homes Being Built on Tract in Anaheim," 12 August 1951.

Photograph 1: 1800 Huntington Drive, north elevation, camera facing south, January 19, 2021.

Photograph 2: 1800 Huntington Drive, north and east elevations, 1958 addition center frame, camera facing southwest, January 19, 2021.

Photograph 3: 1800 Huntington Drive, south and east elevations, camera facing northwest, January 19, 2021.

Photograph 4: 1800 Huntington Drive, steel storage units, west and south elevations, camera facing northeast, January 19, 2021.

Photograph 5: 1800 Huntington Drive, west elevation, camera facing northeast, January 19, 2021.

Photograph 6: 1800 Huntington Drive, north and west elevations, camera facing southeast, January 19, 2021.

Photograph 7: North entrance of 1800 Huntington Drive, camera facing south, January 19, 2021.

Photograph 8: Interior of 1800 Huntington Drive, January 18, 2021.

Photograph 9: "Fireside Room" of 1800 Huntington Drive, January 19, 2021.

Photograph 10: Kitchen of 1800 Huntington Drive, January 19, 2021.

B6. Construction History:

Original construction, 1951, Kemp Bros.
1958 – Two small additions at northeast and southwest building corners
1960 – kitchenette & powder room added to interior, exit door added to southeast corner of dining room, interior exit lights added, hand rail installed at west (rear) entrance)
1981 – dropped acoustic ceilings with recessed lighting installed
1979, 1993 – shake roof replaced in kind
1992 – free-standing metal storage unit added
1997 – canvas awnings installed
2007 – men's and women's restrooms remodeled
Unknown date after 1980, main entrance doors replaced
2012-2018 – brick planter removed from main façade

In 2011, the property was evaluated for historic eligibility pursuant to Section 106 compliance for a FEMA-funded project and recommended eligible for its historic associations as a woman's club and community meeting place that was a focal point for many years. The 2011 evaluation also recommended that the property retained sufficient historic integrity to qualify for historic listing. The evaluation received SHPO concurrence, and the property was added to the California Register of Historical Resources (CRHR). Since the property was placed on the CRHR, the only apparent alterations to the building has been the removal of the brick planter on the main façade. The property therefore retains integrity as a historical resource.

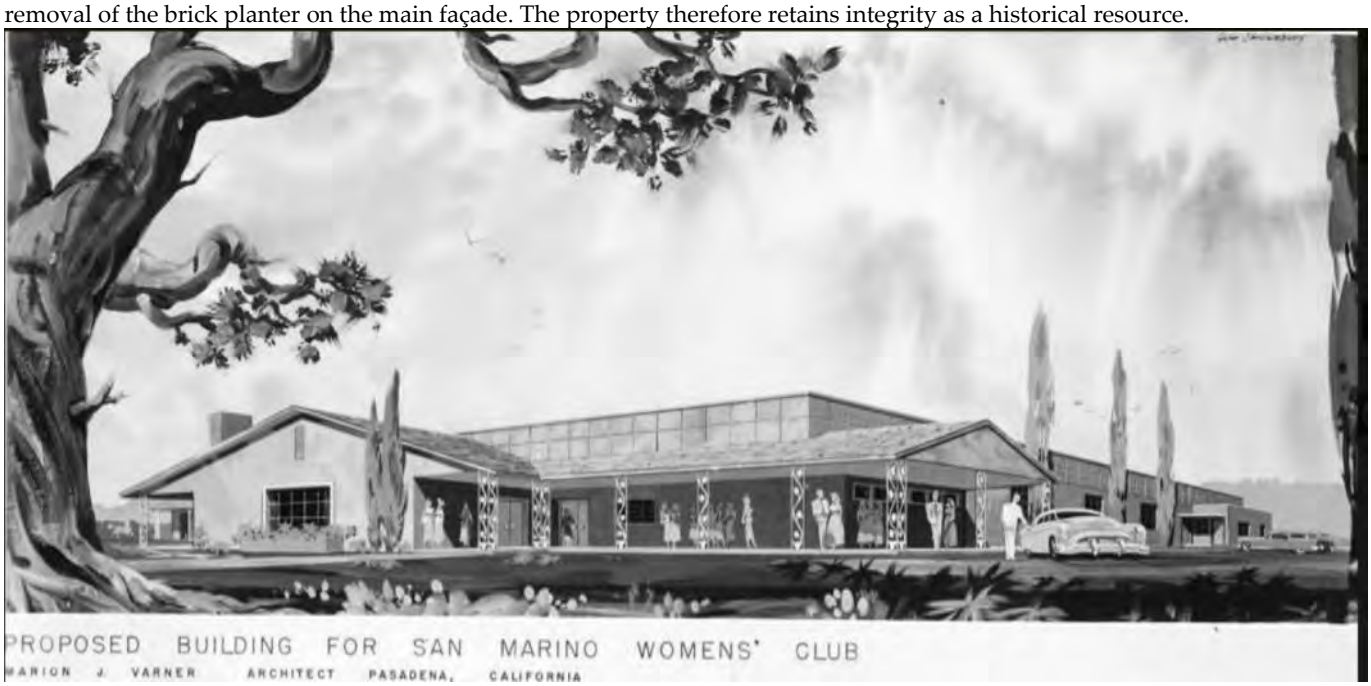


Figure 1: Architect's Rendering San Marino Woman's Club, Marion J. Varner, 1950, *USC Digital Archive.*

Figure 2: San Marino Woman's Club, Georgina Cornwell left, Sybil Ivey second from right and three other members in lounge before cornerstone ceremony, 16 April 1952, *USC Digital Archive.*

APPENDIX B

PALEONTOLOGICAL OVERVIEW

WESTERN SCIENCE CENTER

BCR Consulting
Joseph Orozco
505 West 8th Street
Claremont , CA 91711

January 27, 2021

Dear Mr. Orozco,

This letter presents the results of a record search conducted for the San Marino Center Renovation Project in the city of San Marino, Los Angeles County, California. The project site is located south of Huntington Drive, east of Virginia Road, and west of West Drive in Section 2 of Township 1 South and Range 12 West on the El Monte CA USGS 7.5 minute topographic quadrangle.

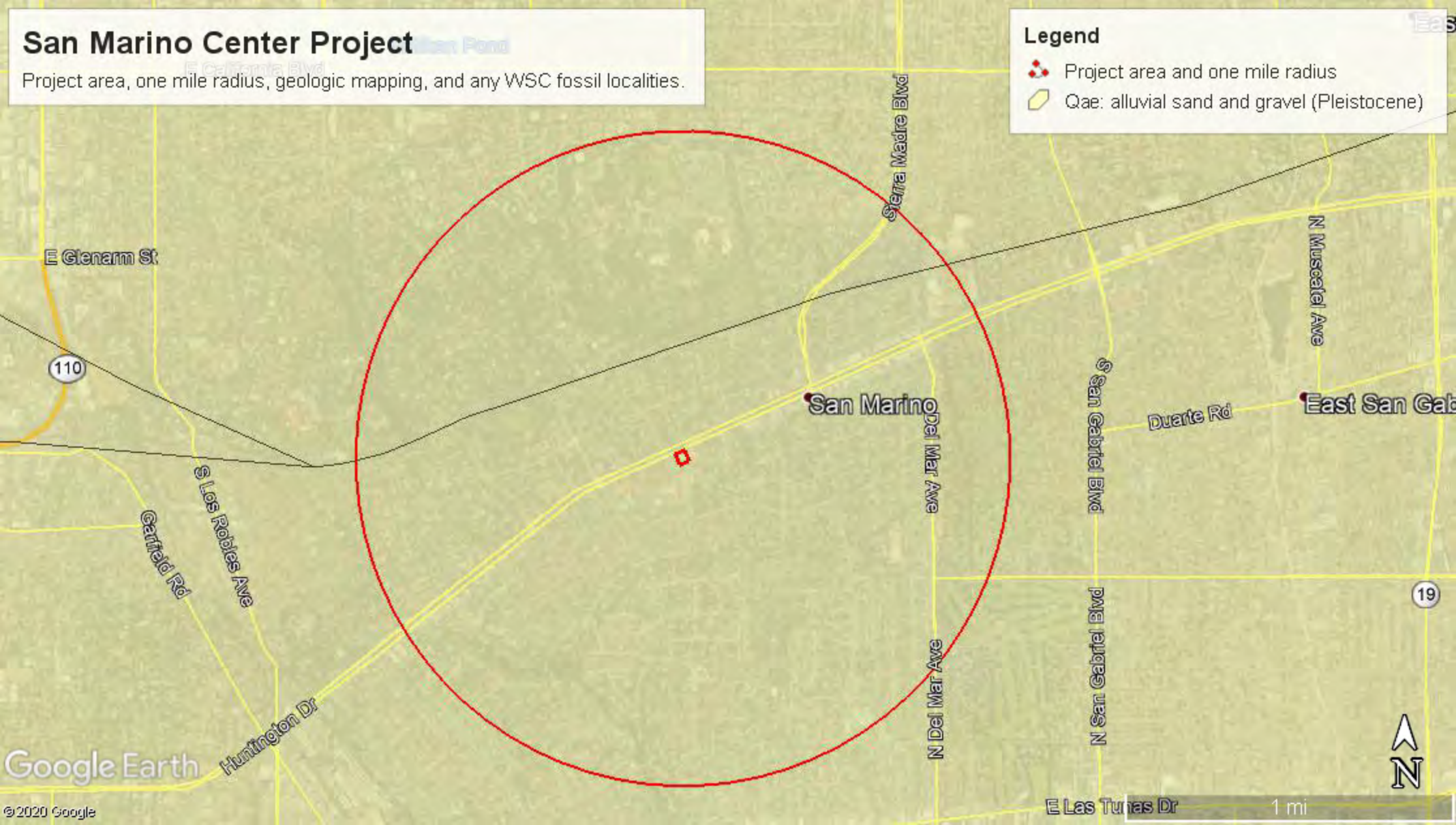
The geologic unit underlying the project area is mapped entirely as alluvial sand and gravel deposits dating to the Pleistocene epoch (Dibblee, 1999). Pleistocene alluvial units are considered to be of high paleontological sensitivity. The Western Science Center does not have localities within the project area, but does have numerous localities within similarly mapped alluvial sediments throughout the region. Pleistocene alluvial deposits in southern California are well documented and known to contain abundant fossil resources including those associated with Columbian mammoth (*Mammuthus columbi*), Pacific mastodon (*Mammut pacificus*), Sabertooth cat (*Smilodon fatalis*), Ancient horse (*Equus sp*.) and many other Pleistocene megafauna.

Any fossils recovered from the San Marino Center Renovation Project area would be scientifically significant. Excavation activity associated with development of the area has the potential to impact the paleontologically sensitive Pleistocene alluvial units and it is the recommendation of the Western Science Center that a paleontological resource mitigation plan be put in place to monitor, salvage, and curate any recovered fossils associated with the current study area.

If you have any questions, or would like further information, please feel free to contact me at dradford@westerncentermuseum.org

Sincerely,

Darla Radford
Collections Manager


San Marino Center Project
Project area, one mile radius, geologic mapping, and any WSC fossil localities.
Legend
Project area and one mile radius
Qae: alluvial sand and gravel (Pleistocene)
Sierra Madre Blvd
E Glenarm St
110
San Marino
Del Mar Ave
S San Gabriel Blvd
Duarte Rd
East San Gab
N Muscatel Ave
Garfield Rd
S Los Robles Ave
Huntington Dr
N Del Mar Ave
N San Gabriel Blvd
19
E Las Tunas Dr
1 mi
N
Google Earth
©2020 Google

APPENDIX C

SACRED LANDS FILE SEARCH

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

January 25, 2021

Joseph Orozco
BCR Consulting LLC

Via Email to: josephorozco513@gmail.com

Re: San Marino Center Renovation Project, Los Angeles County

Dear Mr. Orozco:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the Gabrieleno Band of Mission Indians – Kizh Nation on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Los Angeles County
1/25/2021

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 — Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 — Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 — Gabrielino
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 — Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino-Tongva Tribe
Charles Alvarez,
23454 Vanowen Street — Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820 — Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Soboba Band of Luiseno Indians
Scott Cozart, Chairperson
P. O. Box 487 — Cahuilla
San Jacinto, CA, 92583 — Luiseno
Phone: (951) 654 - 2765
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed San Marino Center Renovation Project, Los Angeles County.

APPENDIX D

RESUMES OF PROJECT PERSONNEL

DAVID BRUNZELL, M.A., RPA
Owner/Principal Investigator (2002-Present)
BCR Consulting LLC
909-525-7078
david.brunzell@yahoo.com

EXPERTISE

Cultural Resource Project Management
National Environmental Policy Act Cultural Resource Compliance
California Environmental Quality Act Cultural Resource Compliance
National Historic Preservation Act (NHPA) Section 106 Compliance
Government Agency (Federal/State/Regional) Partnering, Streamlining, and Consultation
Technical Report Writing for Archaeology, History, and Architectural History
NRHP/CRHR Evaluation of Pre/historic Archaeological, and Historic Architectural Resources
Preparation of all DPR523 Site Records
Archaeological, Historical, and Architectural History Research
Archaeological Excavation
Archaeological and Architectural History Survey
Lithic and Ground Stone Analysis
Global Positioning Systems / Archaeological Mapping and Orienteering
Fossil Preparation
Laboratory Analysis
Native American Consultation

EDUCATION

California State University, Fullerton, M.A. Anthropology/Archaeology, 2002
California State University, Fullerton, B.A. Anthropology, 1997
Pomona College Field School, Southern Oregon/Northern California, 1995

Continuing Education

Riverside County Cultural Sensitivity Training 2011, 2009, 2007
Cal State San Bernardino College of Extended Learning, Science of Flint Knapping, 2007
National Preservation Institute NHPA Section 106 Training, 2004

PERMITS

BLM Principal Investigator for Cultural Resource Investigations (California, Great Basin)
California Department of Transportation Principal Investigator for Cultural Resources
Authorized Researcher at Each of the Twelve California Archaeological Information Centers

PROFESSIONAL AFFILIATIONS, AWARDS, AND CERTIFICATIONS

2002-Present	Member, Register of Professional Archaeologists
2000-Present	Member, Society for American Archaeology
2009-Present	Member, Society for California Archaeology
2011-Present	Certified Archaeologist for Unincorporated Orange County
2013-15	Board of Directors, Claremont Heritage
1996-2002	Lambda Alpha Society, National Collegiate Honors Society for Anthropology
2008-09	Board of Directors, Pomona Valley Historical Society

SELECTED PROJECTS MANAGED

Cultural Resources Impacts Assessment of the Proposed Wattstar Cinema Project on the National Register Listed Watts Station, Watts Community of Los Angeles

Cultural Resources Assessment of the Mountain View Mobile Home Park, Santa Monica, Los Angeles County, California

Archaeological Monitoring of the Marina Del Rey 18" Waterline Replacement, Phase II, Los Angeles County, California

Cultural Resource Assessment and Architectural Evaluation for Ridgeline Equestrian Estates, City of Orange, Orange County, California

Cultural Resources Assessment of the San Juan Creek Road Widening Project, San Juan Capistrano, Orange County, California

Cultural Resources Assessment of the Sun Ranch Drainage Project, San Juan Capistrano, Orange County, California

Cultural Resources Assessment of 129 Southern California Crown Castle Project Locations, San Diego County, California

Cultural Resources Assessment of the T-Mobile PUC Project, San Diego County, California

Cultural Resources Assessment and California Register Eligibility Evaluation of the Norco Water District Project, Norco, Riverside County, California

Phase I Cultural Resources Assessment of Tentative Parcel Map No. 36229, APN 471-080-014, Reche Canyon, Unincorporated Riverside County, California

Archaeological Excavations at the Dateland Project, Indio, Riverside County, California

National Register Eligibility Evaluation of the Coalinga Library, Coalinga, Fresno County

Archaeological and Paleo Monitoring of the Beacon Solar Project, Kern County, California

Cultural Resources Assessment of 7,688 Acre Solar Development in the Mojave Desert, Kern County

Cultural Resources Assessment 340 Acres at Cronise Lake, Unincorporated San Bernardino County, California

Cultural Resources Assessment Assessor Parcel Numbers 0256-41-01, -02, -03, -47, and -48 Bloomington Community of Unincorporated San Bernardino County, California

Cultural Resources Assessment of the Montecito Coastal Geophysical Survey Project, Montecito, Santa Barbara County, California

Cultural Resources Assessment of the E&B Cuyama Interplant Pipeline, Santa Barbara County, California

Cultural Resources Assessment of the Crestview Avenue Project (TTM No. 5920) City of Camarillo, Ventura County, California

Cultural Resources Assessment of the Potrero Road Slant Test Well Project, Unincorporated Monterey County, California

Cultural Resources Assessment of the Western Oil Independent, LLC Capps Tank Facility Project, Monterey County, California

Cultural Resources Assessment of the Simi Village Project, City of Simi Valley, Ventura County, California

KARA BRUNZELL
BCR Consulting LLC
Project Manager/Principal Architectural Historian/Historian
707-290-2918
kara.brunzell@yahoo.com

EXPERTISE

Kara Brunzell has practiced in the fields of history/architectural history, cultural resource management, and historic preservation since 2007. She has served as a consulting historian on historical research investigations for federal, state, and local governments. She is proficient in the recordation, inventory, and evaluation of historic resources using the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR) guidelines. Her expertise includes preparing reports and making recommendations regarding Section 106 review and compliance. Kara is experienced in applying the California Environmental Quality Act (CEQA) to both large-scale survey projects and individual historic-period resources. She has also worked in municipal preservation planning and non-profit historic preservation. Her non-profit work has included coordination of technical services, content creation and implementation for preservation education, and management of a preservation advocacy program. Kara qualifies as a historian and architectural historian under the United States Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR, Part 61).

EDUCATION

CSU Sacramento, Master of Arts in Public History, 2009
UCLA, Bachelor of Arts in History, 1988

Continuing Education

California Preservation Foundation (CPF) Conference 2014 "Redefining Preservation"
CPF Webinar 2011: "Environmental Benefits of Reuse"
CPF Conference 2011: Santa Monica, California, "Preservation on the Edge"
CPF Workshop 2011: Napa, Calif., "Preservation Ordinances"
CPF Workshop 2009: "The Use and Application of the California Historical Building Code"
CPF Conference 2008: Napa, California, "Balance and Complexity: The Vineyard and Beyond"
CPF Workshop 2008: Davis, California, Historic Resource Surveys: A to Z"

PROFESSIONAL AFFILIATIONS, AWARDS, AND CERTIFICATIONS

2011-Present Member, California Preservation Foundation
2009-Present Member, Napa County Landmarks
2007-Present Member, Napa County Historical Society
2010 Grant Application, 2010-2011 CLG Grant Awarded, City of Napa, California
2009 Grant Application, 2009-2010 CLG Grant Awarded, City of Napa, California
2008 Grant Application, 2008-2009 CLG Grant Awarded, City of Napa, California

SELECTED PROFESSIONAL PROJECTS

Section 106 and CEQA Compliance Tasks for the GRID Roads Bookends Project, American Canyon, Napa County, California

Postal Historic Structure Report; Nineteen California Locations

Historic Buildings and Structures Inventory for Fort Hunter Liggett, Jolon, Monterey County, California

Section 106 Compliance Tasks for the Pavement Reconstruction Project, Belmont, San Mateo County, California

Architectural/Historical Evaluation and Review of Proposed Project for Beltane Ranch; Sonoma County, California

NRHP Nomination of Sperry Flour Company, Vallejo, Solano County, California

Historic Context Survey and Historic District Nomination for the Newton Booth Neighborhood; Sacramento, California

Historic Architectural Evaluation of the Delta Research Station; Rio Vista, Solano County, California

Historic Context Survey of Davis; Yolo County, California

Architectural/Historical Evaluation of the Brown Ranch; Sonoma, California

Architectural/Historical Evaluation and Archaeological Survey of Santa's Village in Skyforest, San Bernardino County, California

Architectural/Historical Evaluation and Cultural Resources (Archeological and Paleontological) Assessment of a Motel at 11615 - 11645 San Pablo Avenue, El Cerrito, Contra Costa County, California

Jesse Unruh Building Roof Replacement Project; Department of General Services, Sacramento, California

Redwood Agricultural Inspection Station Repairs; California Department of General Services, Del Norte County, California

Landfall Renovation Project, Review of Proposed Design; Belvedere, Marin County, California

Los Gatos Creek Watershed Maintenance Program; San Jose Water Company, Santa Clara County, California

Historic Resource Evaluation of Five Buildings at Oakland International Airport; Port of Oakland, California

Historic Resource Survey and Evaluation of Soares Ranch; Union City, Alameda County, California

State Printing Plant and Textbook Warehouse Relocation and Building Demolition Project; California Department of General Services; Sacramento, California

Interlake Tunnel Project: Monterey County Water Resources Agency; Monterey and San Luis Obispo Counties, California

Department of Motor Vehicles Fell Street 5024 Evaluation; California Department of General Services; San Francisco, California

Local Historic Register Nomination of Main Street Bridge, Napa, Napa County, California

Environmental Impact Report, California High-Speed Train Project, Fresno to Bakersfield Section, California

ACADEMIC PAPERS/PROFESSIONAL PRESENTATIONS

2011 *Historic Preservation: Engine of the Napa Economy*

2008 *Historic Landscape Regulation and Practice in the City of Napa*

2008 *September 11: History, Memory, and Comics*

2008 *Marxism and History*

2008 *Historiography of the American West* (Published in *Clio*, CSUS Graduate Journal)

2007 *History of the Silverado Trail, Napa County, California*

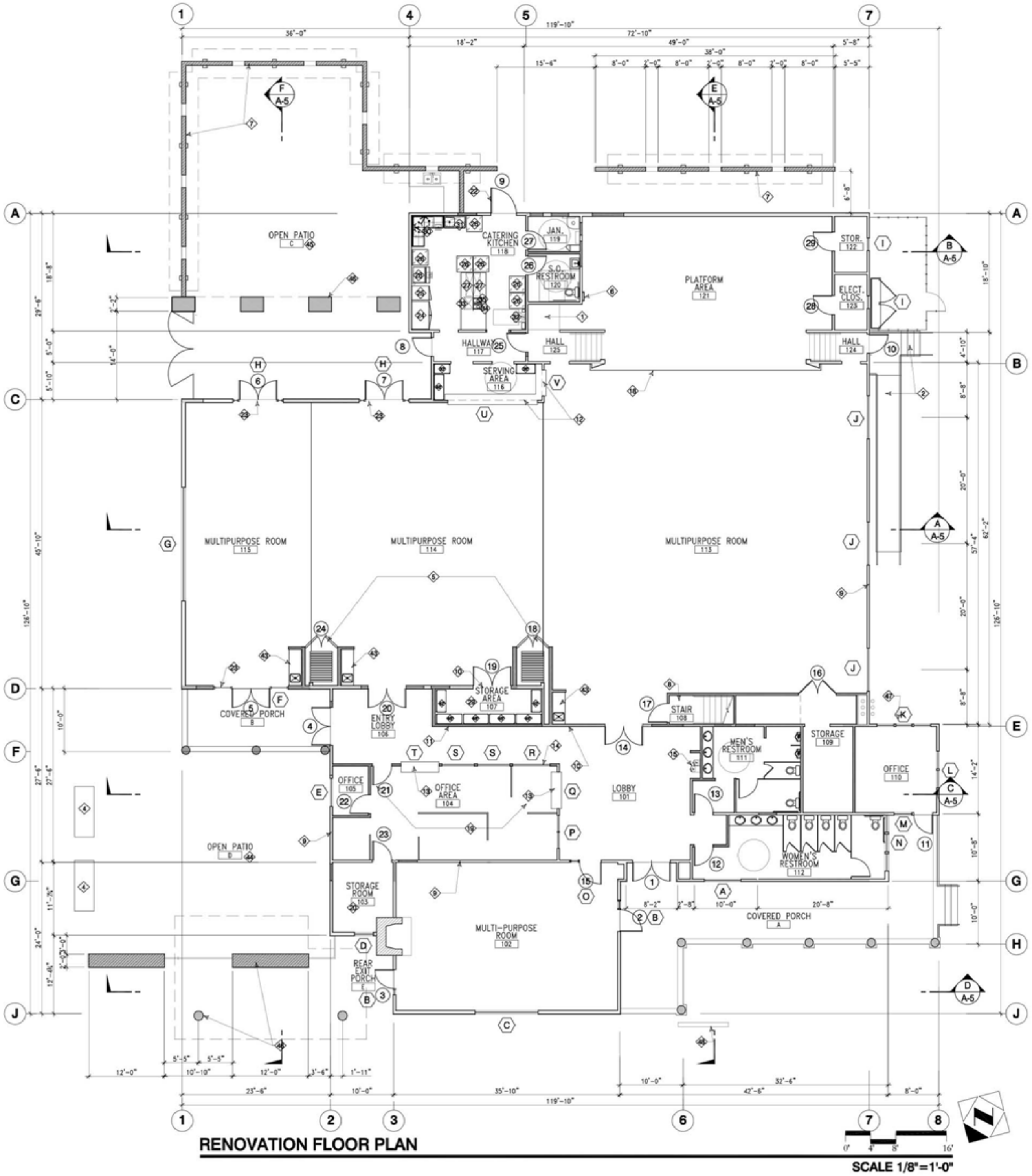
2007 *The Chinese Community in Napa as Portrayed by the Napa County Reporter, 1860-1880*

2007 *The Chinese Community in Early Napa: A Museum Exhibit*

2007 *Downtown Napa Intensive Building Survey and Historic Context Statement*

APPENDIX E

PROPOSED PROJECT EXHIBIT



RENOVATION FLOOR PLAN

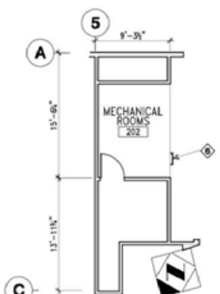
SCALE 1/8"=1'-0"

OCCUPANT LOAD CALCULATIONS				RESTROOM REQUIREMENTS	
ROOM	SQ. FT.	LOAD FACTOR	OCC. LOAD	LOAD FACTOR	OCC. LOAD
LOBBY 101	438 S.F.	5	87.6	30	14.60
MULTI-PURPOSE ROOM 102	825 S.F.	7	117.9	30	27.50
STORAGE ROOM 103	100 S.F.	300	0.3	5000	0.02
OFFICE AREA 104	480 S.F.	150	3.2	200	2.40
OFFICE 105	44 S.F.	150	0.3	200	0.22
ENTRY LOBBY 106	323 S.F.	5	64.6	30	10.77
STORAGE 107	96 S.F.	300	0.3	5000	0.02
STAIR 108	124 S.F.	ACCESSORY	0	0	####
STORAGE 109	124 S.F.	300	0.4	5000	0.02
OFFICE 110	175 S.F.	150	1.2	200	0.88
MEN'S RESTROOM 111	220 S.F.	ACCESSORY	0	ACCESSORY	0
WOMEN'S RESTROOM 112	280 S.F.	ACCESSORY	0	ACCESSORY	0
MULTIPURPOSE 113	2,719 S.F.	7	388.4	30	90.63
MULTI-PURPOSE ROOM 114	1,590 S.F.	7	227.1	30	53.00
MULTI-PURPOSE ROOM 115	884 S.F.	7	126.3	30	29.47
SERVING AREA 116	99 S.F.	200	0.5	200	0.50
HALLWAY 117	68 S.F.	0	ACCESSORY	ACCESSORY	0
CATERING KITCHEN 118	395 S.F.	200	2.0	200	1.98
JANITOR ROOM 119	45 S.F.	300	0.2	5000	0.01
RESTROOM 120	62 S.F.	300	0.2	5000	0.01
PLATFORM AREA 121	940 S.F.	15	62.7	30	31.33
STORAGE ROOM 122	45 S.F.	300	0.2	5000	0.01
STORAGE ROOM 123	45 S.F.	300	0.2	5000	0.01
HALL 124 & 125	118 S.F.	0	ACCESSORY	ACCESSORY	0
MECHANICAL ROOM 203	190 S.F.	0	ACCESSORY	ACCESSORY	0
MECHANICAL ROOMS 201	403 S.F.	0	ACCESSORY	ACCESSORY	0
TOTAL S.F.	10,832 S.F.		0.0	0.0	
TOTAL OCCUPANT LOAD			1,083 OCC.	0 OCC.	263.37

FLOOR PLAN KEYNOTES

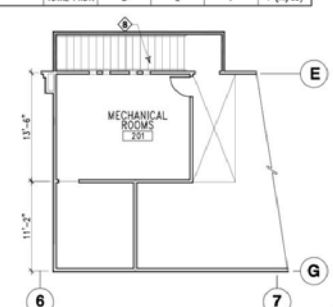
1. PROPOSED ACCESSIBLE CHAIR LIFT FOR ACCESS TO STAGE
2. PROPOSED ACCESSIBILITY RAMP, LANDING AND MODIFIED STAIRS
3. NOT USED
4. CONCRETE BENCH
5. PROPOSED FOLDING PARTITION (HIGHEST SOUND RATING)
6. EXISTING LADDER TO MECHANICAL EQUIPMENT (RELOCATE AS REQ'D)
7. PROPOSED SITE WALL TO MATCH LIBRARY
8. PROPOSED STAIR TO MECHANICAL ROOM 201.
9. EXISTING WALL TO REMAIN – TYP
10. EXISTING BEARING WALL TO REMAIN – TYP
11. PROPOSED NEW WALL – TYP
12. PROPOSED SERVING WINDOW AND COUNTER w/ COILING SHUTTER
13. PROPOSED SERVICE WINDOW AND COUNTER
14. PROPOSED STOREFRONT WINDOW WALL
15. PROPOSED COMBINATION HIGH-LOW DRINKING FOUNTAIN AND BOTTLE FILLER
16. PROPOSED LOADING RAMP (1:8 SLOPE, NON-ACCESSIBLE)
17. 6'-0" LONG COFFEE SERVICE COUNTER WITH LOCKING UPPER AND LOWER CABINETS.
18. RENOVATE UNDER STAGE STORAGE AND CABINET DOORS FOR TABLE CARTS AND STORAGE.
19. 6 CUBICLE WORK STATIONS
20. OFFICE STOCK SUPPLIES AND TECH/PHONE SERVER ROOM
21. NOT USED
22. NEW SERVICE DOOR
23. NEW DOOR AND WINDOW SYSTEM
24. REFRIGERATOR
25. FREEZER
26. WARMING OVEN (SUPPLIED BY CATERER)
27. WORK TABLE W/ SHELVING
28. ICE MAKER
29. 5 TIER STORAGE UNIT
30. 3-COMPARTMENT SINK
31. PREP SINK
32. HAND SINK
33. MICROWAVE (ON SHELF)
34. COFFEE MAKER
35. ICE TEA MAKER
36. COOK TOP WITH OVEN BELOW
37. EXHAUST HOOD ABOVE
38. FRYER
39. UNDER COUNTER FREEZER
40. REMOVE EXISTING RAISED PLATFORM
41. RAISE CEILING TO 9'-0"
42. PROPOSED ACCESSIBILITY RAMP, LANDING AND STAIRS
43. PROPOSED COUNTER AND SINK
44. DECOMPOSED GRANITE
45. GRASS
46. PROPOSED SITE WALL AND SHADE CANOPY TO MATCH LIBRARY
47. PROPOSED FIRE SPRINKLER RISER
48. MONUMENT SIGN

PLUMBING FIXTURE CALCULATIONS					
		W.C.	URINALS	LAVATORIES	D.F.
REQUIRED	MALE	2	2	1	–
	FEMALE	4	----	1	–
	TOTAL REQ.	6	2	2	1 (HI/LO)
PROVIDED	MALE	2	2	3	–
	FEMALE	5	----	3	–
	SINGLE OCCUPANT	1		1	
	TOTAL PROV.	8	2	7	1 (HI/LO)



2ND FLOOR MECHANICAL RM.

SCALE 1/8"=1'-0"



2ND FLOOR MECHANICAL RM.

SCALE 1/8"=1'-0"

REVISIONS | BY

CRANE ARCHITECTURAL GROUP
Innovations in Architecture
110 E. WILSHIRE AVE., SUITE 300 714/525-0363
FULLERTON, CA 92832 FAX 714/525-9826

TITLE:
RENOVATION FLOOR PLAN

PROJECT:
BUILDING RENOVATION
SAN MARINO CENTER
1800 HUNTINGTON DRIVE
SAN MARINO, CA 91108
CLIENT:
CITY OF SAN MARINO
2200 HUNTINGTON DRIVE
SAN MARINO, CA 91108

STAMP:

DRAWN: MTB
CHECKED:
DATE: 02/16/21
SCALE: AS NOTED
JOB NO.: C20-109
SHEET: A-1
OF SHEETS

Appendix C-1
Recommendations Memo, Chattel Historic Preservation Consultants

CHATTEL
Chattel, Inc. | Historic Preservation Consultants

MEMORANDUM

DATE November 15, 2021

TO Marcella Marlowe, Ph.D., City Manager
Michael, Throne, PE, Parks and Public Works Director, City Engineer
City of San Marino

CC Travis McGill, Director
Julie Gilbert, Project Manager
ELMT Consulting

FROM Robert Chattel, AIA, President
Sydney Andrea Landers, Associate I
Chattel, Inc. | Historic Preservation Consultants

RE San Marino Center (San Marino Women's Club)
1800 Huntington Drive, San Marino, California
Recommendations Memorandum

This memorandum describes existing conditions and provides recommendations for the City of San Marino (City) proposed exterior and interior work to the San Marino Center (San Marino Women's Club), 1800 Huntington Drive in San Marino, California (subject property or building) to ensure conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (*Secretary's Standards*). The subject property (Assessor Parcel No. 5334-024-903) is a one-story stucco-clad community building constructed in 1952 as the San Marino Women's Club designed by architect Marion J. Varner in the Ranch style.[1] The building is composed of a large auditorium, dining room, meeting room and office. Constructed as the San Marino Women's Club[2], The building has been determined eligible for the National Register of Historic Places (National Register) and the California Register for Historic Places (California Register) for being the first community meeting center in San Marino.

The subject property was officially determined eligible for listing in the National Register of Historic Places (National Register) in a 2011 report prepared by San Buenaventura Research Associates for the City. It was subsequently surveyed in the 2020 Citywide Historic Resources Survey Report (Citywide survey) prepared by Architectural Resources Group that identified the subject property as an individual property determined eligible for the National Register by a consensus through Section 106 process. The subject property is thus listed in the California Register and is designated as a San

[1] The subject property was variously described in survey and in the determination of National Register eligibility as Modern Colonial Revival style but is more appropriately described as Ranch style.
[2] The building has been interchangeably referred to as the San Marino Women's or Woman's Club in existing documentation. For purposes of consistency, we have selected to refer to it as the San Marino Women's Club as that is how it is listed in the original 1951 building permit.

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Marino Historic Landmark.[3] The subject property is significant for social history under National Register/California Register criterion A/1.

Figure 1: Architectural Rendering of the San Marino Women's Club (Pasadena Museum of History, 1951)

Designed as an early community building, its architectural expression imparts a residential character consistent the Ranch style that was at the height of its popularity. At the time of its design and construction, it was located in a residential zone and received a zoning variance. Characteristic features of the Ranch style include a low sloping, front facing cross gable roof clad in wood shake shingles, painted stucco, square steel porch columns with ornamental ironwork supporting the recessed porch, steel sash casement windows and Late Moderne style features such as the rectangular grid pattern on the high-volume auditorium exterior walls and bevel frames at some windows.

By 1958, two additions were made to the subject property. The east addition is a 100 square foot storage space that infilled a portion of the east elevation porch and the west addition is a 110 square foot office space that infilled the west elevation porch. Alterations include the raised windowsill at the large east elevation dining room window, sheet metal awnings added to the west elevation, an exit door added to the dining room at the south elevation, replacement of the entry door leaves, removal of a raised planter and extension of paved walkways at the north elevation. Consistent with previous evaluations, these are minor alterations, and the subject property retains integrity.

Proposed work plans to mesh the designs of the subject property with the adjacent Crowell Public Library (library), a building influenced by the Spanish-Mediterranean style, featuring characteristic elements of the style such as a terracotta tile roof, arches above windows and doors, stucco exterior and trellises. The project plans aim to rehabilitate and alter the subject property in a manner that would ensure the subject property and library read as one cohesive unit despite being on separate parcels and from different periods. The subject property, when compared to the adjacent library, appears dated and needs investment and repositioning to improve its functionality and use. The proposed work plans currently include replacing steel sash windows with insulated glazed aluminum frame windows, removing reveals and adding new stucco, adding new arches at the primary north elevation entry at the south elevation, adding wall and shade canopies, replacing the planter at the north elevation, replacing the square steel porch columns with ornamental ironwork for round stucco columns, replacing the wood shake roof with Mission or Spanish terracotta tile. The proposed work plans do not conform with the *Secretary's Standards for the Treatment of Historic Properties (Secretary's Standards).*

[3] The San Marino Historic Preservation Ordinance (23.18.03.A) includes Automatic Designation as a local City landmark when a property is listed in the National Register or California Register.

To identify potential design alternatives that would be consistent with the Secretary's Standard's, Chattel, Inc. (Chattel) President Robert Chattel, AIA, and Associate I Sydney Andrea Landers conducted a site visit on October 20, 2021 with ELMT Project Manager Julie Gilbert and City Engineer Michael Throne. This memorandum summarizes Chattel's observations during the site visit, and provides recommendations based on limited historic image research (Attachment A), permit research (Attachment C), review of proposed site plan drawings drawn by Crane Architectural Group dated November 2020 (Attachment D), previous historic evaluation review (Attachment F), and discussion with the City Engineer. Attachment B includes contemporary photographs and Attachment F includes exterior elevations denoting where alterations have occurred.

Existing Conditions

The subject property consists of a generally one-story building of rectangular massing, with two additions one in the front and one in the rear both dating to 1958. The front addition is to the east of the projecting wing and the rear addition is to the east of the auditorium. The front elevations takes on residential massing and features an L-shaped porch that wraps around the north elevation. The north elevation (primary façade) faces Huntington Drive (Huntington) (Images 1-6, 24-29), the east elevation directly abuts the adjacent building (library) (Images 7-14), the south elevation faces a surface parking lot shared by the library (Images 15-19) and the west elevation faces a surface parking lot (Images 20-23).

North Elevation (Façade)

The north elevation (façade) is comprised of an L-shaped porch that wraps around the north and west elevations, an office addition on the west end of the porch and a projecting wing on the east end. The roof of the north elevation is front facing and cross gabled with wood shake shingles. The roof overhangs over the L-shaped porch as well as the east projecting wing. The office addition is approximately 100 sq ft and partially infilled the west end of the porch in 1958. The east projecting wing features a central 6x3 steel casement window surrounded by a painted wooden bevel frame. Intersecting the cross gabled roof is the auditorium's high volume stucco wall with a flat roof. The porch is lined by square steel porch columns with ornamental ironwork. The north facing side of the porch is lined with hedges. The double door entry is recessed into the inner corner of the porch. To the east of the recessed entry door are two metal double doors central with the walkway. To the west of the recessed entry is a 4x3 steel casement window. Original pavement along the north elevation is denoted by original red paint. This original pavement wraps the building's exterior walls and is mostly covered by a roof overhang. This elevation faces Huntington Drive and is highly visible from the public right of way.

East Elevation

The east elevation is comprised of the east addition on the north end and a central north-facing porch entry to the dining hall. The east addition has one window facing north with metal bars and an aluminum frame. Adjacent to it, on the original building envelope, is a steel casement window with a wooden frame painted white. The roofline extends past the addition to create a covered porch with half of the original brick chimney exposed. The pavement underneath the roof overhang is original. Going south, the front addition has one wooden door with a window that faces east. Past this are two 3 panel steel sash windows underneath another roof overhang porch entry.

This entry faces north and consists of a large 4x4 wooden casement window framed by two narrow wooden doors with three windows and transoms. These doors are barely wider than the 28-inch variance permitted through the California Historic Building Code (CHBC).

Along the east elevation's south end, is a large three by six panel steel casement windows. This window is half of its original height, evident by markings on the stucco that extend from the window to the ground level. Chattel was informed that the bottom half of the window was filled in at an unknown date (likely soon after construction) due to drainage and flooding issues with having the window be at ground level. The roofline above this window is a false gable parapet over a flat roof. The rest of the east elevation's envelope is painted stucco and minimally detailed. This elevation is less visible from the public right of way as it directly faces the library.

South Elevation

The south elevation features two 2x4 pane steel sash windows that are central and evenly spaced in the dining hall. On the east end, there is an exit door and metal rail for the center's handicap entrance that was added in 1956. The roofline remains flat with an elevated parapet on the west end to cover mechanical equipment. The 1958 rear addition is half of the height of the high-volume auditorium is nestled in the L-shaped plan of the auditorium rear and dining hall. The rear of the auditorium features two exit doors: one at ground level and one at level with the auditorium with a concrete staircase and metal railing lining the side of the building. The rear of the auditorium remains unpainted and minimally altered. This elevation is not visible from the public right of way.

West Elevation

The west elevation is primarily composed of the flat roof high volume auditorium and a side gabled porch entry on the north end. Near the roofline, the exterior is adorned in a rectangular grid pattern on stucco, similar to the Late Moderne. The south end of the west elevation contains two narrow wooden sash windows covered by black metal bars. Below these windows is a chain link fence, a third of the building's height, that covers access to mechanical equipment. To the north of this fence is an elevator door entry with a concrete staircase and metal railing leading up to the building. The metal handrail was added in 1956. The central portion of the west elevation consists of three evenly spaced steel casement windows 6x6 pane steel sash windows that are covered by corrugated metal awnings with scalloped ends. The awnings have been painted white and feature similar ornamental ironwork as the square steel porch columns. The north end of the west elevation features a side gable wing that contains an office and the front porch of the subject property. This projecting gable includes two windows with metal awnings that face west and south respectively. The top of the gable includes a metal vent that has been painted to match the rest of the exterior envelope. At the north end, a three-step concrete staircase leads to the front porch and is covered by a green fabric awning that lists "San Marino Women's Center" in faded lettering. The porch is lined by a minimalistic metal baluster and railing. Much of the west elevation is obscured and lined by vegetation and trees on the property. This elevation is visible from the public right of way.

The table below summarizes major construction phases and additions identified in existing building permit records provided by the City of San Marino.

Date	**Permit Type/ Number**	**Architect/ Contractor**	**Value**	**Description**	**Notes**
06/08/1951	Building Permit 7772	Architect: Marion J. Varner	$90,000	New construction of Women's Club	Zoning variance for use in residential neighborhood
08/28/1956	Building Permit 10522	Architect: Marion J. Varner	$500	Alterations: Exit door in SE corner of dining room, exit	All on secondary, rear elevation

				lights, metal hand rail for stoop on rear west side	
07/30/1958	Building Permit 11468	Contractor: Norwood & Delong	$5,000	Storage and office additions	Two additions infilling existing porch east and west, respectively
02/23/1960	Building Permit 15558	Contactor: Norwood & Delong	$3500	New kitchenette and half bath	No structural changes

Character-Defining Features

The subject property retains the following character-defining features of Ranch and Late Moderne styles:

- One-story rectangular massing with front facing and cross gable roofs;
- Stucco with rectangular grid reveals at parapet;
- Multi-light steel sash windows, wood grid windows, some with wood bevel frames;
- Square steel porch columns with ornamental ironwork; and,
- Fenestration pattern of windows and doors at north (primary), east, south (rear), and west elevations.

Recommendations

The subject property lacks some aesthetic appeal of its original design due to two additions that infilled the primary north elevation porch on both the east and west, which altered its original massing, removal of the front planter, deterioration of the exterior stucco, and weathered wood shakes. Restoring the original footprint by removing both porch additions and rehabilitating character defining features would significantly enhance the aesthetic appeal of the building.

The goal of the revised design should be first and foremost to restore and rehabilitate the subject property's character defining features while allowing for subtle changes in massing, color, and landscaping to visually connect it with the library. Visual elements of the Spanish-Mediterranean style library can be integrated into the building by subtle changes to roof color and material, exterior paint color, hardscape, and landscaping to improve compatibility with the library.

We recommend referencing *Preservation Brief 22: The Preservation and Repair of Historic Stucco* and *Preservation Brief 13: The Repair and Thermal Upgrading of Historic Steel Windows* for any future rehabilitation work on these features.

To ensure that any revised design conforms with the *Secretary's Standards*, the design architect should work with a qualified historic preservation consultant through design collaboration.[4]

[4] A qualified historic preservation consultant must meet the *Secretary of the Interior's Professional Qualification Standards in architecture, historic architecture, or architectural history.*

Specifically, our recommendations are as follows and additional reference materials are provided in Attachment G:

At the north elevation:

- Retain and rehabilitate character-defining features to greatest extent feasible.
- Retain wood shake roof or replace with compatible replacement such as red asphalt shingle or flat terracotta tile.
- Patch, repair and repaint stucco, as necessary. Stucco can be painted to be compatible with the library.
- Retain and rehabilitate square steel porch columns and ornamental ironwork, repaint as necessary. Columns and ornamental ironwork can be painted brown to be compatible with trim of the library.
- Rehabilitate and repair steel sash windows, as necessary.
- Retain and rehabilitate original paving, as necessary.
- Restore original planter at north elevation, match vegetation with library.
- Remove two porch additions (east storage addition and west office addition). Ensure that brick chimney is not damaged in removal of east storage addition. Chemically remove overpaint on brick.
- Detail wall and shade canopy to not touch existing building ensuring reversibility, and revise wall and shade canopy design to be subordinate to existing building. Provide only minimal metal infill at existing porch to enclose courtyard.
- Replace existing primary north entry door leaves to match existing.

At the east elevation:

- Retain and rehabilitate character-defining features to greatest extent feasible.
- Patch, repair and repaint stucco, as necessary. Stucco can be painted to be compatible with the adjacent library.
- Rehabilitate and repair steel sash and wood grid windows, as necessary.
- Remove porch addition (east storage addition). Ensure that brick chimney is not damaged in removal of east storage addition. Chemically remove overpaint on brick. Restore steel sash doors that were removed to provide access into addition.

At the south elevation:

- Retain and rehabilitate character-defining features to greatest extent feasible.
- Patch, repair and repaint stucco, as necessary. Stucco can be painted to be compatible with the adjacent library.
- Rehabilitate and repair steel sash and wood grid windows, as necessary.
- Detail wall and shade canopy to not touch existing building ensuring reversibility. Simplify design of the screen wall and trellis to eliminate round arches and detail to be self-supporting and not attached to the existing building.

At the west elevation:

- Retain and rehabilitate character-defining features to greatest extent feasible.
- Patch, repair and repaint stucco, as necessary. Stucco can be painted to be compatible with the adjacent library.
- Rehabilitate and repair sheet metal window awnings, repaint as necessary.
- Rehabilitate and repair steel sash windows, as necessary.

- Remove porch addition (west office addition). Restore missing square steel porch columns with ornamental ironwork.

Attachments

Attachment A: Historic Images
Attachment B: Contemporary Images
Attachment C: Original Permits
Attachment D: Site Plan, Proposed Plans
Attachment E: Exterior Elevations, Alterations denoted
Attachment F: Previous Historic Evaluation
Attachment G: Replacement Tile Examples

Attachment A:
Historic Images
San Marino Center (San Marino Women's Club)

1800 Huntington Drive
San Marino, California

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Image 1: Architectural Rendering of San Marino Women's Club (1950) (Pasadena Museum of History)

Image 2: San Marino Women's Club, 1952. (1952) (University of Southern California Digital Collections)

Image 3: San Marino Women's Club, 1952 (1952) (University of Southern California Digital Collections)

Attachment B:
Contemporary Images
San Marino Center (San Marino Women's Club)

1800 Huntington Drive
San Marino, California

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Image 1: San Marino Center, north elevation (left) and west elevation (right), view southeast (Chattel, 2021)

Image 2: San Marino Center, north elevation, view southeast (Chattel, 2021)

Image 3: Entrance to the San Marino Center, north elevation, view south (Chattel, 2021)

Image 4: San Marino Center, north elevation, view south (Chattel, 2021

Image 5: San Marino Center, north elevation, note steel sash windows with wooden bevel frame, view south (Chattel, 2021)

Image 6: San Marino Center, east elevation (left) and north elevation (right), view southwest (Chattel, 2021)

Image 7: San Marino Center, east elevation (far left) and north elevation (center), note brick chimney bisected by east storage addition and ornamental ironwork (Chattel, 2021)

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Image 8: San Marino Center, north elevation (left) and east elevation (right), note recessed porch with original paving painted red, view west (Chattel, 2021)

Image 9: Detail of recessed porch on east elevation, note steel sash windows and original wooden doors, view west (Chattel, 2021)

Image 10: San Marino Center, east elevation, view southwest (Chattel, 2021)

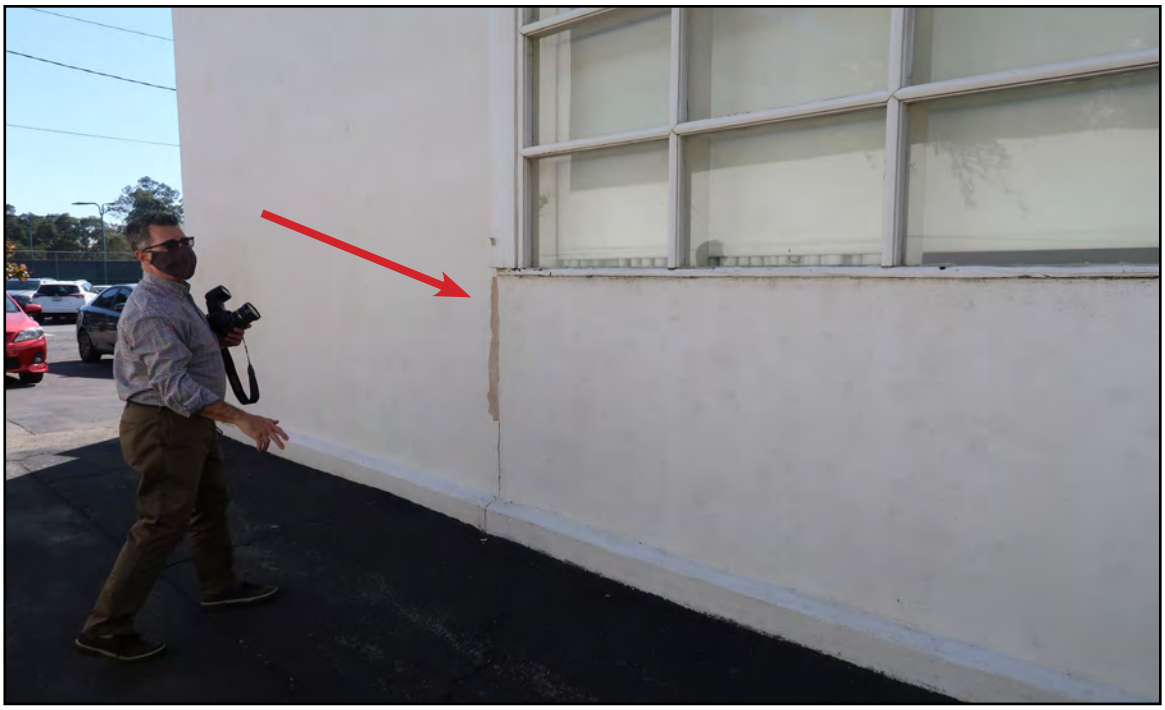

Image 11: Detail of steel sash window on east elevation, note the tear in stucco where window originally extended to ground level and infilled at a unknown date, view southwest (Chattel, 2021)

Image 12: San Marino Center, south elevation (left) and east elevation (right), view northwest (Chattel, 2021)

Image 13: Detail of steel sash window on the south elevation, view north (Chattel, 2021)

Image 14: San Marino Center, south elevation, view northwest (Chattel, 2021)

Image 15: San Marino Center, south elevation, view north (Chattel, 2021)

Image 16: San Marino Center, south elevation, view north (Chattel, 2021)

Image 17: San Marino Center, west elevation, view northeast (Chattel, 2021)

Image 18: San Marino Center, west elevation, view east (Chattel, 2021)

Image 19: San Marino Center, west elevation, view east (Chattel, 2021)

Image 20: San Marino Center, west elevation, view east (Chattel, 2021)

Image 21: San Marino Center, north elevation, view southeast, note entry porch (Chattel, 2021)

Image 22: Detail of door and window of west office addition, north elevation, view south (Chattel, 2021)

Image 23: Detail of steel sash windows on west elevation, view southeast (Chattel, 2021)

Image 24: San Marino Center, north elevation, note entry double doors, view southeast (Chattel, 2021)

Image 25: Detail of cornerstone, north elevation, view east (Chattel, 2021)

Image 26: View of entry double doors from interior, view northeast (Chattel, 2021)

Image 27: View of interior lobby, view west

Image 28: Detail of commemorative tiles for the San Marino Women's Club (Chattel, 2021)

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Image 29: View of auditorium, view southwest (Chattel, 2021)

Image 30: View of auditorium, view northeast (Chattel, 2021)

Image 31: View of adjoining dining hall, view northeast (Chattel, 2021)

Image 32: View of dining hall, view east (Chattel, 2021)

Image 33: View of dining hall, view south (Chattel, 2021)

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Image 34: View of meeting room, view northeast (Chattel, 2021)

Image 35: View of meeting room, view southwest (Chattel, 2021)

Attachment C:
Original Permits
San Marino Center (San Marino Women's Club)

1800 Huntington Drive
San Marino, California

Permit No. 7772 Date Issued June 8, 1951

Application must be filled out by Applicant with ink or indelible pencil. Plans and specifications and other data must also be filed.

OFFICE OF BUILDING INSPECTOR
SAN MARINO, CALIF.

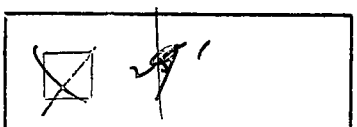
APPLICATION FOR BUILDING PERMIT

Application is hereby made for a permit to construct the building hereafter described at the point hereinafter specified.

Date Dec. 14, 1950

PHONE 5/6816 (Sign here) M J Warner Architect (Applicant)

1. Building to be erected on Lot No. PORTION 421 Block ..... Tract PORTION 425 Zone .....
2. No. 1800 Huntington Dr. Street. Purpose of Building Commercial
3. Entire cost of proposed building $ 90,000.00
4. Owner San Marino Women's Club Address 1800 Huntington Drive
5. Architect Marion J Warner Address 35 N. Raymond Ave Pasa.
6. Contractor NOT DECIDED KEMP BROS Address ——— James Kemp on Pleasant 11107 Pasadena
7. Size of lot 132' x 200' Size of building 120' x 131'
8. Type of Architecture .....
9. Number of rooms 10 Will building be erected on front or rear of lot Rear
10. NUMBER OF STORIES IN HEIGHT 1 Height to highest point of roof 20' 6"
11. Height of first floor joist above curb level, or sur 18"
12. Character of ground; rock, clay, sand, filled, etc. .....
13. Of what material will FOUNDATION and cellar walls be built? Concrete
14. GIVE depth of FOUNDATION below surface of ground 18" minimum
15. GIVE dimensions of FOUNDATION and cellar wall FOOTINGS 10" x 24"
16. GIVE width of FOUNDATION and cellar walls at top X
17. NUMBER and kind of chimneys 1 — Brick Number of flues TC Flue
18. Number of inlets to each flue One Interior size of flues 9" min
19. Of what material will upper walls be constructed? Wood & Plaster
20. Are there any buildings within 30 feet of the proposed structure? No



The figures on this chart show your set-back lines.

There must be a clear air space of at least twenty-four inches

21. GIVE THICKNESS OF EXTERIOR WALLS:

Basement X 5th story

1st story 7" MIN 5th story

2nd story 7th story

3rd story 8th story

4th story Fire Wall

22. GIVE MATERIAL, SIZE AND DISTANCE ON CENTERS OF FLOOR JOISTS:

1st story—material ; Size x ; distance on centers

2nd " " ; " x ; " " "

3rd " " ; " x ; " " "

4th " " ; " x ; " " "

5th " " ; " x ; " " "

6th " " ; " x ; " " "

7th " " ; " x ; " " "

8th " " ; " x ; " " "

Ceiling Joists ; " x ; " " "

Roof Rafters ; " x ; " " "

23. Will any wall be supported on iron or steel girders or columns? YES

24. Specify material of beams, girders or columns STEEL, WOOD, CONC

25. Specify material and construction of floors CONC SLAB 3½ 4" GRADED BASE

26. Specify material of partitions WOOD PLASTER

27. Specify material of roofing WOOD SHAKES & COMPO

28. Specify material of stairways WOOD & CONC

29. Specify material of elevator shaft, other shafts and chutes

30. Specify material and construction of cornices WOOD

31. Specify number of fire escapes, where placed 10 — ALL SIDES

32. Specify means of access to the roof SCUTTLE

33. Specify size of vent shafts to water closet compartments 4" MIN

34. Specify how halls will be lighted and ventilated WINDOWS

35. Will metal lath be used? Specify where NOT KNOWN

36. Will freight elevators be inclosed or provided with doors and fusible links? NO

REMARKS

Permit No. 10522 Date Issued 8-22-56

Application must be filled out by Applicant with ink or indelible pencil. Plans and specifications and other data must also be filed.

OFFICE OF BUILDING INSPECTOR
SAN MARINO, CALIF.

APPLICATION FOR BUILDING PERMIT

Application is hereby made for a permit to construct the building hereafter described at the point hereinafter specified.

Date 8-22-56

Telephone Number: SY-6811C (Sign here) Marion J Clarke (Applicant)

1. Building to be erected on Lot No. ____ Block ____ Tract ____ Zone ____
2. No. 1800 Huntington Street. Purpose of Building ALTERATIONS
3. Entire cost of proposed building ALT — ABOUT $500.00
4. Owner SAN MARINO CO. CLUB Address 1800 HUNTINGTON DR.
5. Architect MARION J. VARNER Address 35 NO. RAYMOND — PASA.
   LLOYD KITCHEL
6. Contractor ~~OWNER~~ Address BY DAY LABOR
7. Size of lot ____ Size of building ____
8. Type of Architecture EXISTING.
9. Number of rooms ____ Will building be erected on front or rear of lot ____
10. NUMBER OF STORIES IN HEIGHT ____ Height to highest point of roof ____
11. Height of first floor joist above curb level, or sur ____
12. Character of ground; rock, clay, sand, filled, etc. ____
13. Of what material will FOUNDATION and cellar walls be built? ____
14. GIVE depth of FOUNDATION below surface of ground ____
15. GIVE dimensions of FOUNDATION and cellar wall FOOTINGS ____
16. GIVE width of FOUNDATION and cellar walls at top ____
17. NUMBER and kind of chimneys ____ Number of flues ____
18. Number of inlets to each flue ____ Interior size of flues ____
19. Of what material will upper walls be constructed? ____
20. Are there any buildings within 30 feet of the proposed structure? ____

☐ The figures on this chart show your set-back lines.

Square Feet in House ____

Permit No. 11468 Date Issued 7-30-58

Application must be filled out by Applicant with ink or indelible pencil. Plans and specifications and other data must also be filed.

OFFICE OF BUILDING INSPECTOR
SAN MARINO, CALIF.

APPLICATION FOR BUILDING PERMIT

Application is hereby made for a permit to construct the building hereafter described at the point hereinafter specified.

Date July 30, 1958

Telephone Number: Sy 55929 (Sign here) Forrest E. De Longe by John W. De Longe (Applicant)

1. Building to be erected on Lot No. ____ Block ____ Tract ____ Zone ____
2. No. 1800 Huntington Dr. Street. Purpose of Building garage office & storage building San Marino
3. Entire cost of proposed building $5000.00
4. Owner San Marino Women's Club Address 1800 Huntington Drive. S.M.
5. Architect ____ Address ____
6. Contractor Forrest E. De Longe Address 1441 San Marino Ave San Marino
7. Size of lot ____ Size of building ____
8. Type of Architecture modern colonial
9. Number of rooms 2 Will building be erected on front or rear of lot one - front one - rear
10. NUMBER OF STORIES IN HEIGHT one Height to highest point of roof 15'
11. Height of first floor joist above curb level, or sur 12" approx
12. Character of ground; rock, clay, sand, filled, etc. Sandy loam
13. Of what material will FOUNDATION and cellar walls be built? Conc.
14. GIVE depth of FOUNDATION below surface of ground 12"
15. GIVE dimensions of FOUNDATION and cellar wall FOOTINGS see plan
16. GIVE width of FOUNDATION and cellar walls at top ____
17. NUMBER and kind of chimneys none Number of flues —
18. Number of inlets to each flue — Interior size of flues —
19. Of what material will upper walls be constructed? D.F. studs & stucco
20. Are there any buildings within 30 feet of the proposed structure? no

The figures on this chart show your set-back lines.

Permit No. 12258 Date Issued 2-23-60

Application must be filled out by Applicant with ink or indelible pencil. Plans and specifications and other data must also be filed.

3.71
4.
8.71
4.37
13.12

OFFICE OF BUILDING INSPECTOR

SAN MARINO, CALIF.

APPLICATION FOR BUILDING PERMIT

Application is hereby made for a permit to construct the building hereafter described at the point hereinafter specified.

83689 JWP

Date 2/23/60

State License # ~~Norwood & DeLonge~~

Telephone Number: Sy 55929 (Sign here) Jack Norwood (Applicant)

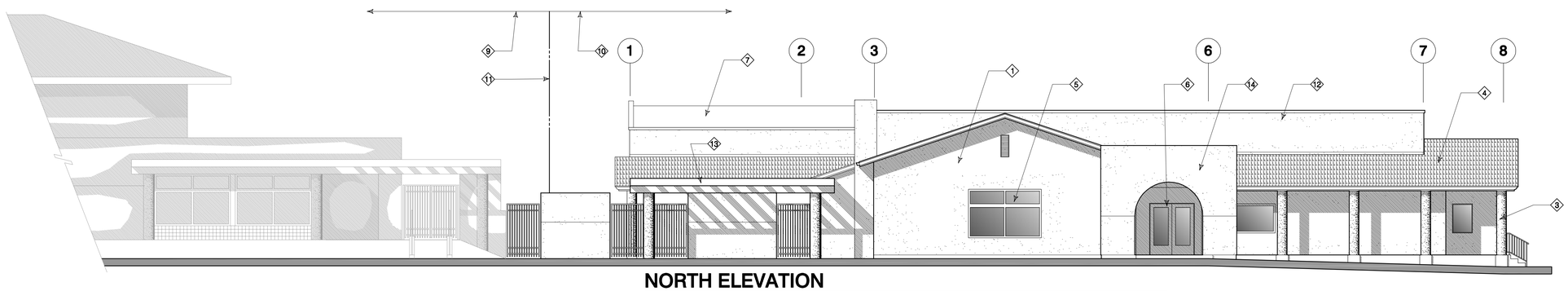
1. Building to be erected on Lot No. ~~[illegible]~~ Block Tract 425 ~~[illegible]~~ Zone C-1
2. No. 1800 Huntington ~~Street.~~ Dr Purpose of Building San Marino Women's Club
3. Entire cost of proposed building 3500.00
4. Owner San Marino Women's Club Address 1800 Huntington Dr
5. Architect Address
6. Contractor Norwood & DeLonge Address 1441 San Marino Ave, San Marino
7. Size of lot Size of building
8. Type of Architecture
9. Number of rooms Will building be erected on front or rear of lot
10. NUMBER OF STORIES IN HEIGHT Height to highest point of roof
11. Height of first floor joist above curb level, or sur
12. Character of ground; rock, clay, sand, filled, etc.
13. Of what material will FOUNDATION and cellar walls be built?
14. GIVE depth of FOUNDATION below surface of ground
15. GIVE dimensions of FOUNDATION and cellar wall FOOTINGS
16. GIVE width of FOUNDATION and cellar walls at top
17. NUMBER and kind of chimneys Number of flues
18. Number of inlets to each flue Interior size of flues
19. Of what material will upper walls be constructed?
20. Are there any buildings within 30 feet of the proposed structure?

new kitchenette & 1/2 bath no structural change

The figures on this chart show your set-back lines.

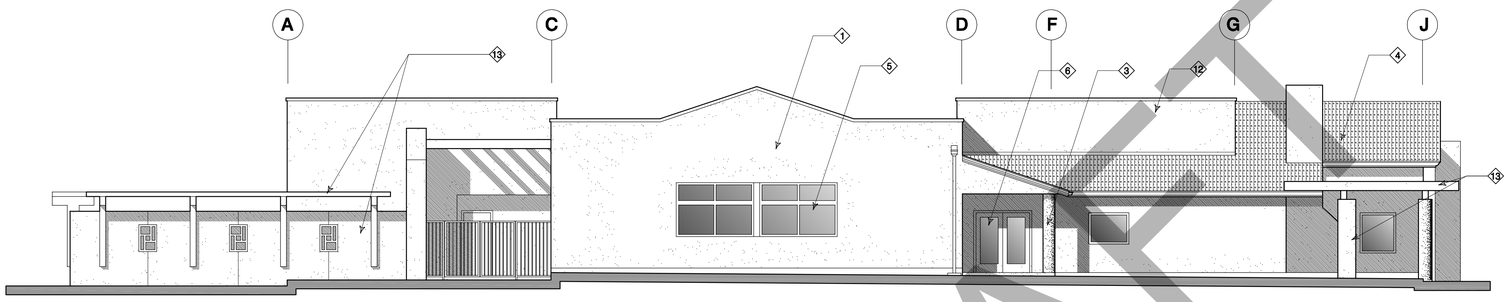
Attachment D:
Proposed Plans
San Marino Center (San Marino Women's Club)

1800 Huntington Drive
San Marino, California



NORTH ELEVATION

SCALE 1/8"=1'-0"

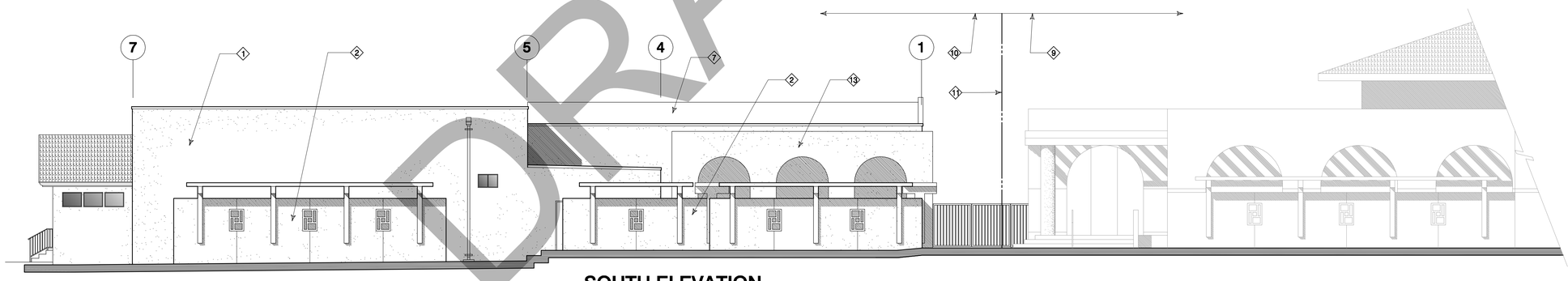


EAST ELEVATION

SCALE 1/8"=1'-0"

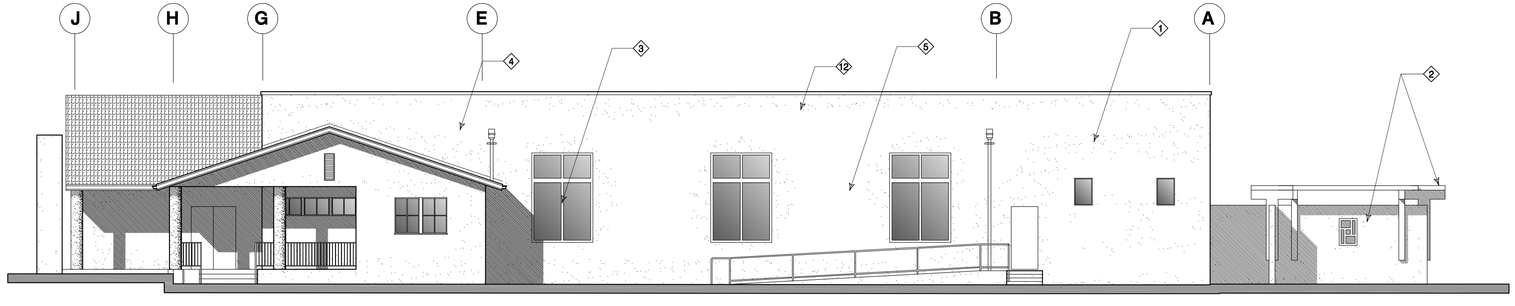
ELEVATION KEYNOTES

1. NEW STUCCO FINISH COAT TO MATCH LIBRARY
2. PROPOSED WALL AT NEW PATIO TO MATCH LIBRARY
3. REPLACE EXISTING COLUMNS WITH NEW TO MATCH LIBRARY
4. REPLACE ROOF TO MATCH LIBRARY (SPANISH TILE)
5. NEW DUAL GLAZED, ALUMINUM FRAME WINDOWS, TYP
6. NEW ALUMINUM FRAME STOREFRONT DOOR SYSTEM, TYP
7. SINGLE-PLY MEMBRANE ROOF
8. NOT USED
9. EXISTING LIBRARY
10. PROPOSED REMODEL TO COMMUNITY CENTER
11. PROPERTY LINE
12. REMOVE STUCCO REVEALS
13. PROPOSED WALL AND SHADE CANOPY TO MATCH LIBRARY
14. PROPOSED ARCHWAY TO MATCH LIBRARY



SOUTH ELEVATION

SCALE 1/8"=1'-0"



WEST ELEVATION

SCALE 1/8"=1'-0"

REVISIONS	BY

CRANE ARCHITECTURAL GROUP
Innovations in Architecture
110 E. WILSHIRE AVE., SUITE 300
FULLERTON, CA 92832
714/525-0363
FAX 714/525-9826

TITLE:
EXTERIOR ELEVATIONS

PROJECT:
SAN MARINO CENTER
1800 HUNTINGTON DRIVE
SAN MARINO, CA 91108

CLIENT:
CITY OF SAN MARINO
2100 HUNTINGTON DRIVE
SAN MARINO, CA 91108

STAMP:

DRAWN	MTB
CHECKED	
DATE	11-10-20
SCALE	AS NOTED
JOB NO.	C19-103
SHEET	A-2
OF	SHEETS

Attachment E:
Original Elevations with Alterations Denoted
San Marino Center (San Marino Women's Club)

1800 Huntington Drive
San Marino, California

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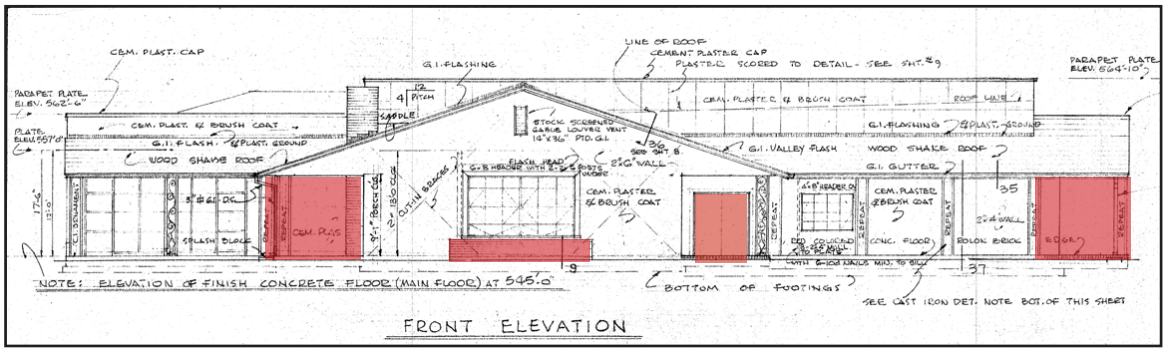
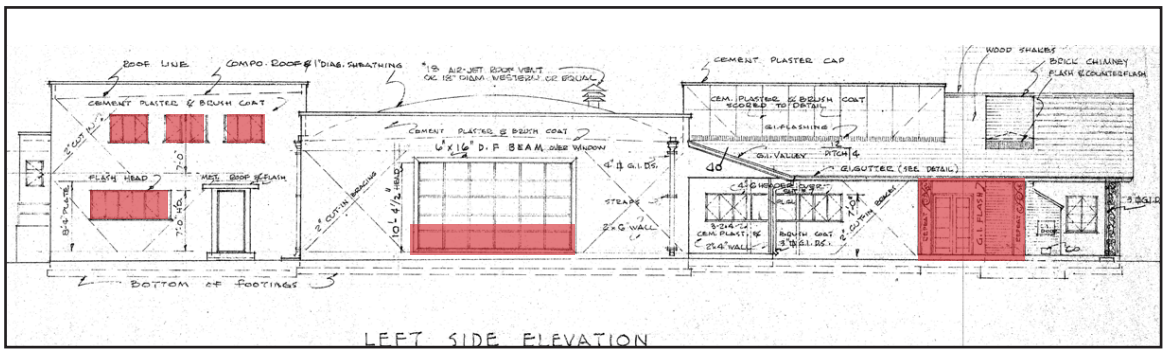
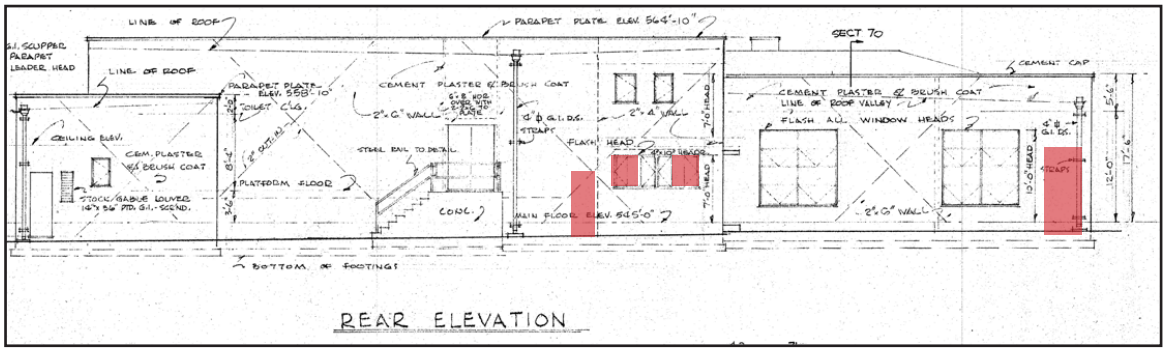
North Elevation



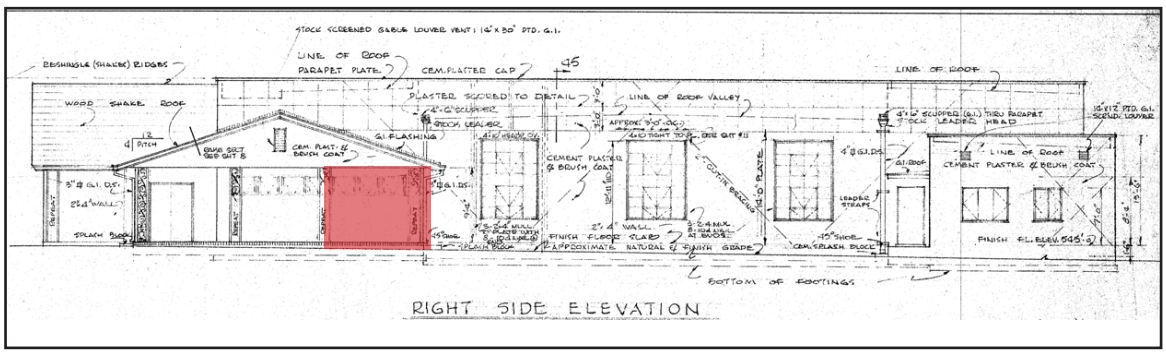
East Elevation



South Elevation



West Elevation



Attachment F:
Previous Historic Evaluation
San Marino Center (San Marino Women's Club)
1800 Huntington Drive
San Marino, California

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary
HRI
Trinomial
NRHP Status Code 3S
Other Listing
Review Code _____ **Reviewer** _____ **Date** _____

Page 1 **of** 3 **Resource Name or #:** (Assigned by recorder) San Marino Woman's CLub

P1. Other Identifier:

P2. Location: ☐ **Not for Publication** ☒ **Unrestricted** **a. County** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad El Monte **Date** 1966/81/94 **; R** **1/4 of** **1/4 of Sec** **B.M.**

c. Address: 1800 Huntington Drive **City** San Marino **Zip** 91108

d. UTM: (Give more than one for large and/linear resources) ; mE/ mN

e. Other Locational Data (Enter Parcel #, legal description, directions to resource, elevation, etc., as appropriate)

APN 5334-024-903

P3. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Located on Huntington Drive between the San Marino Library and the Henry E. Huntington School, the former San Marino Woman's Club building is a large primarily one story building with a flat roof and raised parapet along the rear and side elevations. The front elevation features a side-facing medium gable roof with an offset front gable wing. An l-shaped porch runs across the front elevation and is supported by decorative wrought iron posts. The roof is covered with wood shingles. A large multi-paned steel framed window is located below the main front gable. Underneath the window is brick trim. A tall exterior brick chimney is located on the northeast elevation. Windows are primarily multi-paned steel casements. Siding is stucco and foundation is concrete. The interior of the building when first built contained a large auditorium, dining room, meeting room and office.

P3b. Resource Attributes (List attributes and codes) HP13; HP38

P4. Resources Present ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Other (isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)

P5b. Description of Photo: (View, date, accession #)
front (northern) elevation, 13 July 2011

P6. Date Constructed/Age and Sources:
☐ Prehistoric ☒ Historic ☐ Both
1952-F - building permits

P7. Owner and Address
City of San Marino
2200 Huntington Drive
San Marino, CA 91108

P8. Recorded by: (Name, affiliation and address)
Judy Triem/San Buenaventura Research Assc.
1328 Woodland Drive
Santa Paula, CA 93060

P9. Date Recorded: 20 July 2011

P10. Survey Type: (Describe)
Section 106 Review

P11. Report Citation: (Cite survey report and other sources, or enter "none")

Attachments
☐ NONE ☒ Continuation Sheet ☐ District Record ☐ Rock Art Record ☐ Other (List)
☐ Location Map ☒ Building, Structure and Object Record ☐ Linear Feature Record ☐ Artifact Record
☐ Sketch Map ☐ Archaeological Record ☐ Milling Station Record ☐ Photograph Record

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD **HRI #** **Primary #**

 NRHP Status Code 3S

Resource Name or #: (Assigned by recorder) San Marino Woman's Club

B1. Historic Name: San Marino Woman's Club
B2. Common Name: San Marino Community Center
B3. Original Use: woman's club/community center **B4. Present Use:** community center
B5. Architectural Style: Modern Colonial Revival
B6. Construction History: (Construction date, alterations, and date of alterations)
1952; two additions in 1958; separate modular building in rear, date unknown

B7. Moved? [X] **No** [ ] **Yes** [ ] **Unknown** **Date:** **Original Location:**
B8. Related Features:
mature tree in front; parking area on side and rear

B9a. Architect: Marion J. Varner **b. Builder:** unknown
B10. Significance: Theme Social history **Area:** San Marino
Period of Significance: 1952 - 1958 **Property Type:** clubhouse **Applicable Criteria:** A
(Discuss importance in terms of historical or architectural context as defined by theme, period and geographical scope. Also address integrity.)

The San Marino Woman's Club was organized in 1936 with 420 members and held its general meetings in the Henry E. Huntington School. In 1942 the club purchased the property at 1800 Huntington Drive for the purpose of building a much needed clubhouse for its growing membership. However, it was not until ten years later that the 15,720 square foot clubhouse was completed on the site.

When completed, the San Marino Woman's Club was the first meeting place to be built in the community. The building was constructed to serve the entire community, not just the Woman's Club, although they funded its construction. Members raised most of the funds to complete the clubhouse through bazaars, rummage sales, parties and various entertainment events over a ten year period. They also made an appeal to the public for funds.

Over the years, the club's charitable contributions have been numerous and include the endowment of a bed at the Orthopedic Hospital, nursing scholarships, Toys for Tots and others. They also provided help to the Assistance League, American Red Cross and the City of Hope. The building was made available to the community for meetings and events. After selling its building, the San Marino Woman's Club moved its organization to Pasadena in 2004. (cont'd.)

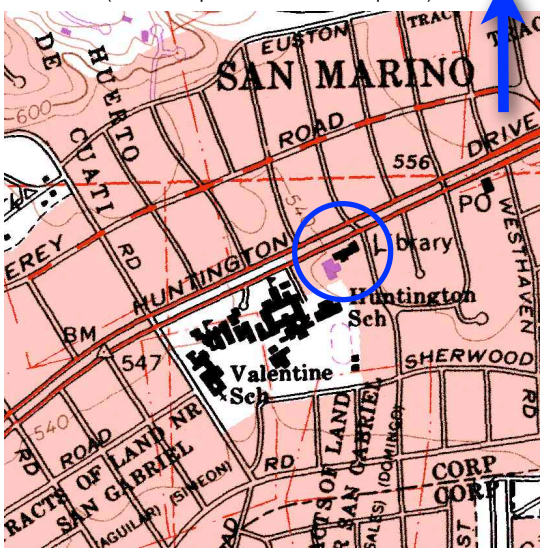
B11. Additional Resource Attributes (List attributes and codes) HP38
B12. References:
Balvin, Christie. "San Marino Woman's Club Creates $1 Million Endowment with the Pasadena Community Foundation." Pasadena Community Foundation, May 25, 2007.
City of San Marino, building permits for San Marino Woman's Club, 6/8/1951, 7/30/1958. (Cont'd.)

B13. Remarks:

B14. Evaluator: San Buenaventura Research Associates
Date of Evaluation: 20 July 2011

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



B10. Significance

Marion J. Varner, Architect

Born February 8, 1912 in Kansas, Marion J. Varner moved to Pomona, California by 1920 with his parents Clarence and Mabel Varner and siblings. His father owned a plastering company. Marion lived with his family in 1930, and at age 18, was employed as a baker. Varner's educational background is unknown. The first known reference to his architecture career was in 1951 when the Los Angeles Times reported he designed 24 homes in the Anaheim Tract at the same time he was designing the San Marino Woman's Club. His office was located in Pasadena. Varner had a very prolific career designing primarily public buildings throughout Los Angeles County. Some of his major projects include Hawthorne Police Station, 1955; Torrance Fire Station, 1955; San Fernando Police Station, 1956; Compton Community Center, 1956; Gardena Medical Clinic, 1956; Glendora Hospital, 1956; El Segundo Fire Station, 1957; Hawthorne Fire Station, 1957; Downey Civic Center, 1958; San Gabriel Police Station, 1961; Gardena City Hall, police building and library, 1963 for which he received an award from the Society of American Registered Architects (SARA); Arcadia high-rise office, 1963; and Bell Gardens City Hall in 1966. Varner also won an award from SARA for his design for the Vernon City Hall and Police Station in 1975. In 1978 Varner joined W. Gayle Daniel and Samuel E. Hart of the SARA to design the first energy-effective case study house in Rancho California and the first to be sponsored by a chapter of a professional society. (Los Angeles Times, 1951-1978)

Varner was active professionally serving as president of the National Board of the Society of American Registered Architects and in 1968 he served as president of the local chapter. He died on April 10, 2005 in San Marino.

The San Marino Community Center, formerly the San Marino Woman's Club, is associated with an event (Criterion A) which is important to the history of the San Marino community. It apparently was the first community building constructed in San Marino and has served as a community focal point for many years while the club also pursued its charitable work. The building is not associated with any known individuals (Criterion B) important to the history of the San Marino community. The building does not embody the distinctive characteristics of a type, period or method of construction (Criterion C). The Woman's Club is an undistinguished example of the Modern Colonial style. It was designed by Pasadena architect Marion Varner and is one of his early designs. Varner was a prolific architect during the 1950s and 1960s designing numerous public buildings throughout Los Angeles County. Varner's work is not sufficiently documented to regard him as a Master architect. Criterion D refers to archaeology and is not addressed in this report.

Integrity Discussion

The property at 1800 Huntington Drive is in its original location. The original design of the 1952 building is primarily intact except for changes to the front entrance doors and two small additions in 1958 done in the same style. The historic setting of the property is partially intact. The relationship to the adjacent library and school remain. However, the original 1950 library was replaced with a new library building within the last few years. The integrity of materials is somewhat intact. The feeling and association as a woman's club is no longer intact since the building is now the San Marino Community Center, but it continues to function to serve the community. Overall, the integrity of the building appears sufficient for eligibility.

B12. References

Los Angeles Times, various articles, 1951 through 1978.

Los Angeles County Assessor's Property information

Attachment G:
Replacement Tile Examples
San Marino Center (San Marino Women's Club)
1800 Huntington Drive
San Marino, California

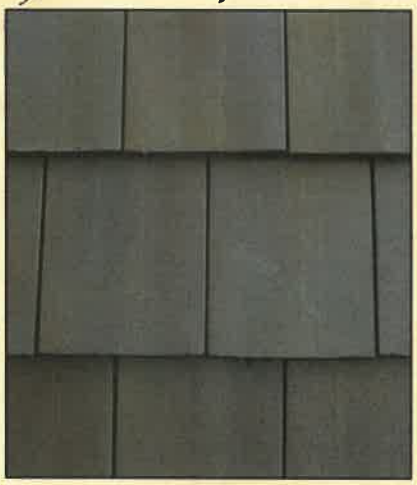
Gladding, McBean

PLACER INTERLOCKING CLAY ROOF TILE

Presidio Blend

Monterey Blend

Spanish Bay Blend

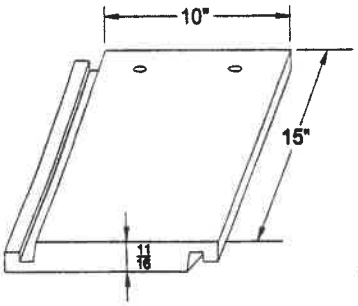


Kiln-Run #8 Mix

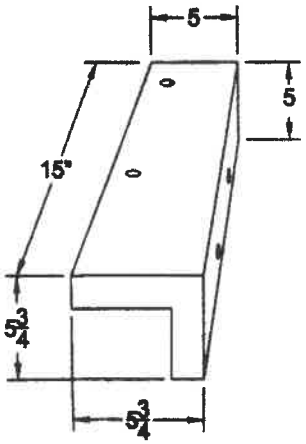
Blended Red

Franciscan Blend

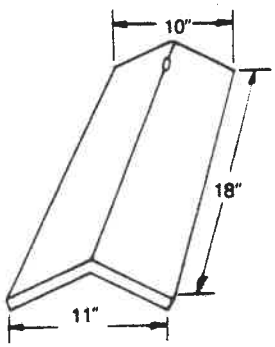
PLACER INTERLOCKING CLAY ROOF TILE



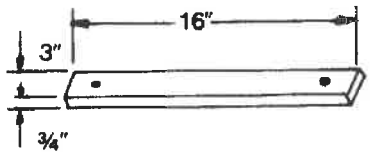
FIELD TILE



UNIVERSAL GABLE RAKE TILE



"V" RIDGE TILE



CLAY CANT STRIP

"V" - TILE HIP & RIDGE

Angle	Roof Pitch
153 degrees	3/12
128 degrees	5.5/12
90 degrees	12/12

SPECIFICATIONS

A. MATERIALS

- There are 120 pieces of field tile per square weighing approximately 960 pounds.
- Roofing tile shall be Gladding, McBean Placer Interlocking Clay Tile 15" long to 10" wide, square butt and laid with an exposure of 12". Meeting requirements of ASTM C-1167. Grade 1.
- Under eave shall be (specify one):
  - Clay tile cant strip 3" x 16" x 3/4".
  - 1" x 2" wood cant strip.
- Hips and ridges shall be "V" type clay tile 18" long laid with an exposure of 14". (Specify pitch of roof.)
- Gable trim shall be a universal gable rake tile.
- Cement Mortar: The mortar used under the hip and ridge shall be Type M by proportions per U.B.C. Table 21A. This mix is basically (by volume) 1 part Type I cement (or masonry cement) to 3 parts damp plaster sand.

B. COLOR shall be (specify one):

- Kiln-run #8 Mix • Spanish Bay Blend • Monterey Blend
- Blended Red • Franciscan Blend

C. UNDERLAY—**The underlayments described are very conventional and in accordance with many building code requirements including I.C.B.O. Uniform Building Code and the City of Los Angeles Building Code. Sweep roof surface broom clean. Cover knot holes with tin. Specify desired weight of underlay as follows:**

For Pitches of less than 4/12:

- Lay two layers of 30# felt at right angles to roof surface, nail to secure in place as code requires. Mop solidly 25# per square between layers and on top of layers with hot asphalt.

For Pitches of 4/12 and greater:

- Lay one layer of 30# or 40# felt. Lay with 4" head lap and a 6" side lap. Nail to secure in place as code requires.

D. TILE FASTENERS—Tile shall be fastened by (specify one of the following):

- Nails—Noncorrosive. Sufficient length shall give 3/4" penetration. (Consult manufacturer of special roof deck materials for additional nailing specifications.)
- Fasteners—To be installed per project specifications using applicable 300 series Stainless Steel or Galvanized Tyle Tye Systems, as manufactured by Newport Fasteners, per I.C.B.O. 3362 and provided by Gladding, McBean. Consult factory regarding applicable deck attachment and accessories.

E. METHOD OF APPLICATION:

- Alternate rows shall be started at gable with half width field tile.
- All hip and ridge tile shall be set in cement mortar and fastened with noncorrosive nails. Refer to "Clay Roof Tile Specifications and Suggested Installation Details" showing desired construction of hips, ridges and gable rakes.
- All tile in contact with cement mortar shall be immersed in water for at least 2 minutes before laying to avoid drying out the mortar before setting and curing.

Shade Blending: After 75 to 100 tiles are installed, examine the application at a distance from ground level for straight, true lines and good color blend. This should be done at regular intervals during installation to insure an attractive and acceptable roof. Blending of shade is particularly important to avoid streaks or "hot spots." Acceptable blending cannot be done at the factory or on the ground; it can only be done as the tile is applied.

G110a 5,000 CP 05/12/04

GLADDING, McBEAN
a division of PABCO building products, LLC
601 7th Street / P.O. Box 97, Lincoln, CA 95648
(800) 964-2529 Ext.204 (916) 645-3341 Ext.204
Fax (916) 645-1723
www.gladdingmcbean.com

Appendix D
Noise Analysis

SAN MARINO CENTER IMPROVEMENT PROJECT

NOISE STUDY

Prepared for:

ELMT Consulting, Inc.
2201 North Grand Avenue, Suite 10098
Santa Ana, CA 92711

Prepared by:

BPG
BIRDSEYE
PLANNING GROUP

September 2021

SAN MARINO CENTER IMPROVEMENT PROJECT
SAN MARINO, CALIFORNIA
Noise Study

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SAN MARINO CENTER IMPROVEMENT PROJECT
SAN MARINO, CALIFORNIA
NOISE STUDY

This report is an analysis of the potential noise impacts associated with the proposed San Marino Community Center Improvement project in the City of San Marino, California located in Los Angeles County. This report has been prepared by Birdseye Planning Group (BPG) under contract to ELMT Consulting, Inc., to support preparation of the environmental documentation pursuant to the California Environmental Quality Act (CEQA). This study analyzes the potential for temporary impacts associated with construction activity and long-term impacts associated with operation of the proposed project.

PROJECT DESCRIPTION

The San Marino Center Improvement Project (Project) is located at 1800 Huntington Drive, San Marino, which is the south side of Huntington Drive, adjacent and east of the Huntington Middle School and west and adjacent to the Crowell Public Library, identified by Los Angeles County Assessor's Parcel Number (APNs) 5334-024-903.The site currently supports an existing community center. The Project proposes to change the San Marino Center (SMC) building façade from a Modern Colonial Revival to a Spanish Mediterranean architectural style which is similar to adjacent buildings. Other upgrades include rehabilitation of the building interior to include additional offices to accommodate six City Recreation Department staff, optimize the interior public gathering space, and repair/replace the heating/air conditioning, plumbing and electrical systems and light fixtures to current building code standards.

The proposed interior space reconfiguration will allow for an occupancy rating of 1,083. Access to the site is via two driveways – one fronting Huntington Drive and the other along West Street east of the site. Access would not be changed with implementation of the project.

Exterior improvements include the following are comprised of the following:

- Replace the decorative wrought iron posts with stucco columns;
- Replace the wood shingled roof with the terra cotta tile;
- Replace doors and windows to match existing rectangular and square shapes but with grid patterns similar to the library windows as appropriate;
- Add wood accents where appropriate and complimentary such as around windows and the entry door;
- Add an open patio area at the back of the building that will have a stucco wall and a wood trellis ceiling similar to the open space areas at the library;
- Remove canopies that were added to the building after its original construction will be removed.
- New paint and stucco repair that will match the color of the library.

Exterior features that will remain intact or will not be impacted by the proposed improvements include the following:

- The cornerstone of the building inscribed with "San Marino Women's Club" near the building entry;
- Concrete walkway and concrete front patio; and
- Landscaping, including the large oak tree adjacent to the front entry, grassy areas and urban landscaping around the west and south of the building.

The project would not require ground disturbances associated with or grading. Minor demolition would be required. The majority of the work would be completed with hand tools or small pieces of equipment.

Adjacent land uses are vacant land to the Crowell Library to the east, a parking lot to the west; San Marino Unified School District offices to the south and Huntington Drive to the north. The proposed project is expected to be begin construction in early 2022 and be completed within 6-8 months. The project site is shown in Figure 1. Proposed floor plans are shown in Figure 2.

SETTING

Overview of Sound Measurement

Noise level (or volume/loudness) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level would be half as loud and influence the character of ambient noise without influencing the overall sound level. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations. Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (i.e., industrial machinery). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of

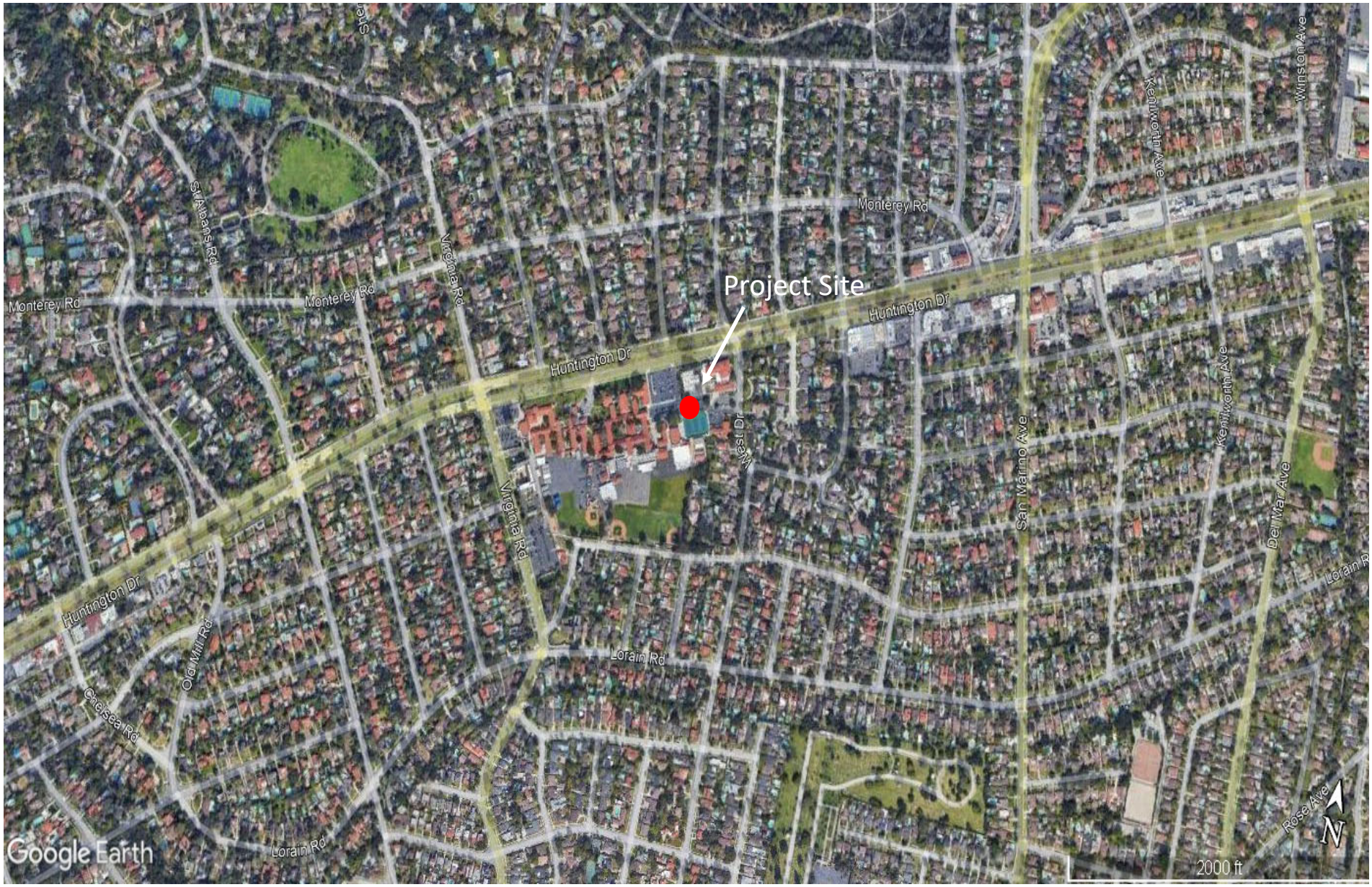
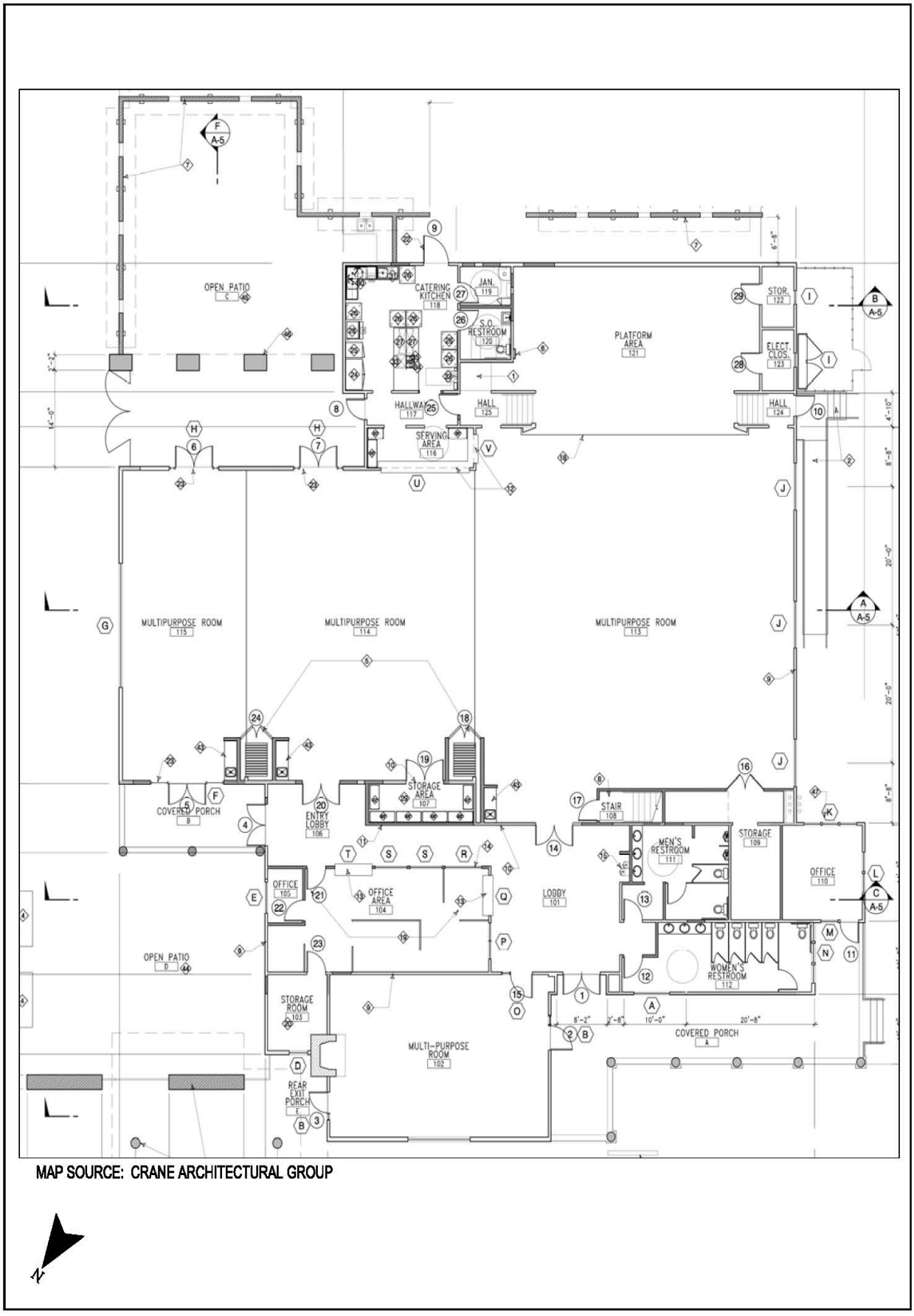


Figure 1—Vicinity Map



o:\job_file\4416\dwg\f2-2.dwg LDP 08:49:47 08/06/2021 rodriquez

Figure 2—Site Plan

buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed (approximately 30 years old or older) generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units and office buildings construction to California Energy Code standards is generally 30 dBA or more (HMMH, 2006).

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound pressure level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. Lmax is the highest RMS (root mean squared) sound pressure level within the measuring period, and Lmin is the lowest RMS sound pressure level within the measuring period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10-dBA penalty for noise occurring during nighttime (10 p.m. to 7 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7 p.m. to 10 p.m. and a 10 dBA penalty for noise occurring from 10 p.m. to 7 a.m. Noise levels described by Ldn and CNEL usually do not differ by more than 1 dB. Table 1 shows sounds levels of typical noise sources in Leq.

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Urban areas contain a variety of land use and development types that are noise sensitive including residences, schools, churches, hospitals and convalescent care facilities. Nearby sensitive receptors are the Valentine Elementary School and Huntington Middle School located adjacent to and south/southwest and single-family residences located across Huntington Drive approximately 200 feet north/northwest and northeast of the site and across from the Crowell Library on West Drive.

Project Site Setting

The Project site is an existing community center, constructed in 1952 as the San Marino Women's Club. The project site is bounded on the west by the Crowell library, on the east and south by the Huntington Middle School, and on the north by Huntington Drive. The most common and primary sources of noise in the project site vicinity are motor vehicles (e.g., automobiles and trucks) operating on Huntington Drive. Motor vehicle noise is of concern because where a high

Table 1. Sound Levels of Typical Noise Sources and Noise Environments

Noise Source (at Given Distance)	Noise Environment	A-Weighted Sound Level (Decibels)	Human Judgment of Noise Loudness (Relative to Reference Loudness of 70 Decibels*)
Military Jet Takeoff with Afterburner (50 ft)	Carrier Flight Deck	140	128 times as loud
Civil Defense Siren (100 ft)		130	64 times as loud
Commercial Jet Take-off (200 ft)		120	32 times as loud **Threshold of Pain**
Pile Driver (50 ft)	Rock Music Concert Inside Subway Station (New York)	110	16 times as loud
Ambulance Siren (100 ft) Newspaper Press (5 ft) Gas Lawn Mower (3 ft)		100	8 times as loud **Very Loud**
Food Blender (3 ft) Propeller Plane Flyover (1,000 ft) Diesel Truck (150 ft)	Boiler Room Printing Press Plant	90	4 times as loud
Garbage Disposal (3 ft)	Noisy Urban Daytime	80	2 times as loud
Passenger Car, 65 mph (25 ft) Living Room Stereo (15 ft) Vacuum Cleaner (10 ft)	Commercial Areas	70	Reference Loudness **Moderately Loud**
Normal Speech (5 ft) Air Conditioning Unit (100 ft)	Data Processing Center Department Store	60	1/2 as loud
Light Traffic (100 ft)	Large Business Office Quiet Urban Daytime	50	1/4 as loud
Bird Calls (distant)	Quiet Urban Nighttime	40	1/8 as loud **Quiet**
Soft Whisper (5 ft)	Library and Bedroom at Night Quiet Rural Nighttime	30	1/16 as loud
	Broadcast and Recording Studio	20	1/32 as loud **Just Audible**
		0	1/64 as loud **Threshold of Hearing**

Source: Compiled by dBF Associates, Inc., 2016

number of individual events occur, it can create a sustained noise level. Aircraft overflights were observed but do not noticeably contribute to the ambient noise environment.

To gather data on the general noise environment at the project site, two weekday morning 15-minute noise measurements were taken on and in proximity to the site on April 7, 2021, using an ANSI Type II integrating sound level meter. The predominant noise source was traffic. The temperature during monitoring was 65 degrees Fahrenheit with no perceptible wind.

Site 1 is located on the project site approximately 30 feet south of the nearest north/eastbound lanes of Huntington Drive. This location is on the site and represents noise levels at the sensitive receivers located along the north side of Huntington Drive. During monitoring, 224 cars/light trucks, four medium trucks (six tires/two axles) and zero heavy trucks (all vehicles with three or more axles) passed the site. Site 2 is located in front of the Crowell Library north of the site near the intersection of Huntington Drive and West Drive. This location is northeast of the site and represents noise levels at the nearest sensitive receivers located to the north of West Drive. During monitoring, 290 cars/light trucks, 10 medium truck (six tires/two axles) and zero heavy trucks (all vehicles with three or more axles) passed the site. The dominant noise source is traffic operating primarily on Huntington Drive. Table 2 identifies the noise measurement locations and measured noise levels. Monitoring locations are shown in Figure 3. As shown, the Leq was 61.6 dBA at Site 1 and 63.7 dBA at Site 2. The monitoring data sheet is provided as part of Appendix A.

Table 2
Noise Monitoring Results

Measurement Location	Primary Noise Source	Sample Time	Leq (dBA)
Project site approximately 30 feet south of the nearest Huntington Drive travel lane	Traffic	Weekday morning	61.6
Adjacent to the Crowell Library north of the site.	Traffic	Weekday morning	63.7

Source: Field visit using ANSI Type II Integrating sound level meter.

Regulatory Setting

In 1976, the California Department of Health, State Office of Noise Control published a recommended noise/land use compatibility matrix which many jurisdictions have adopted as a standard in their general plan noise elements. The California State Office of Planning and Research 2017 updates to the General Plan Guidelines, Appendix D Noise Element Guidelines, Figure 2, shows that exterior noise levels up to 60 dBA (CNEL or Ldn) are normally compatible in rural residential areas. Noise levels up to 70 dBA (CNEL or Ldn) are conditionally compatible.

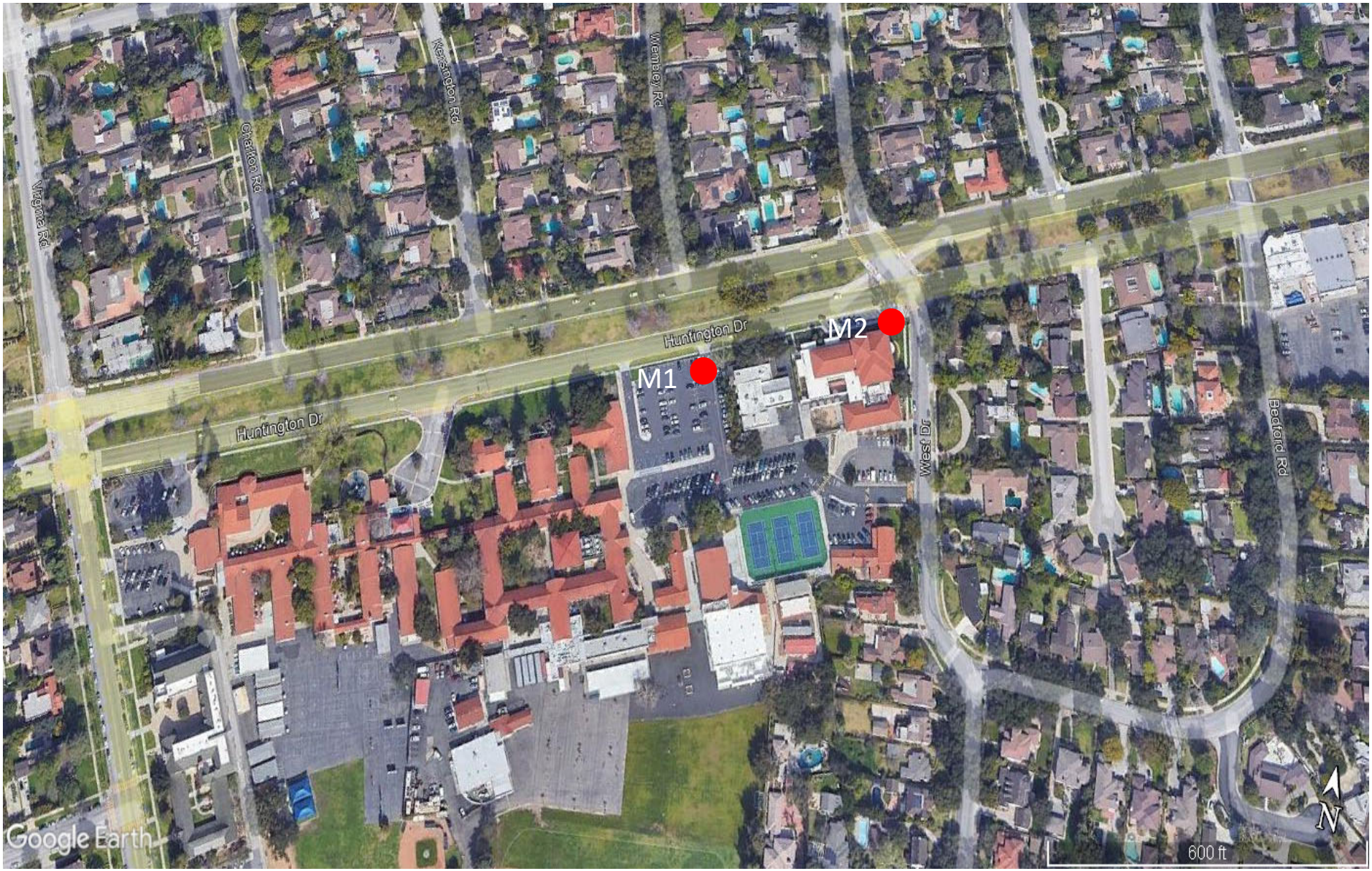


Figure 3—Noise Monitoring Locations

● - **Monitoring Locations**

City of San Marino Noise Ordinance

The project site is zoned Residential (R)-1. Per Section 14.04.04 of the Municipal Code, noise levels in R-1 Residential zones must not exceed 55 dBA between 7:00 a.m. and 10:00 p.m. and 45 dBA 10:00 p.m. 7:00 a.m.

Per Section 14.04.07 of the Municipal Code, it is unlawful for a person within a residential zone, or within a radius of five hundred feet (500 feet) therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures or projects or to operate equipment in such a manner that noise is produced which would constitute a violation of Section 14.04.05 of the Municipal Code unless, a permit is obtained from the planning and building director. As defined in Section 14.04.05, noise levels at any adjacent residential property line must not exceed 65 dB when originating from any parcel in an R-1 Zone and 75 dB from any parcel in a C-1 Zone, Park and Recreational Zone or Historical and Cultural Zone. These standards are used herein for the purpose evaluating stationary noise impacts.

With respect to traffic noise, no specific standards for this source are provided in the San Marino Municipal Code. In 1976, the California Department of Health, State Office of Noise Control published a recommended noise/land use compatibility matrix which many jurisdictions have adopted as a standard in their general plan noise elements. The California State Office of Planning and Research (updated in 2017) General Plan Guidelines, Appendix D Noise Element Guidelines, shows that exterior noise levels up to 60 dBA (CNEL or Ldn) are normally compatible. Noise levels between 60 dBA and 70 dBA (CNEL or Ldn) are conditionally compatible. These noise levels are referenced in the Noise Element of the San Marino General Plan (page V-82); and thus, are used as the standard herein for the purpose of evaluating traffic noise impacts. As shown in Table 2, existing conditions along Huntington Drive in proximity to the project site exceed 60 dBA.

Vibration Standards

Vibration is a unique form of noise as the energy is transmitted through buildings, structures and the ground whereas audible noise energy is transmitted through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as peak particle velocity (PPV) in inches per second and is referenced as vibration decibels (VdB). The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Table 3 shows various vibration levels and typical human responses and effects on buildings.

The San Marino Municipal Code does not address construction-related vibration; thus, for the purpose of evaluating project-related vibration impacts, thresholds established in the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* (September 2018) (Table 6-3) are used. A threshold of 65 VdB is used for buildings where low ambient vibration is

Table 3
Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels

Peak Particle Velocity (inches/second)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effects on Buildings
0.006–0.019	64–74	Range of threshold of perception.	Vibrations unlikely to cause damage of any type.
0.08	87	Vibrations readily perceptible.	Recommended upper level to which ruins and ancient monuments should be subjected.
0.01	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities.	Virtually no risk of architectural damage to normal buildings.
0.2	94	Vibrations may begin to annoy people in buildings.	Threshold at which there is a risk of architectural damage to normal dwellings.
0.4–0.6	98-104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Architectural damage and possibly minor structural damage.

Source: Caltrans, April 2020

essential for interior operations. These buildings include hospitals and recording studios. A threshold of 72 VdB is used for residences and buildings where people normally sleep (i.e., hotels and rest homes). A threshold of 75 VdB is used for institutional land uses where activities occur primarily during the daytime (i.e., churches and schools). The threshold used for the proposed project is 72 VdB as school buildings and single-family residences are the nearest sensitive receptors to the site.

Construction activities such as blasting, pile driving, demolition, excavation or drilling have the potential to generate ground vibrations. With respect to ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 92 VdB would damage buildings extremely susceptible to vibration damage. The existing San Marino Center building is eligible for inclusion in the National Register of Historic Places; and thus, may be susceptible to vibration damage. However, no construction activities with the potential to generate ground vibration would be required to complete the proposed improvements. Thus, 94 VdB (PPV 0.2) is used herein to evaluate potential vibration impacts to neighboring structures. Construction activities referenced above that would generate significant vibration levels are not proposed. However, to provide information for use in completing the CEQA evaluation, construction-related vibration impacts are evaluated using the above referenced criteria.

IMPACT ANALYSIS

Methodology and Significance Thresholds

Methodology and Significance Thresholds

Construction noise estimates are based upon noise levels reported by the Federal Highway Administration for construction equipment and the distance between sensitive properties and Huntington Drive. Reference noise levels are used herein to estimate noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 3 dBA for line sources such as haul roads and 6 dB per doubling of distance (line-of-sight method of sound attenuation) for stationary sources and construction equipment. For the purpose of CEQA review, noise levels along Huntington Drive and neighboring streets are estimated based on traffic volumes provided in the Traffic Impact Analysis (September 2021).

The impact analysis provided below is based on the following CEQA Guidelines, as listed in Appendix G of the CEQA Guidelines. An impact is considered significant if the project would:

a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
b. Generate excessive groundborne vibration or groundborne noise levels?
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project is not located in proximity to an airport or private airstrip. Threshold **c** above does not apply and is not discussed further in this report.

Temporary Construction Noise

The primary main noise source during construction activities would be associated with demolition and construction of the proposed improvements. Most of the improvements would occur indoors; and thus, would be inaudible to neighboring uses. Exterior improvements requiring removal of concrete or other hardscape materials would require the use of jackhammers and small tractors/bobcats to transport material to haul trucks. Table 4 shows typical noise levels associated with heavy construction equipment.

The noise level used to estimate the typical maximum noise level that could occur is based on use of a jackhammer because it is likely to be the noisiest type of equipment used over a sustained period of time during exterior demolition. Installation of new concrete hardscape would require use of concrete mixers to deliver the material. Interior improvements would

require materials be delivered to the site; however, noise would be limited to haul trucks. Actual noise levels will fluctuate throughout the day and may periodically exceed 95 dBA at the property line depending on the location of jackhammer use used and whether multiple pieces of equipment are operating simultaneously in the same area.

Table 4
Typical Maximum Construction Equipment Noise Levels

Equipment Onsite	Typical Maximum Level (dBA) 25 Feet from the Source	Typical Maximum Level (dBA) 50 Feet from the Source	Typical Maximum Level (dBA) 100 Feet from the Source
Air Compressor	84	79	73
Backhoe	84	79	73
Bobcat Tractor	84	79	73
Concrete Mixer	85	78	72
Bulldozer	88	82	76
Jack Hammer	95	89	83
Pavement Roller	86	80	74
Street Sweeper	88	82	76
Man Lift	81	75	69
Dump Truck	82	76	70

Source: Noise levels based on FHWA Roadway Construction Noise Model (2006) Users Guide Table 1.
Noise levels based on actual maximum measured noise levels at 50 feet (Lmax).
Noise levels assume a noise attenuation rate of 6 dBA per doubling of distance.

Noise-sensitive uses near the project site include the Crowell Library which is located adjacent to and northeast of the San Marino Center. Existing school buildings and single-family residences located 200-300 feet west, south and east of the site. Typical maximum construction noise levels shown for 25 feet in Table 4 would be expected to occur at adjacent receivers based on the distance from the property line. For reference purposes, construction noise levels at varying distances from the source are shown in Table 5.

Table 5
Typical Maximum Construction Noise Levels at Various Distances from Project Construction

Distance from Construction	Typical Maximum Noise Level at Receptor (dBA)
25 feet	88
50 feet	82
100 feet	76
250 feet	68

500 feet	62
1,000 feet	56

As stated, noise levels will exceed 65 dBA periodically during the construction process. Thus, per Section 14.04.05 of the Municipal Code, a permit issued by the planning and building director would be required. With approval of the permit, noise impacts would be **less than significant.**

Construction Noise Reduction Measures

No significant temporary construction noise impacts are anticipated; no mitigation is required. However, construction noise levels could be reduced through implementation of the following measures:

N-1 Construction Equipment. Electrical power shall be used to run air compressors and similar power tools. Internal combustion engines should be equipped with a muffler of a type recommended by the manufacturer and in good repair. All diesel equipment should be operated with closed engine doors and should be equipped with factory-recommended mufflers. Construction equipment that continues to generate substantial noise at the project boundaries should be shielded with temporary noise barriers, such as barriers that meet a sound transmission class (STC) rating of 25, sound absorptive panels, or sound blankets on individual pieces of construction equipment. Stationary noise-generating equipment, such as generators and compressors, should be located as far as practically possible from the nearest residential property lines.

N-2 **Limit Operations Adjacent to Receivers**. Limit the number of large pieces of equipment (i.e., bulldozers or concrete mixers) operating adjacent to receivers to one at any given time.

N-3 Neighbor Notification. Provide notification to residential occupants nearest to the project site at least 24 hours prior to initiation of construction activities that could result in substantial noise levels at outdoor or indoor living areas. This notification should include the anticipated hours and duration of construction and a description of noise reduction measures being implemented at the project site. The notification should include a telephone number for local residents to call to submit complaints associated with construction noise. The notification should be posted along Huntington Drive and be visible from adjacent properties.

Temporary Construction-Related Vibration

Thus, this discussion focuses on temporary vibration caused by construction. As referenced, the closest building is the San Marino Center and neighboring Crowell Library. Use of a jackhammer and small tractor/bobcat may generate localized vibration; however, based on the

information in Table 6 below, vibration levels would not reach or exceed levels required to cause any structural damage or related impacts to the San Marino Center or Crowell Library. The nearest residence is approximately 205 feet north of the site across Huntington Drive. Based on the information presented in Table 6, vibration levels would attenuate to approximately 61 dBA at this residence during construction assuming use of a jackhammer. Vibration levels would be below the 72 VdB threshold required to be perceptible at neighboring residences. Temporary vibration impacts would be **less than significant.**

Table 6
Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB				
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Large Bulldozer	87	81	79	77	75
Loaded Trucks	86	80	78	76	74
Jackhammer	79	73	71	69	67
Small Bulldozer	58	52	50	48	46

Source: Federal Railroad Administration, 1998

Operational Noise Exposure

Operation of the proposed project was evaluated for potential exterior traffic related impacts caused by increased traffic volumes associated with the project. Noise levels associated with existing and future traffic were based on trip generation estimates provided in the Traffic Impact Analysis (Linscott, Law and Greenspan, Inc. September 2021). A doubling of baseline traffic volumes would be required to cause a noticeable increase (3 dBA) in traffic noise. As stated, baseline conditions currently exceed 60 dBA, the normally acceptable sound level referenced in the San Marino General Plan Noise Element. Thus, the baseline and with project sound levels were calculated to determine whether the project would generate enough traffic to noticeably increase (+3 dBA or greater) the Leq over baseline conditions.

Exterior Traffic Noise. Traffic is the primary noise source that would be generated by the proposed project. As stated, existing measured noise levels along Huntington Drive exceed the exterior residential standard (60 dBA) referenced above during the monitoring period. Whether a traffic-related noise impact would occur is based on whether project traffic, when added to the existing observed traffic on Huntington Drive, would cause noise to noticeably increase over measured ambient conditions (i.e., +3 dBA) and/or exceed the 60 dBA standard in the City of San Marino General Plan Noise Element.

The roadway network (i.e., Huntington Drive and West Drive) adjacent to the project site was modeled using the Federal Highway Administration Traffic Noise Model (TNM) version 2.5 software (see Appendix A). The model calculates traffic noise at receiver locations based on

traffic volumes, travel speed, mix of vehicle types operating on the roadways (i.e., cars/trucks, medium trucks and heavy trucks) and related factors. Traffic volumes and vehicle mix on Huntington Drive are based on traffic counts obtained during the monitoring period.

Traffic volumes for the project were based on peak hour trip generation rates provided in the Traffic Impact Study Analysis. The proposed project would generate approximately 312 new daily trips. Of the total, 19 would occur in the morning (A.M.) peak hour and 25 would occur in the evening (P.M.) peak hour. The P.M. peak hour trips were added to baseline conditions to determine whether noise levels would increase as a result of project operation. The model was calibrated to calculate noise levels that are +/- 2 dBA those measured on-site and reported in Table 2.

Hourly average baseline noise levels (Leq) were calculated for the residential receivers located along Huntington Drive and West Drive northeast of the site. These are the closest receivers to the project site and would experience the highest concentration of project-related traffic. The receiving properties are defined as follows and shown in Figure 4:

1. Crowell Library adjacent to and northeast of the site;
2. Huntington Middle School buildings adjacent to the San Marino Center parking lost and Huntington Drive southwest of the site; and
3. Single-family residence at 1600 West Drive northeast of the site.

Baseline noise levels are shown Table 7. As shown, baseline conditions exceed the 60 dBA exterior standard at existing single-family residences and are consistent with measured noise levels. Noise levels associated with the project were calculated by distributing the 25 P.M. peak hour project trips into the baseline traffic volumes on Huntington Drive and West Drive. Volumes were concentrated in this area for the purpose of evaluating worst case noise conditions. The results are also shown in Table 7. Project peak hour traffic will have no effect on baseline traffic noise conditions.

Table 7
Modeled Noise Levels

Receptor	Existing Leq	Existing CNEL	With Project Leq	With Project CNEL	Decibel Change	Significant Impact
Site 1	62.6	63.6	62.6	63.6	+0.0	No
Site 2	63.6	64.6	63.6	64.6	+0.0	No
Site 3	63.1	64.1	63.1	64.1	+0.0	No

Interior Traffic Noise. California Energy Code Title 24 standards specify construction methods and materials that result in energy efficient structures up to a 30 dBA reduction in exterior noise levels (assuming windows are closed). This includes operation of mechanical ventilation (e.g., heating and air conditioning), in combination with standard building construction that includes dual-glazed windows with a minimum Sound Transmission Class (STC) rating of 26 or higher. When windows are open, the insertion loss drops to about 10 dBA.

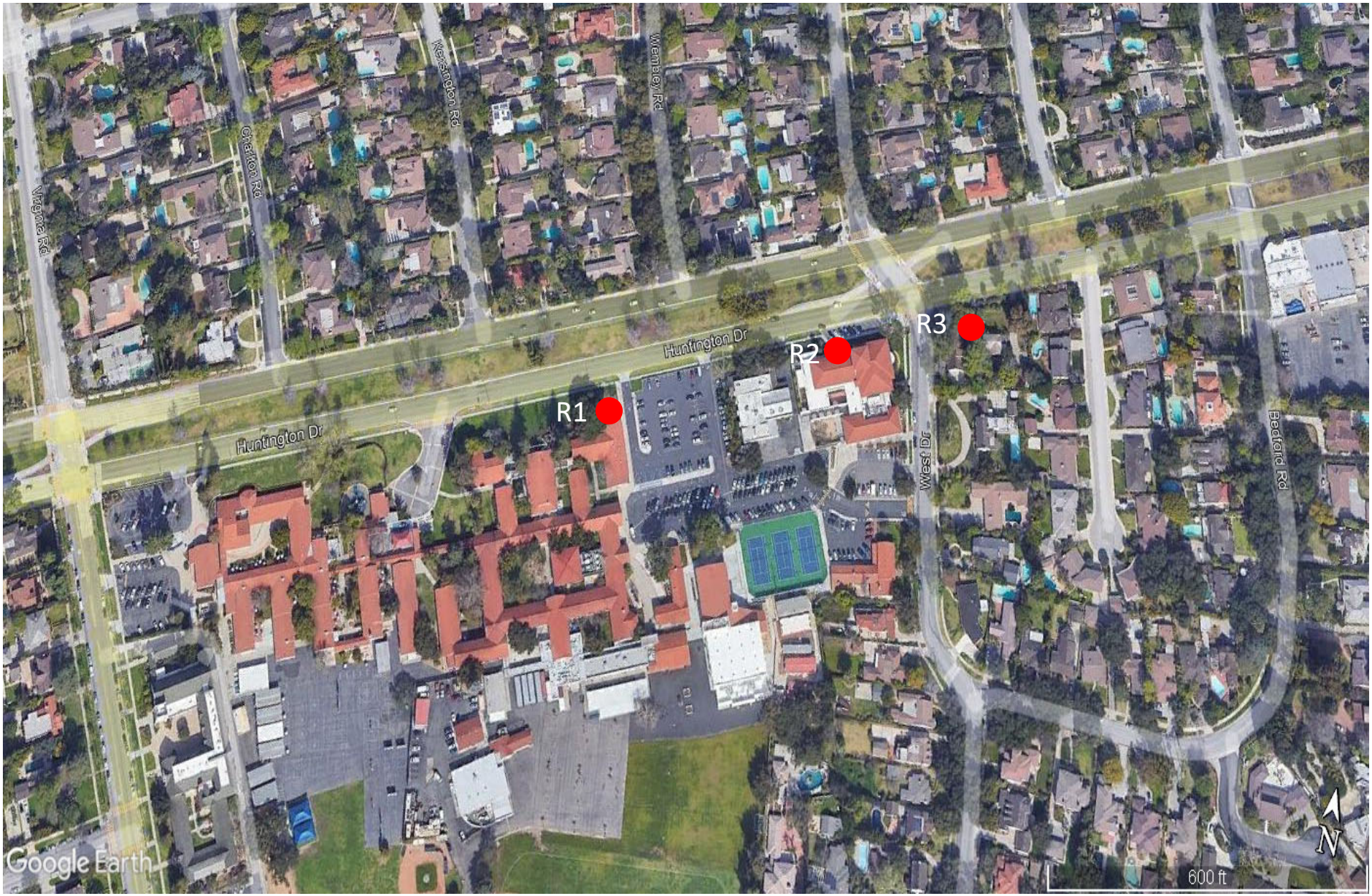


Figure 4—Noise Receivers ● **- Receiver Locations**

The receiving properties appear to have been constructed before Title 24 standards were implemented. As stated, the manner in which older buildings in California were constructed (approximately 30 years old or older) generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. Assuming windows are closed and a 20 dBA insertion loss, interior noise levels at residences modeled would range between 43 dBA and 44 dBA CNEL. Interior noise levels at receivers fronting Huntington Drive and West Drive in proximity to the site would be below the 45 dBA interior standard. In all cases modeled, the existing interior noise levels would change with the addition of project traffic.

CONCLUSION

As defined in Section 14.04.05, noise levels at any adjacent residential property line must not exceed 65 dB when originating from any parcel in an R-1 Zone and 75 dB from any parcel in a C-1 Zone, Park and Recreational Zone or Historical and Cultural Zone. The project site is located in an area designated for very low-density residential; thus, construction-related noise generated on-site may exceed 65 dBA at neighboring receivers. To avoid a municipal code violation, a permit would be obtained from the planning and building director. No significant or adverse noise impacts would occur as a result of project construction. Project related traffic would not change existing noise levels along Huntington Drive or West Drive. Noise levels would remain below 65 dBA CNEL. All events occurring on-site would be hosted indoors; thus, no exterior noise source would be audible at neighboring receivers.

REFERENCES

California Department of Transportation, Transportation and Construction Vibration Guidance Manual, April 2020. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf

City of San Marino, Municipal Code Section 14.04.04 and 14.04.07

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County of Riverside General Plan, Noise Element, Tables N-1 and N-2, December 2015.

dBF & Associates, Inc., Reference Noise Level Compilation Table, 2016.

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Federal Transit Administration. *Transit Noise and Vibration Impact Assessment*. September 2018.

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Appendix A

Monitoring Data Sheet and Modeling Results

FIELD NOISE MEASUREMENT DATA

Project Name: San Marino Community Center Page 1 of
Project #: Day / Date My Name.

Sound Level Meter
Model #: Piccolo II
Serial #:
Weighting: (A) / C / Flat
Response: (Slow) / Fast / Impl
Windscreen: (Yes) / No

Calibrator
Model #: Cesva
Serial #: Calibration
Pre-Test: ____ dBA SPL
Post-Test: ____ dBA SPL

Weather Meter
Model # Serial #
Terrain: Hard / Soft / (Mixed)
Topo: (Flat) / Hilly (describe)
Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
1	7:05	7:20	68.6	46.5	71.8	66.4	57.2	50.5	1-2 W	65			0%
2	7:25	7:40	63.7	46.6	77.0	67.9	60.6	50.6	1-2 W	66			0%

Roadway Name: Huntington Drive
Speed (post/obs): 45 / 45
Number of Lanes: 6 / 6
Width (pave/row): 100' / 100'
1- or 2- way: 2 / 2
Grade: 0% / 0%
Bus Stops: ~~no~~ yes / yes
Stoplights: yes / yes
Street Parking: no / 290
Automobiles: 229 / 10
Medium Trucks: 4 / 0
Heavy Trucks: 0 / 1 helicopter overflight

Location(s) / GPS Reading(s):

Other Noise Sources: distant (aircraft) / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

Site 1

Start Date	4/7/2021
Start Time	7:03:25 AM
End Time	7:18:24 AM
Duration	00:14:59
Meas Mode	Single
Input Range	High
Input Type	Mic
SPL Time Weight	Slow
LN% Freq Weight	dBA
Overload	No
UnderRange	Yes
Sensitivity	18.44mV/Pa

LZeq	70.2
LCeq	69.0
LAeq	61.6
LZSmax	82.9
LCSmax	82.0
LASmax	71.8
LZSmin	64.8
LCSmin	63.1
LASmin	46.5
LZE	99.7
LCE	98.5
LAE	91.1
LZpeak	94.7
LCpeak	93.0
LApeak	85.9
1%	70.2
2%	69.6
5%	67.8
8%	66.7
10%	66.1
25%	62.1
50%	57.2
90%	50.5
95%	49.5
99%	47.7

Site 2

Start Date	4/7/2021
Start Time	7:24:15 AM
End Time	7:39:14 AM
Duration	00:14:59
Meas Mode	Single
Input Range	High
Input Type	Mic
SPL Time Weight	Slow
LN% Freq Weight	dBA
Overload	No
UnderRange	Yes
Sensitivity	18.44mV/Pa

LZeq	74.8
LCeq	73.7
LAeq	63.7
LZSmax	93.0
LCSmax	92.4
LASmax	77.0
LZSmin	64.0
LCSmin	61.7
LASmin	46.6
LZE	104.3
LCE	103.2
LAE	93.2
LZpeak	102.1
LCpeak	102.1
LApeak	90.0
1%	71.4
2%	70.3
5%	69.0
8%	68.3
10%	67.9
25%	65.1
50%	60.6
90%	50.6
95%	49.4
99%	47.7

<Organization?>
21 September 2021
<Analysis By?>
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: San Marino Center - Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0
Receiver2	2	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
Receiver3	3	1	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?>
21 September 2021
<Analysis By?>
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: San Marino Center - w-Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0
Receiver2	2	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
Receiver3	3	1	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix E
Traffic Impact Analysis

LINSCOTT LAW & GREENSPAN engineers

TRANSPORTATION IMPACT STUDY

SAN MARINO CENTER IMPROVEMENT PROJECT

City of San Marino, California
September 21, 2021

Prepared for:

ELMT Consulting
2201 N. Grand Avenue, #10098
Santa Ana, California 92711

LLG Ref. 1-20-4416-1

Prepared by:

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TRANSPORTATION IMPACT STUDY

SAN MARINO CENTER IMPROVEMENT PROJECT

City of San Marino, California
September 21, 2021

1.0 INTRODUCTION

1.1 Transportation Study Overview

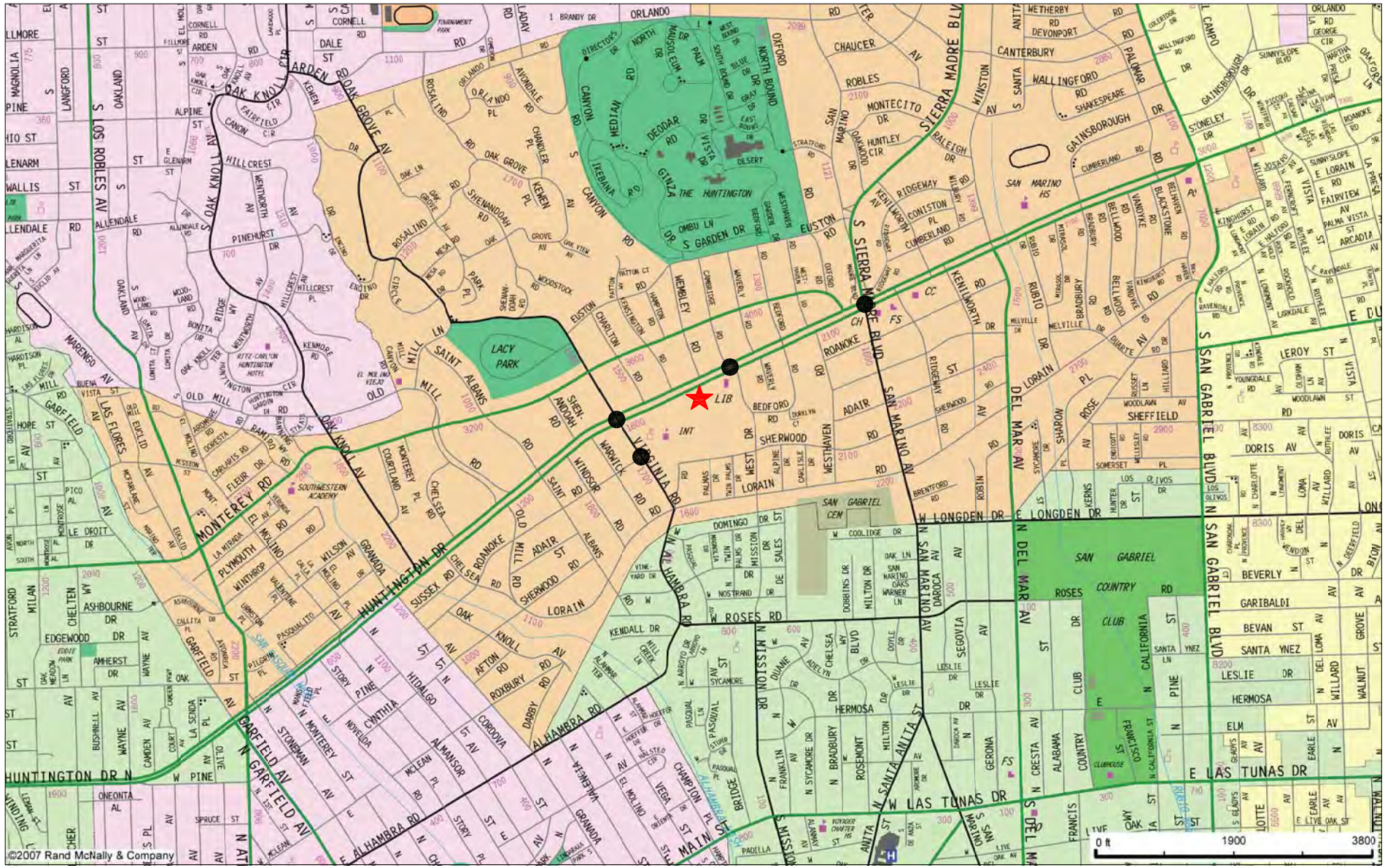
This transportation impact study has been conducted to identify and evaluate the potential transportation impacts of the proposed San Marino Center Improvement project ("proposed project"). The project site is located at 1800 Huntington Drive, along the south side of Huntington Drive, west of West Drive in the City of San Marino. The proposed project site is generally bounded by Huntington Drive to the north, the existing parking lot and tennis courts for Henry E. Huntington Middle School to the south and west, and the Crowell Public Library to the east. The project site and general vicinity are shown in ***Figure 1-1***.

The transportation assessment follows the analysis methodology that is consistent with the *City of San Marino Citywide Traffic Circulation Study*[1]. In compliance with the California Environmental Quality Act (CEQA) Sections 15064.3 and 15064.7, the City of San Marino has adopted Vehicle Miles Traveled (VMT) for the purpose of analyzing transportation impacts under CEQA. In addition, the City maintains vehicle Level of Service (LOS) standards for local transportation infrastructure. Therefore, the Guidelines identify both CEQA based analysis requirements and non-CEQA based analysis requirements for analyzing the potential transportation impacts of proposed development projects.

This study evaluates potential project-related VMT impacts pursuant to the screening criteria, analysis tools, and thresholds adopted and approved for use by the City of San Marino. The study also evaluates potential project-related effects on LOS at four (4) key intersections in the vicinity of the project site. The study intersections were determined in consultation with City of San Marino staff. The Highway Capacity Manual (HCM) method was used to determine LOS for the three (3) signalized intersections and one (1) unsignalized intersection.

This report (i) presents the proposed project's existing transportation network context, (ii) presents existing traffic volumes, (iii) forecasts cumulative baseline conditions, (iv) forecasts project-generated traffic, (v) assesses the potential for project-related transportation impacts consistent with the CEQA compliant and non-CEQA compliant metrics set forth by the City of San Marino, and (vi) recommends transportation mitigation and/or improvement measures, where necessary.

[1] *City of San Marino Citywide Traffic Circulation Study*, prepared by Iteris, March 11, 2021.



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★ Project Site

● Study Intersection

Figure 1-1
Vicinity Map

San Marino Center Improvement Project

1.2 Study Methodology

The CEQA and non-CEQA analysis criteria for this transportation assessment were identified in consultation with City of San Marino staff. The analysis criteria were determined based on the City's Guidelines, the proposed project description and location, and the characteristics of the surrounding transportation system. As the Lead Agency under CEQA, the City of San Marino confirmed the appropriateness of the analysis criteria when it approved the transportation assessment Scope of Work Memorandum of Understanding (MOU).

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743 (Steinberg, 2013). Among other things, SB 743 created a process to change the methodology to analyze transportation impacts under CEQA (Public Resources Code section 21000 and following) in order to promote: 1) the reduction of greenhouse gas emissions, 2) the development of multimodal transportation networks, and 3) a diversity of land uses. On December 30, 2013, the State of California Governor's Office of Planning and Research (OPR) released a preliminary evaluation of alternative methods of transportation analysis, which included analysis based on project VMT rather than impacts to intersection Level of Service. OPR issued other draft discussion documents in March 2015 and January 2016, suggesting some new revisions to the state CEQA Guidelines. In November 2017, OPR submitted the proposed amendments to the CEQA Guidelines to the State's Natural Resources Agency (that include a proposed new Guidelines section 15064.3 which governs how VMT-based analyses of potential traffic impacts should be conducted). On January 26, 2018, the Natural Resources Agency published a Notice of Rulemaking, commencing the formal rulemaking process for the amendments to the CEQA Guidelines. On December 28, 2018, the California Office of Administrative Law adopted the proposed amendments, formally implementing the use of VMT as the metric for transportation analysis under CEQA and providing a grace period allowing local agencies to opt-in to the new metrics. State-wide implementation of the new metric was required by July 1, 2020.

In anticipation of the mandated change to VMT, the San Gabriel Valley Council of Governments (SGVCOG), of which the City of San Marino is a participating agency, undertook the SGVCOG SB 743 Implementation Study to assist with answering important implementation questions about the methodology, thresholds, and mitigation approaches for VMT impact analysis in the member agencies. The City of San Marino utilized the information produced through the Implementation Study to adopt a methodology and significance thresholds for use in CEQA compliant transportation analyses. The new metric and thresholds of significance were formally adopted through City Council Resolution No. 20-18[2] on July 8, 2020. In alignment with the goals of SB 743, the City also requires an evaluation of a project's impact on the multi-modal pedestrian, bicycle, and transit network.

[2] Resolution No. 20-18, *A Resolution of the City Council of the City of San Marino, California, Adopting "Vehicle Miles Traveled" Thresholds of Significance for Purposes of Analyzing Transportation Impacts Under the California Environmental Quality Act*, adopted on July 8, 2020.

The City's Guidelines further note that SB 743 does not prevent agencies from continuing to analyze delay or LOS outside of CEQA review for other transportation planning or analysis purposes (i.e., general plans, impact fee programs, corridor studies, congestion reduction, or ongoing network monitoring). The City has LOS standards which local transportation infrastructure should strive to maintain. The LOS standards apply to discretionary approvals of new land use development projects. Therefore, the City's Guidelines also include requirements for non-CEQA analyses. Specifically, the City requires utilization of the latest version of the Highway Capacity Manual (HCM) methodology to evaluate LOS at signalized and unsignalized intersections.

The proposed project's CEQA transportation impacts have been evaluated based on the City of San Marino's adopted VMT screening criteria, methodology, and thresholds. In order to evaluate the proposed project's effect on local transportation infrastructure, a non-CEQA analysis of four (4) study intersections has been conducted for the weekday AM and PM peak hours, utilizing the HCM analysis methodologies for signalized and unsignalized intersections.

1.3 Los Angeles County Congestion Management Program Status

The Los Angeles County Congestion Management Program (CMP) was previously a state-mandated program that was enacted by the California State Legislature with the passage of Proposition 111 in 1990 that primarily utilized a level of service (LOS) performance metric. Pursuant to California Government Code §65088.3, local jurisdictions may opt out of the CMP requirement without penalty if a majority of the local jurisdictions representing a majority of the County's population formally adopt resolutions requesting to opt out of the program. As stated in a letter from the Los Angeles County Metropolitan Transportation Authority (Metro)[3], by August 28, 2019, 57 local jurisdictions, which in total represent 8.5 million in population, had adopted resolutions electing to be exempt from the CMP. With the Los Angeles County region having reached the statutorily required threshold, the provisions of the CMP are no longer applicable to any of the 89 local jurisdictions within Los Angeles County, regardless of whether or not a jurisdiction adopted an opt-out resolution. Therefore, CMP Traffic Impact Analysis is no longer required in Environmental Impact Reports.

[3] Kalieh Honish, Los Angeles County Metropolitan Transportation Authority, to Seleta Reynolds, City of Los Angeles Department of Transportation, "Re: Dissolution of the Congestion Management Program in Los Angeles County", August 28, 2019.

2.0 PROJECT DESCRIPTION

2.1 Existing Project Site

The project site is located at 1800 Huntington Drive, along the south side of Huntington Drive approximately 345 feet west of West Drive. The site is generally bounded by Huntington Drive to the north, the existing parking lot and tennis courts for Henry E. Huntington Middle School to the south and west, and the Crowell Public Library to the east. The proposed project site and general vicinity are shown in *Figure 1-1*.

The assessor's parcel number for the project site is 5334-024-903. The site is currently developed with the San Marino Center building which has been owned by the City since 2005 for community meetings and events. An aerial photograph of the existing project site is presented in ***Figure 2-1***.

2.2 Proposed Project Description

The proposed project consists of revitalizing and updating the existing San Marino Center (SMC) including rehabilitation of the building interior to include additional offices to accommodate six (6) City Recreation Department staff, optimization of the interior public gathering space, replacement of the heating/air conditioning, plumbing and electrical systems and light fixtures to current building code standards, renovation of the building and grounds for compliance with the Americans with Disabilities Act (ADA), and building façade similar to that of the adjacent buildings. The SMC building totals 10,832 gross square feet of building floor area.

Vehicular access to the project site is planned to continue to be provided via Huntington Drive and West Drive. The building renovation floor plan is shown in ***Figure 2-2***. The project build-out and occupancy year is anticipated by the year 2023.

2.3 Project Site Access

2.3.1 *Vehicular Site Access*

Direct vehicular access to the project site is planned to be accommodated by two (2) existing driveways on West Drive and two (2) existing driveways on Huntington Drive as shown in *Figure 2-1*. A third existing driveway on Huntington Drive is planned to be closed as part of the proposed project. Descriptions of the project site access points are provided in further detail below:

- Huntington Drive
  Two existing driveways along the south side of Huntington Drive will continue to provide access to the on-site parking area/s. The westerly Huntington Drive driveway currently accommodates inbound movements only (i.e., right-turn ingress movements only) from Huntington Drive. The middle and easterly Huntington Drive driveways both accommodate restricted access (i.e., right-turn ingress and egress movements only) due to the existing raised median island on Huntington Drive.

MAP SOURCE: GOOGLE EARTH

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Project Site

Existing Driveway

Driveway to be Closed by Project

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Figure 2-1
Aerial Photograph of Existing Site

San Marino Center Improvement Project

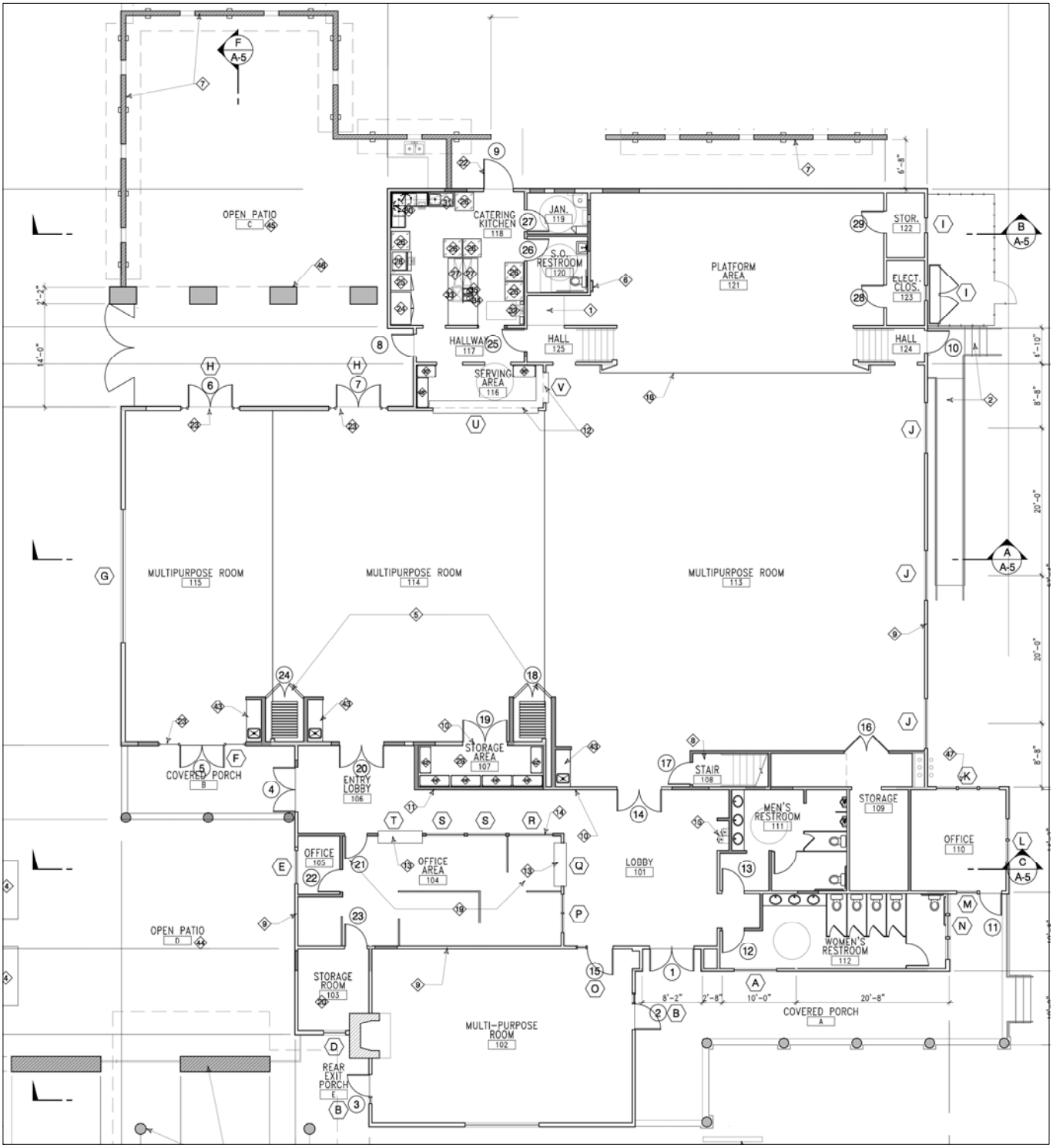

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Figure 2-2
Renovation Floor Plan

San Marino Center Improvement Project

- West Drive
  Two existing driveways along the west side of West Drive will continue to provide access to the on-site parking area/s. The northerly West Drive driveway accommodates outbound movements only (i.e., right-turn and left-turn egress movements). The southerly West Drive driveway accommodates restricted access during School days (i.e., northbound left-turn movement prohibited from 7:45 AM to 8:45 AM, and 2:45 PM to 3:30 PM).

Within the project site, vehicle circulation will be accommodated by the drive aisle situated in an east-west alignment in order for motorists to access the surface parking spaces located south and west of the SMC building.

2.3.2 *Non-Vehicular Site Access*

The project site is planned to accommodate non-vehicular access to the proposed SMC building. Pedestrian access within the project site will be accommodated by Americans with Disabilities Act (ADA) compliant walkways near the eastern portion of the site. New walkways will be provided to/from Huntington Drive which will interconnect with the building. These walkways will also provide exclusive pedestrian and bicycle access to/from the existing public sidewalk along the project site frontage. The walkways thus minimize the extent of pedestrian and bicycle interaction with vehicles at the site and provide a comfortable, convenient, and safe environment for pedestrians and bicyclists accessing the building from outside the project site.

2.4 Existing Overall Site and Total Parking Supply

Parking for the San Marino Center (SMC) exists on the west and south sides of the building, in the parking lot of the Henry E. Huntington Middle School, through a cooperative agreement with the San Marino Unified School District (SMUSD) for use of up to 48 spaces for both the SMC and the Crowell Public Library. The agreement between the City and the SMUSD was initiated in 2006 after the City purchased the building. In 2019, the shared parking use agreement for non-exclusive use of the 48 spaces was renewed for a 10-year term. The Huntington Middle School, located at 1700 Huntington Drive, is a public middle school in the SMUSD with an enrollment of approximately 650 students in 6th through 8th grades, with approximately 60 faculty/staff/administrators on-site. The regular day bell schedule is from 8:00 AM to 2:50 PM. Pick-up and drop-off operations for the Huntington Middle School is conducted within the surface parking lot with access via West Drive and Huntington Drive. The Crowell Public Library, located at 1890 Huntington Drive, was renovated in 2006 to enhance the exterior, optimize interior space, and to replace lighting, internet, and other electrical and heating/air conditioning before reopening in 2008. The 33,906 square-foot library provides community meeting space, a conference room, separate young adult and children's sections, a homework center, a computer training lab with 15 workstations, and room to expand the book collection.

Current hours of operation for the Crowell Public Library are from 10:00 AM to 9:00 PM on Mondays through Thursdays, 10:00 AM to 5:00 PM on Fridays and Saturdays, and 1:00 PM to 5:00 PM on Sundays.

Figure 2-3 provides an aerial photograph illustration of the overall existing site as well as the various surface parking areas. As shown in *Figure 2-3*, the surface parking lot for the Huntington Middle School currently provides a total of 171 spaces (i.e., 95 standard spaces, 58 staff/PTA reserved spaces, 10 visitor spaces, 6 handicap accessible spaces, and 2 handicap van accessible spaces). Three (3) handicap accessible parking spaces are provided in close proximity to the SMC building. A surface parking lot located directly south of the Crowell Public Library currently has 18 spaces (i.e., 14 standard spaces, 3 handicap accessible spaces, and 1 handicap van accessible space). Altogether, the on-site parking supply totals 192 spaces (i.e., 109 standard spaces, 58 staff/PTA reserved spaces, 10 visitor spaces, 12 handicap accessible spaces, 3 handicap van accessible spaces).

In addition to the on-site parking spaces, a total of 12 angled parking spaces are provided along the Crowell Public Library frontage along Huntington Drive and five (5) marked parallel spaces are provided along the west side of West Drive, south of Huntington Drive. For purposes of this parking analysis, when accounting for the 17 on-street spaces, the total on-site and on-street supply consists of 209 spaces.

It should be noted that the SMUSD office parking lot which provides 17 spaces (i.e., 16 standard spaces, 1 handicap accessible space) is not included as part of this parking analysis.

2.5 City Code Parking Requirements

A calculation of the Code parking requirement was prepared in accordance with the City of San Marino Municipal Code off-street parking requirements (Section 23.10.03, Number of Parking Spaces Required). In accordance with the Municipal Code parking regulations, the following parking requirements most applicable to the proposed project are as follows:

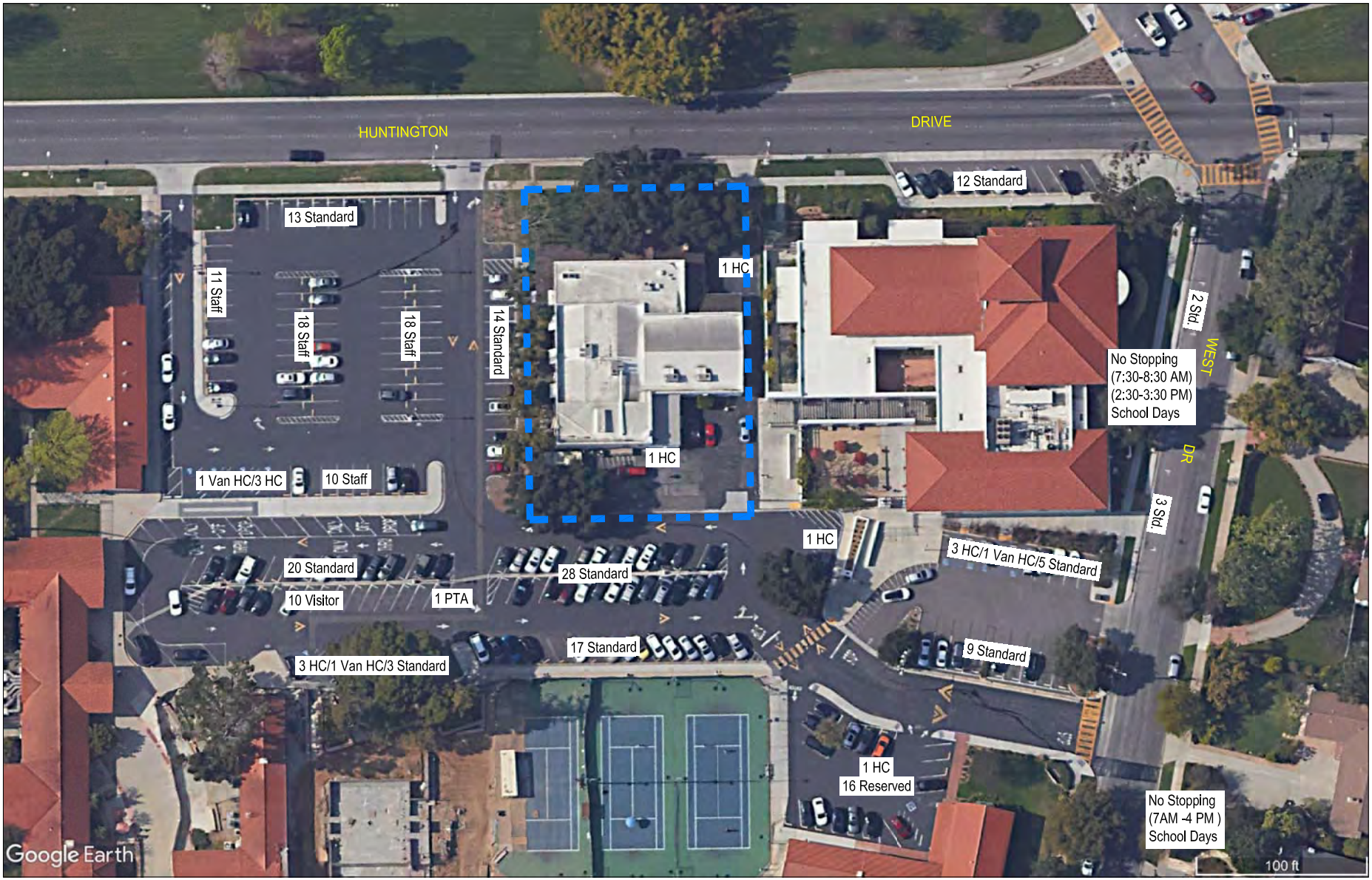
- Office buildings — For all buildings on Huntington Drive (including commercial areas on Chelsea Road, Granada Avenue, San Gabriel Boulevard and San Marino Avenue) existing on October 25, 2010:

  1 space for every 350 square feet of gross floor area.

Source: City of San Marino Municipal Code (Section 23.10.03).

Through strict application of the Municipal Code parking regulations, the following parking requirement would be calculated for the proposed project if the community center is categorized as an existing office building on Huntington Drive. As noted previously in the project description, the total gross floor area of the building is 10,832 square feet:

- Community Center: 10,832 SF x 1.0 space/350 SF = rounded to 31 spaces
  Total Code Required Project Parking = 31 spaces



MAP SOURCE: GOOGLE EARTH

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Project Site

Figure 2-3
Existing On-Site Parking Supply

As summarized above, the Code parking requirement for the proposed SMC Improvement Project totals 31 spaces.

2.6 Comparison of Industry Standard Parking Ratios

2.6.1 *ITE Parking Demand Ratios*

In addition to reviewing Code parking requirements, the average peak parking demand for various land uses are often estimated using parking ratios contained in other industry standard parking publications. First, LLG reviewed parking ratios contained in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*[4] publication. The *Parking Generation Manual* presents the state-of-the-practice understanding of the relationship between parking demand and various characteristics associated with individual land use developments, based on parking studies conducted at locations throughout North America. While the *Parking Generation Manual* does not contain a parking ratio specifically for a community center, the two land uses most applicable are those for a government office building and a recreational community center. Specifically, the ITE Land Use 730 (Government Office Building) and ITE Land Use 495 (Recreational Community Center) average peak parking demand ratios were reviewed so that it could be compared with that expected through application of the Code parking requirements. When utilizing the ITE publication, the parking demand can be calculated through application of the average peak parking demand ratios based on the total building gross floor area. The average weekday parking demand ratios for the two land use types are summarized below:

- ITE Land Use Code 730 (Government Office Building) average weekday peak period parking demand ratio: 2.99 spaces 1,000 square feet of gross floor area (12 study sites, average building size: 113,000 SF)

- ITE Land Use Code 495 (Recreational Community Center) average weekday peak period parking demand ratio: 2.07 spaces 1,000 square feet of gross floor area (10 study sites, average building size: 57,000 SF)

Application of the two ITE published parking demand ratios above to the proposed SMC Improvement project would yield an average weekday peak parking demand of 32 spaces (i.e., 2.99 spaces/1,000 SF x 10,832 SF = 32 parking spaces) as a government office building. When the parking demand ratios for the recreational community center is applied, an average weekday peak parking demand of 22 spaces (i.e., 2.07 spaces/1,000 SF x 10,832 SF = 22 spaces) is forecast. The Code parking requirement for the proposed SMC Improvement project (i.e., 31 spaces) is less than the parking demand forecast utilizing the ITE parking demand ratios for a government office building (i.e., 32 spaces) but more than that forecast for a recreational community center (i.e., 22 spaces).

[4] *Parking Generation Manual*, 5th Edition, Institute of Transportation Engineers, Washington D.C., January 2019.

2.6.2 *ULI Shared Parking Demand Concept and Analysis*

LLG also reviewed the parking ratios as published by the Urban Land Institute (ULI) as contained in the third edition of the *Shared Parking* manual[5]. The concept of shared parking is widely recognized within the transportation planning industry and accounts for the changes in parking demand over time for different types of land uses within a project. Furthermore, accumulated experience in parking demand characteristics indicates that a mixing of land uses results in an overall parking need that is less than the sum of the individual peak requirements for each individual land use. Due to the multi-use characteristics of the adjacent surrounding uses (i.e., the Huntington Middle School and the Crowell Public Library) with the proposed project, opportunities to share parking can be expected as evident in the shared parking agreement between the SMUSD and the City.

This shared parking analysis has been prepared based on data contained in the *Shared Parking* and *Parking Generation* manuals as well as supplemented with site-specific programming information for SMC and Huntington Middle School in order to determine if there will be a sufficient number of parking spaces to adequately accommodate the future peak parking demand of the project in combination with the adjacent uses. The *Shared Parking* manual provides recommendations with respect to the following characteristics of parking demand:

- Hourly Parking Indices. The *Shared Parking* manual provides hourly parking indices for various land uses. The ULI hourly parking indices for the public library was utilized. The hourly parking indices for the SMC was based on event programming schedule/s and attendance figures provided for the weekday and weekend time periods. For the Huntington Middle School, it was assumed that the faculty/staff spaces (i.e., 58 spaces) are reserved and not available for shared use during the weekday hours of operation for the School. Adjustments are made to the weekday late afternoons (i.e., after 3:00 PM) and weekend hourly parking indices due to other regularly scheduled sports activities/classes held at the school campus. The indices also show, for example, that the hourly parking demand for the Huntington Middle School (which generates its peak parking demand concentrated around the afternoon hours) is different than the parking demand associated with SMC (which generates its peak parking demand concentrated around the early evening periods). Thus, under the shared parking principle, a parking space that is used in the daytime by a faculty/staff member could be used again in the late afternoon/early evening period by a community center patron.
- Day of Week Parking Variations. The *Shared Parking* manual provides recommendations for day of week parking factors. For example, office and institutional uses experience their peak parking demands during weekdays and experience minimal parking demand during the weekends. However, based on the event schedules for the Huntington Middle School and the SMC, minimal weekday and weekend variations are expected as events/classes are contemplated to be scheduled during both weekdays and weekend time periods. The day of

[5] *Shared Parking*, Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

week parking factors for the public library land use type was utilized for the Crowell Public Library.

The peak parking ratios for the Huntington Middle School, the SMC, and Crowell Public Library are based on the ITE *Parking Generation* manual, the City of San Marino Municipal Code, and the ULI *Shared Parkin*g manual, respectively. Direct application of these peak parking demand ratios yields an unadjusted base parking demand of 203 spaces (84 spaces for the middle school, 43 spaces for the community center, and 76 spaces for the public library). While the library patrons may be expected to generate a significant degree of internal capture from the Huntington Middle School as well as walk-in patronage from surrounding residential uses in the area, no adjustment factor (reduction) was employed so as to provide a conservative analysis. The shared parking analysis essentially only accounts for the variations in demand that occur based on the time of day and/or the day of week fluctuations between the various uses.

In order to determine the peak parking demand for the project, a shared parking demand model for the proposed project use and adjacent uses was developed. The ITE, Code, ULI parking ratios along with the hourly parking accumulation profiles for the middle school, community center, and library uses were applied to determine the forecast shared parking demand site wide. The weekday and weekend parking analyses utilizing the shared parking methodology and assuming the respective parking demand ratios, are summarized in ***Tables 2-1*** and ***2-2***, respectively. ***Appendix A*** contains the weekday and weekend day shared parking analysis calculation worksheets for the individual land use components.

When accounting for shared parking usage between the proposed SMC patrons, along with the school population and library patrons, a peak weekday parking demand of 200 spaces (95.7% utilization of the combined total of 209 spaces) is forecast to occur at 10:00 AM as shown in *Table 2-1*. The weekend peak shared parking demand for the project is forecast to be less than the weekday peak parking demand. As shown in *Table 2-2*, a peak parking demand of 176 spaces (84.2% utilization of the combined total of 209 spaces) is forecast to occur at 10:00 AM during a weekend day condition. As a result, the overall peak shared parking demand is forecast to total 200 parking spaces. Consequently, given the review of the shared parking demand analysis and comparisons with the parking supply, it can be concluded that surpluses of 9 and 33 parking spaces are forecast to occur during peak weekday and weekend conditions, respectively. As previously noted, this analysis assumes that the 17 on-street spaces along Huntington Drive and West Drive along the library frontages are available for shared use.

It should be noted that site-specific programming details including the frequency and attendance figures for each of the proposed classes/events were provided and reviewed for the Huntington Middle School and the SMC. It was determined that recurring daily and weekly classes/events would continue to be provided as part of the typical site operations. Less frequent special events/conferences (e.g., monthly and quarterly events) are not accounted for in the parking demand forecast as they do not occur with often regularity.

Table 2-1

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Middle School [5]	Community Center [6]	Library [7]	Shared Parking Demand	Comparison w/ Parking Supply [8] 209 Spaces
Size	60 Employees	10.8 KSF	33.9 KSF		
Peak Pkg Rate[2]	1.40 /Employee	1.0 /350 SF	2.25 /KSF		
Weekday Pkg Rate[3]	1.40 /Employee	1.0 /350 SF	2.25 /KSF		
Gross Spaces	84 Spc.	43 Spc.	76 Spc.		
Adjusted Gross Spaces[4]	84 Spc.	43 Spc.	76 Spc.		
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces		Surplus (Deficiency)
6:00 AM	0	0	0	0	209
7:00 AM	58	3	1	62	147
8:00 AM	63	18	4	85	124
9:00 AM	74	18	76	168	41
10:00 AM	**84**	**40**	**76**	**200**	**9**
11:00 AM	70	36	75	181	28
12:00 PM	62	23	75	160	49
1:00 PM	70	23	61	154	55
2:00 PM	83	15	57	155	54
3:00 PM	112	6	52	170	39
4:00 PM	104	6	56	166	43
5:00 PM	103	0	61	164	45
6:00 PM	43	19	47	109	100
7:00 PM	22	43	38	103	106
8:00 PM	21	43	29	93	116
9:00 PM	11	19	1	31	178
10:00 PM	0	19	0	19	190
11:00 PM	0	0	0	0	209
12:00 AM	0	0	0	0	209

Notes:

[1] Source: *Shared Parking* , Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

[2] Peak parking rates based on the ITE *Parking Generation Manual* for the middle school component, the City of San Marino Municipal Code off-street parking requirements for the community center, and the ULI *Shared Parking* manual for the public library.

[3] The weekday and weekend parking rates are based on the weekday vs. weekend parking variations for the public library land use for the Crowell Library as summarized in Figure 2-2 of the *Shared Parking* manual. For the Huntington Middle School and the San Marino Center, the weekend parking rates are assumed to be the same as the peak weekday rates given the various weekend classes, events, sports activities scheduled at these facilities.

[4] Gross spaces not adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] The number of employees (i.e., faculty/staff figures) at the Huntington Middle School consists of 60 employees as provided by the San Marino Unified School District staff.

[6] The square footage includes the renovated San Marino Center totaling 10,832 square feet of gross floor area.

[7] The square footage includes the Crowell Library totaling 33,906 square feet of gross floor area.

[8] The total parking supply of 209 spaces consists of parking spaces on-site (i.e.,192 spaces), the angled spaces on the south side of Huntington Drive (i.e., 12 spaces), and west side of West Drive (i.e., 5 spaces) along the Library frontages. For purposes of the shared parking analysis, the District Office parking lot (i.e., 17 spaces) is not included as part of the parking supply available for shared usage.

Table 2-2

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Middle School [5]	Community Center [6]	Library [7]		
Size	60 Employees	10.8 KSF	33.9 KSF		
Peak Pkg Rate[2]	1.40 /Employee	1.0 /350 SF	2.25 /KSF		
Weekend Pkg Rate[3]	1.40 /Employee	1.0 /350 SF	2.10 /KSF		
Gross Spaces	84 Spc.	43 Spc.	71 Spc.		Comparison w/ Parking Supply [8] 209 Spaces
Adjusted Gross Spaces[4]	84 Spc.	43 Spc.	71 Spc.	Shared Parking Demand	
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces		Surplus (Deficiency)
6:00 AM	0	0	0	0	209
7:00 AM	42	0	0	42	167
8:00 AM	84	18	1	103	106
9:00 AM	84	21	4	109	100
10:00 AM	**84**	**21**	**71**	**176**	**33**
11:00 AM	84	21	65	170	39
12:00 PM	63	21	58	142	67
1:00 PM	63	21	49	133	76
2:00 PM	63	21	39	123	86
3:00 PM	63	18	26	107	102
4:00 PM	63	43	8	114	95
5:00 PM	63	43	4	110	99
6:00 PM	63	43	4	110	99
7:00 PM	63	43	1	107	102
8:00 PM	42	43	0	85	124
9:00 PM	0	43	0	43	166
10:00 PM	0	0	0	0	209
11:00 PM	0	0	0	0	209
12:00 AM	0	0	0	0	209

Notes:

[1] Source: *Shared Parking* , Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

[2] Peak parking rates based on the ITE Parking Generation Manual for the middle school component, the City of San Marino Municipal Code off-street parking requirements for the community center, and the ULI Shared Parking manual for the public library.

[3] The weekday and weekend parking rates are based on the weekday vs. weekend parking variations for the public library land use for the Crowell Library as summarized in Figure 2-2 of the *Shared Parking* manual. For the Huntington Middle School and the San Marino Center, the weekend parking rates are assumed to be the same as the peak weekday rates given the various weekend classes, events, sports activities scheduled at these facilities.

[4] Gross spaces not adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] The number of employees (i.e., faculty/staff figures) at the Huntington Middle School consists of 60 employees as provided by the San Marino Unified School District staff.

[6] The square footage includes the renovated San Marino Center totaling 10,832 square feet of gross floor area.

[7] The square footage includes the Crowell Library totaling 33,906 square feet of gross floor area.

[8] The total parking supply of 209 spaces consists of parking spaces on-site (i.e.,192 spaces), the angled spaces on the south side of Huntington Drive (i.e., 12 spaces), and west side of West Drive (i.e., 5 spaces) along the Library frontages. For purposes of the shared parking analysis, the District Office parking lot (i.e., 17 spaces) is not included as part of the parking supply available for shared usage.

2.7 Parking Management Strategies

During times when the parking demand is high at the site or when less frequent special events/conferences are held, various parking management strategies are effective at managing these peak parking demands. Below are parking management strategies for consideration, specifically when special events are held concurrently at the SMC, the Huntington Middle School and/or the Crowell Public Library. The following elements should be considered by the Director of Community Development prior to issuance of the Certificate of Occupancy.

- A requirement to maintain an events calendar that is accessible and shared with the Huntington Middle School and the Crowell Public Library, which would include the date, time and duration of the event, including the expected attendance figure for each event. Special SMC events/meetings where 40 attendees or more are expected would require further coordination with the Huntington Middle School and Crowell Public Library to ensure that any overlap of activities is minimized to the extent possible.

- Implementation of managed parking for some spaces within the on-site parking facility (i.e., both valet parking spaces and tandem parking spaces) which would increase the effective parking supply as valet-attended parking could occur within drive aisles located throughout the on-site parking areas or other nearby lots (i.e., District Office parking lot).

- A provision in the Rules and Regulations which would prohibit visitors/vendor employees from parking on surrounding streets that are not immediately adjacent to the site frontages. Consider, if needed and feasible, installation of additional angled parking spaces along the south side of Huntington Drive along the SMC frontage, similar to the spaces that are currently in front of the Crowell Public Library.

- To the extent feasible, classes/meetings/events held at the SMC and the Crowell Public Library shall not be scheduled to begin or end such that it overlaps with the morning drop-off and afternoon pick-up peak time periods at the Huntington Middle School.

- The SMC, Crowell Public Library and Huntington Middle School should encourage bicycle, transit, and ride-share opportunities to events where appropriate.

- A requirement to conduct a parking utilization monitoring study one year from issuance of the Project's Certificate of Occupancy. The parking utilization monitoring study must demonstrate that on-site parking is adequate to meet project demand during both weekday and weekend conditions. If the study shows that project parking demand exceeds the supply of parking within the project, the Applicant shall propose measures to reduce spillover parking impacts, subject to review and approval by the Director of Community Development. The parking reduction strategies may include, but are not limited to: 1) preparation of a Valet Parking Plan, 2) provision of transit passes and/or ride-share subsidies for employees, and/or

3) subsidized off-site parking options in order to minimize on-site employee parking demand, if necessary.

2.8 Project Trip Generation and Distribution

2.8.1 *Project Trip Generation*

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Traffic volumes expected to be generated by the proposed project were estimated for the weekday commuter AM and PM peak hours, as well as over a 24-hour daily period, using trip generation rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*[6]. The ITE document contains trip rates for a variety of land uses which have been derived based on traffic counts conducted at existing sites throughout California and the United States.

The trip generation rates and forecast of the vehicular trips anticipated to be generated by the proposed project are presented in ***Table 2-3***. Traffic volumes expected to be generated by the proposed project were based upon rates per thousand square feet of gross floor area. The project trip generation forecast was submitted for review and approval by City staff as part of the Memorandum of Understanding scoping process. ITE Land Use Code 495 (Recreational Community Center) trip generation average rates were used to forecast the traffic volumes expected to be generated by the proposed project.

2.8.2 *Weekday ITE Project Trip Generation Summary*

As summarized in *Table 2-3*, the proposed project is expected to generate 19 new vehicle trips (13 inbound trips and 6 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 25 new vehicle trips (12 inbound trips and 13 outbound trips). Over a 24-hour period, the proposed project is forecast to generate approximately 312 new daily trip ends (156 inbound trips and 156 outbound trips) during a typical weekday.

2.8.3 *Weekday Site-Specific Project Trip Generation Summary*

Site-specific programming details including the frequency and attendance figures for each of the proposed classes/events was provided and reviewed. It was determined that recurring daily and weekly classes/events would continue to be provided as part of the typical site operations. Less frequent special events/conferences (e.g., monthly and quarterly events) are not accounted for in the trip generation forecast as they do not occur with often regularity. Based on the site-specific programming data and person trips forecast for the project, the number of vehicles has been estimated using an average vehicle ridership (AVR) of 1.135 persons per vehicle (as provided in the South Coast Air Quality Management District in its CEQA Air Quality Handbook). It is estimated that approximately 302 vehicle trips (i.e., 342 person trips/1.135 persons per vehicle = 151 inbound trips and 151 outbound trips) on a daily basis would be generated to/from the site. Using the site-specific data, the proposed project is expected to generate 18 new vehicle trips (12 inbound trips and

[6] Institute of Transportation Engineers *Trip Generation Manual*, 10th Edition, 2017.

Table 2-3
PROJECT TRIP GENERATION [1]

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Proposed Use								
Community Center [3]	10,832 GSF	312	13	6	19	12	13	25
TOTAL PROJECT TRIPS		**312**	**13**	**6**	**19**	**12**	**13**	**25**

[1] Source: ITE "Trip Generation Manual", 10th Edition, 2017.

[2] Trips are one-way traffic movements, entering or leaving.

[3] ITE Land Use Code 495 (Recreational Community Center) trip generation average rates.

- Weekday Daily Trip Rate: 28.82 trips/1,000 SF of floor area; 50% inbound/50% outbound
- Weekday AM Peak Hour Trip Rate: 1.76 trips/1,000 SF of floor area; 66% inbound/34% outbound
- Weekday PM Peak Hour Trip Rate: 2.31 trips/1,000 SF of floor area; 47% inbound/53% outbound

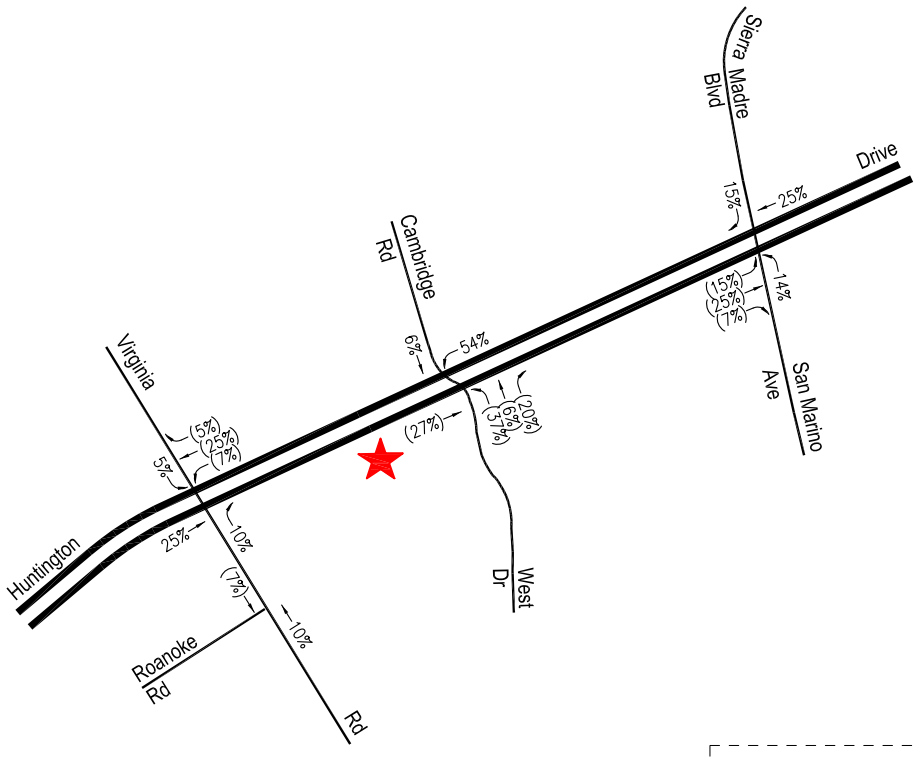
6 outbound trips) or 21 person trips/1.135 persons per vehicle during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 16 new vehicle trips (5 inbound trips and 11 outbound trips) or 19 person trips/1.135 persons per vehicle. For purposes of the LOS analysis for the non-CEQA transportation assessment, the ITE trip generation forecast was utilized as it was slightly higher when compared to that based on the site-specific programming data.

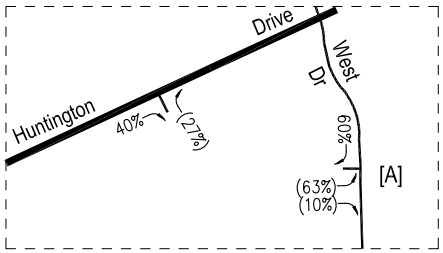
2.8.4 *Project Trip Distribution and Assignment*

Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- The site's proximity to major traffic corridors (i.e., Huntington Drive, Virginia Road, Sierra Madre Boulevard, etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress scheme planned for the proposed project;
- Nearby population and employment centers; and
- Input from City of San Marino Public Works Department staff.

The general, directional morning and afternoon traffic distribution patterns for the proposed project are presented in ***Figures 2-4*** and ***2-5***, respectively. The forecast new weekday AM and PM peak hour project traffic volumes at the study intersections associated with the proposed project are presented in ***Figures 2-6*** and ***2-7***, respectively. The traffic volume assignments presented in *Figures 2-6* and *2-7* reflect the traffic distribution characteristics shown in *Figures 2-4* and *2-5* and the project trip generation forecasts presented in *Table 2-3*.





Project Driveway Distribution

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★ Project Site

XX = Inbound Percentage

(XX) = Outbound Percentage

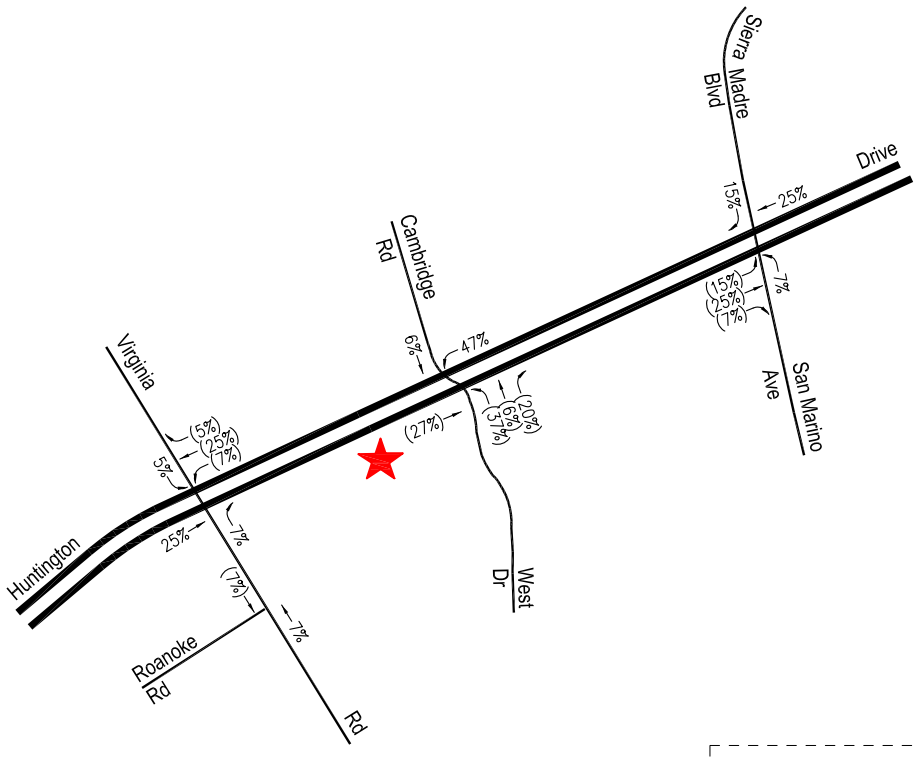
[A] No Northbound Left-Turn (7:45-8:45 AM and 2:45-3:30 PM School Days)

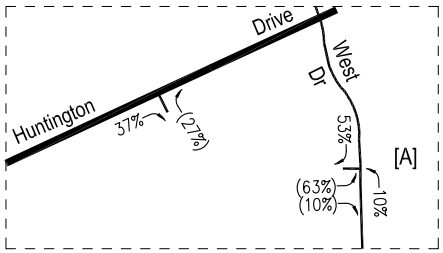
Figure 2-4

Project Trip Distribution

Weekday AM Peak Hour

San Marino Center Improvement Project





Project Driveway Distribution

N

LINSCOTT LAW & GREENSPAN engineers

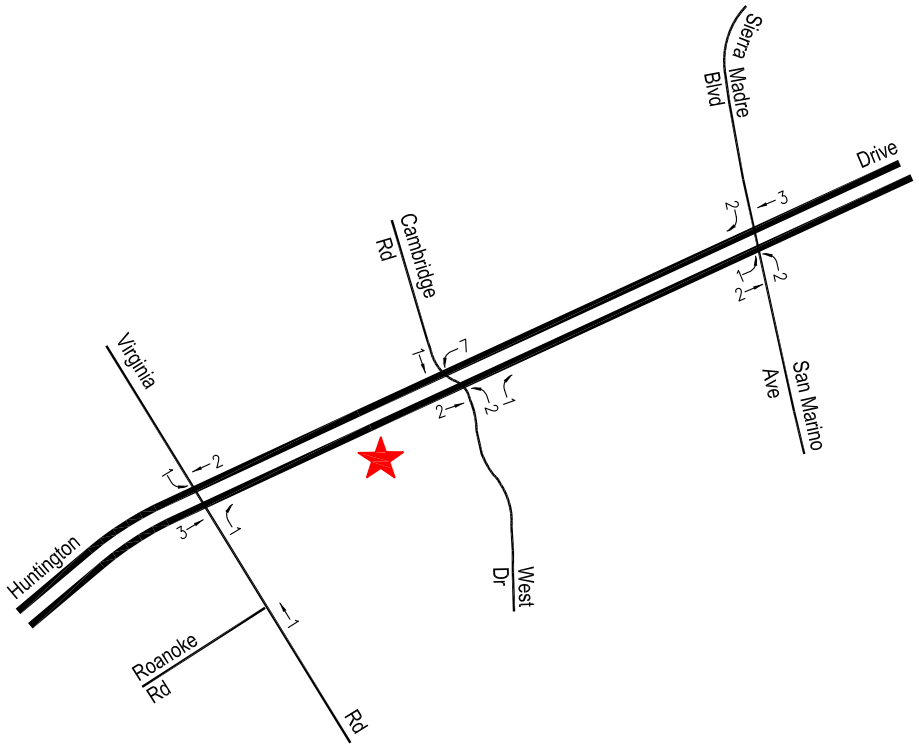
★ Project Site

XX = Inbound Percentage

(XX) = Outbound Percentage

[A] No Northbound Left-Turn (7:45-8:45 AM and 2:45-3:30 PM School Days)

Figure 2-5
Project Trip Distribution
Weekday PM Peak Hour
San Marino Center Improvement Project



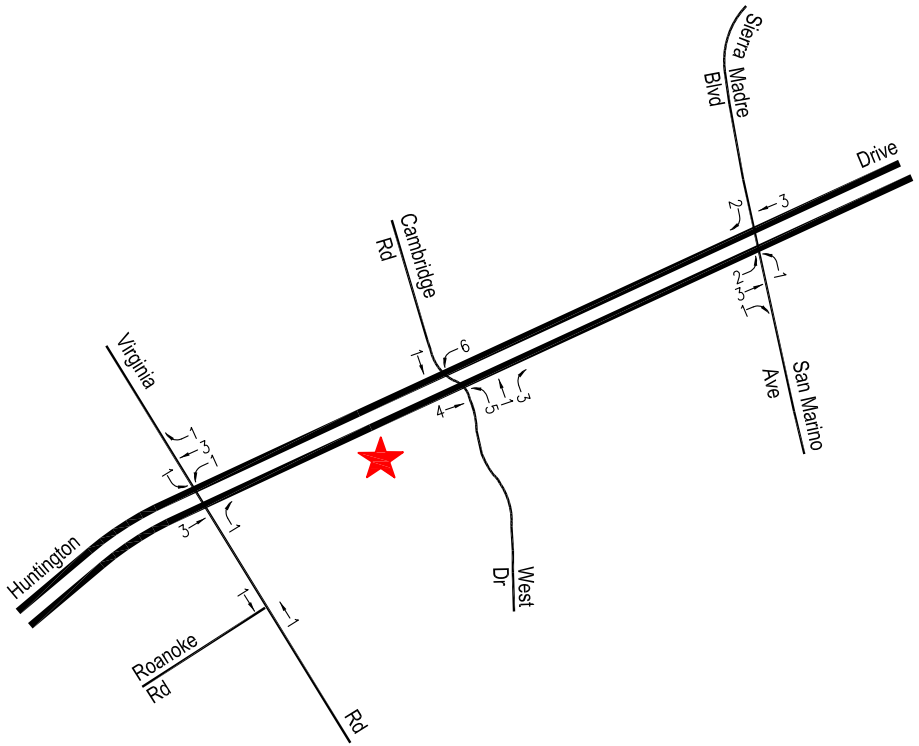
Project Site

Figure 2-6

Project Traffic Volumes

Weekday AM Peak Hour

San Marino Center Improvement Project



Project Site

Figure 2-7

Project Traffic Volumes

Weekday PM Peak Hour

San Marino Center Improvement Project

3.0 PROJECT SITE CONTEXT

The project site is located within a well-established multi-modal transportation network maintained by the City of San Marino. The following sections will provide an overview of the transportation infrastructure in the vicinity of the proposed project, including infrastructure which supports both motorized and non-motorized transportation modes.

3.1 Non-Vehicle Network

Non-vehicular transportation generally encompasses walking, biking, and other active transportation modes. Distinct facilities are often provided for these non-vehicular modes. Most prominently, paved sidewalks are typically provided to facilitate pedestrian travel outside of the roadway. In some cases, bicycle facilities such as painted bike lanes or separated bike paths are provided within the roadway in order to separate bike traffic from vehicular traffic. Roadways which are designed to prioritize non-vehicular transportation modes utilize complimentary non-vehicular infrastructure in order to promote comfortable, safe travel for both pedestrians and bicyclists. A review of the pedestrian and bicycle infrastructure provided in the vicinity of the project site is provided below.

3.1.1 *Pedestrian System*

Pedestrian infrastructure consists of facilities such as sidewalks, crosswalks, pedestrian signals, curb access ramps, Americans with Disabilities Act (ADA) compliant tactile warning strips, and curb extensions, among other things. These facilities are widely provided within the study area. Sidewalks are currently provided along Huntington Drive and along other corridors near the site, including Virginia Road and West Drive. Marked crosswalks, pedestrian signals, and curb ramps are provided at the study intersections.

3.1.2 *Bicycle System*

Bicycle infrastructure consists of both facilities within the roadway as well as public bicycle parking spaces. The Federal and State transportation systems recognize three primary bikeway facilities: Bicycle Paths (Class I), Bicycle Lanes (Class II), and Bicycle Routes (Class III). Bicycle Paths (Class I) are exclusive car free facilities that are typically not located within a roadway area. Bicycle Lanes (Class II) are part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Bicycle Routes (Class III) are preferably located on collector and lower volume arterial streets.

As indicated in the *Huntington Drive Safe Streets Corridor Plan*, the only existing bicycle facility within the City of San Marino is a north-south Class II bike lane on Del Mar Avenue from Huntington Drive to the southerly City limits (0.70 miles). The *2014 Draft San Marino Bicycle and Pedestrian Plan* included proposed protected bicycle lanes along Huntington Drive. Adjoining jurisdictions have plans for Class II bicycle lanes along Huntington Drive east and west of the City of San Marino (i.e., Los Angeles County Bicycle Master Plan proposes Class II bicycle lanes on Huntington Drive in unincorporated East San Gabriel to the east of the project site and the *South*

Pasadena Bicycle Master Plan also proposes Class II bicycle lanes to the west of the site). The existing and proposed bicycle infrastructure in the City of San Marino is illustrated in ***Figure 3-1***.

3.2 Transit Network

Public bus transit services are provided within the project study area by the Los Angeles County Metropolitan Transportation Authority (Metro) lines and the City of Montebello Bus Lines (MBL). The existing public transit routes in the vicinity of the project site are illustrated in ***Figure 3-2***. A summary of the existing transit service in the vicinity of the project site is presented in ***Table 3-1***.

As shown in *Figure 3-2,* public transit access to the project site is accommodated by Metro which runs one line along Huntington Drive at a frequency of approximately 60 minutes during weekday and Saturday peak service. The nearest bus stops for Metro Line 79 provide amenities including benches and trash receptacles east of the project site (i.e., along the north side of Huntington Drive west of West Drive and along the south side of Huntington Drive east of West Drive). Other bus stops for Metro bus lines with benches and trash receptacles are provided west of the project site (i.e., within approximately one-quarter of a mile of the project site) at the following locations: 1) along the north side of Huntington Drive west of Virginia Road, and 2) along the south side of Huntington Drive east of Virginia Road.

3.3 Vehicle Network

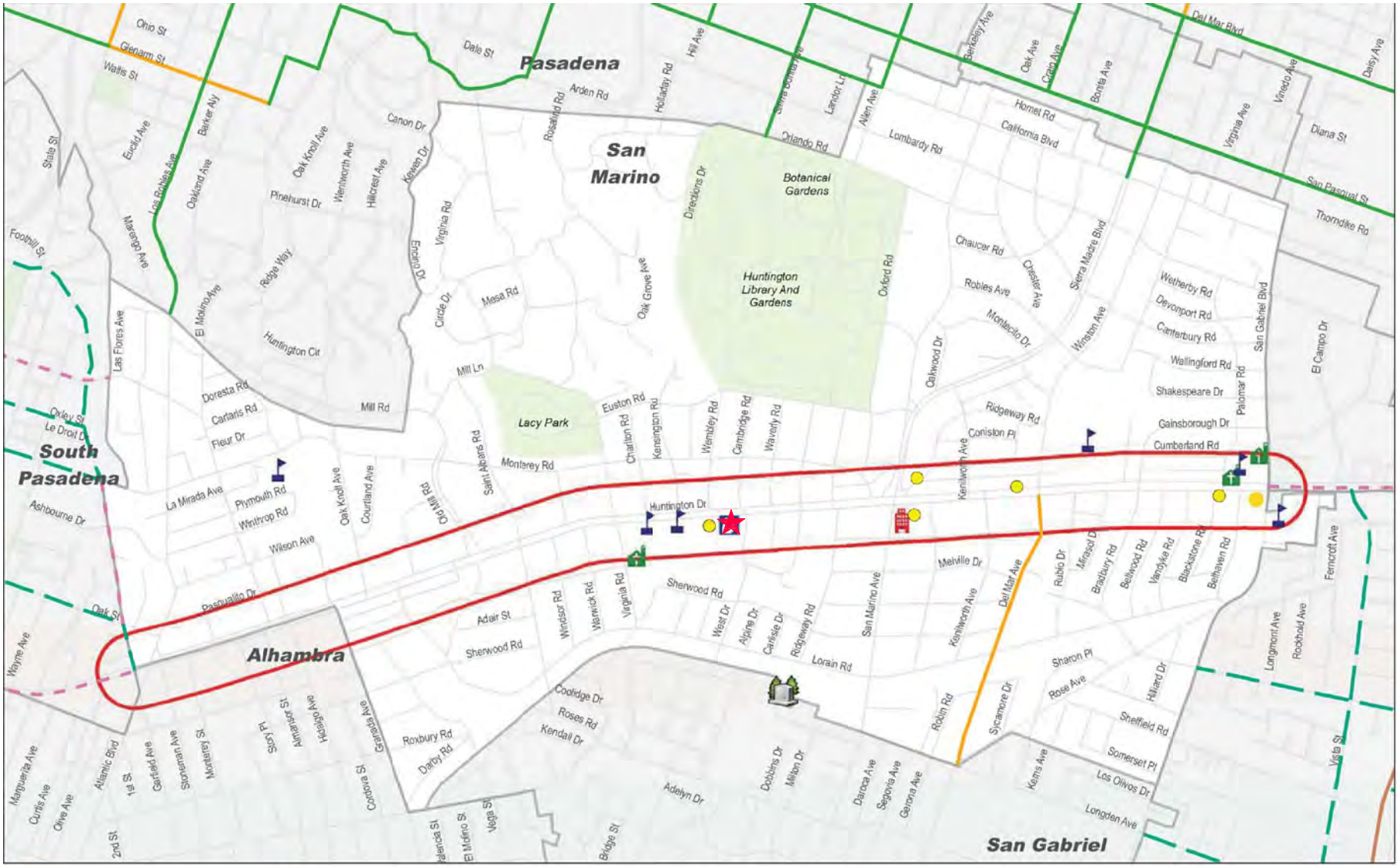
3.3.1 *Roadway Classifications*

The City of San Marino utilizes the roadway categories recognized by regional, state and federal transportation agencies. There are four categories in the roadway hierarchy, ranging from freeways with the highest capacity to two-lane undivided roadways with the lowest capacity. The roadway categories are summarized as follows:

- *Freeways* are limited-access and high speed travel ways included in the state and federal highway systems. Their purpose is to carry regional through-traffic. Access is provided by interchanges with typical spacing of one mile or greater. No local access is provided to adjacent land uses.

- *Arterial* roadways are major streets that primarily serve through-traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with two to six travel lanes and their major intersections are signalized. This roadway type is divided into two categories: principal and minor arterials. Principal arterials are typically four-or-more lane roadways and serve both local and regional through-traffic. Minor arterials are typically two-to-four lane streets that service local and commuter traffic.

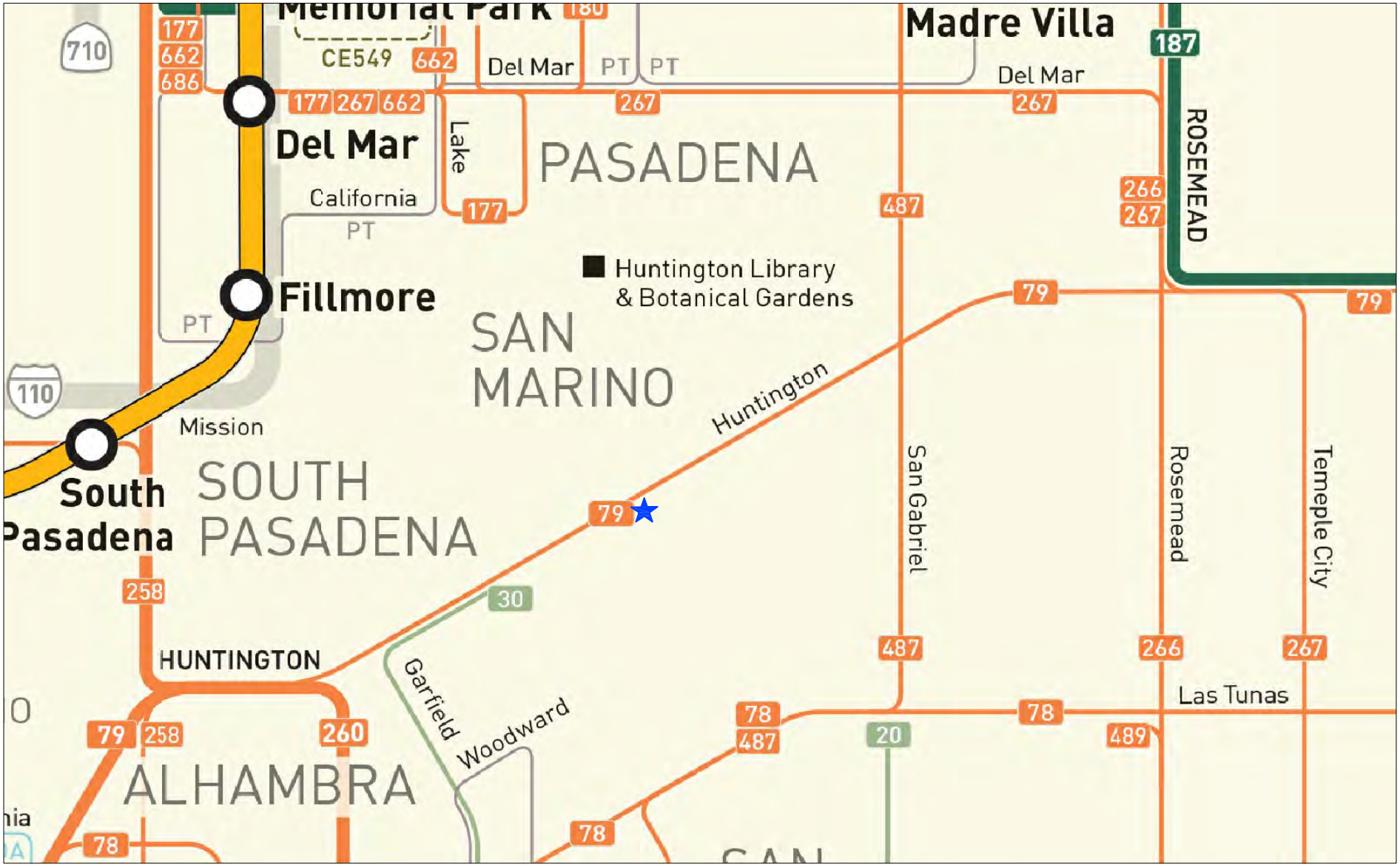
- *Collector* roadways are streets that provide access and traffic circulation within residential and non-residential (e.g., commercial and industrial) areas. Collector roadways connect local streets to arterials and are typically designed with two through travel lanes (i.e., one through



MAP SOURCE: CITY OF SAN MARINO HUNTINGTON DRIVE SAFE STREETS CORRIDOR PLAN DRAFT FEBRUARY 2018

Project Site

Figure 3-1
Existing and Proposed Bikeways



MAP SOURCE: METROPOLITAN TRANSPORTATION AUTHORITY WEBSITE, SEPTEMBER 2021

N

★ Project Site

Figure 3-2
Existing Transit Routes

San Marino Center Improvement Project

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Table 3-1
EXISTING TRANSIT ROUTES [1]

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES DURING PEAK HOUR		
			DIR	AM	PM
Metro 79	Downtown Los Angeles to Arcadia via El Sereno, Alhambra and South Arcadia	Virginia Road, West Drive, Sierra Madre Boulevard, San Marino Avenue, Huntington Drive	EB WB	1 1	1 1
Metro 176	Highland Park to Montebello via South Pasadena, San Gabriel, Rosemead, El Monte and South El Monte	Garfield Avenue, Huntington Drive	EB WB	1 1	1 1
Metro 260	Altadena to Compton via Pasadena, Alhambra, East Los Angeles, Maywood and Lynwood	Garfield Avenue, Huntington Drive	NB SB	4 4	4 5
Metro 487	El Monte to Downtown Los Angeles via Arcadia, Pasadena, San Marino, Temple City and San Gabriel	San Gabriel Boulevard, Huntington Drive	EB WB	1 1	1 1
Montebello 30	San Marino to Bell Gardens via Alhambra, Monterey Park and Montebello	Garfield Avenue, Huntington Drive	EB WB	1 1	1 1
TOTAL				**16**	**17**

[1] Sources: Los Angeles County Metropolitan Transportation Authority (Metro) and City of Montebello Bus Lines (MBL) websites, 2021.

travel lane in each direction) that may accommodate on-street parking. They may also provide access to abutting properties.

- *Local* roadways distribute traffic within a neighborhood, or similar adjacent neighborhoods, and are not intended for use as a through-street or a link between higher capacity facilities such as collector or arterial roadways. Local streets are fronted by residential uses and do not typically serve commercial uses. Generally, travel lanes are not striped, and parking may be accommodated on one or both sides of the roadway.

3.3.2 *Regional Highway System*

Primary regional access is provided by the I-210 Freeway (approximately 2.5 miles north of the project site) and the I-10 Freeway (approximately 3.5 miles south of the project site). The *Foothill Freeway (I-210)* is a major east-west oriented freeway connecting the Golden State Freeway (I-5) in the San Fernando area to the Orange Freeway (SR 57) near San Dimas. The I-210 Freeway generally contains four mainline freeway lanes and one high occupancy vehicle lane in each direction near the study area. Full freeway connections (i.e., eastbound and westbound ramp connections) are provided at Sierra Madre Boulevard and Allen Avenue.

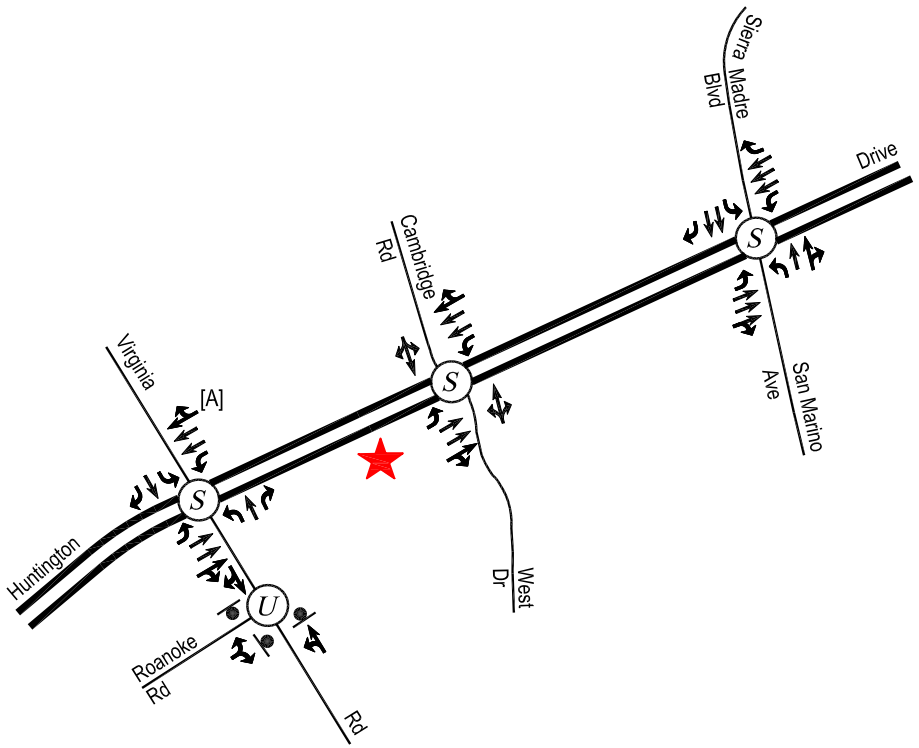
The *San Bernardino (I-10) Freeway* is a major east-west freeway connecting the City of Santa Monica with the City of Los Angeles and the municipalities of the San Gabriel Valley and San Bernardino County to the east. In the project vicinity, three to four mixed-flow freeway lanes are provided in each direction on the I-10 Freeway with auxiliary merge/weave lanes provided between some interchanges. Eastbound and westbound on/off ramps are provided to and from the I-10 Freeway at Del Mar Avenue and New Avenue.

3.3.3 *Roadway Descriptions*

The current lane configurations and traffic control measures at each study intersection is presented in ***Figure 3-3***. Descriptions of the roadways which comprise the study area are provided in ***Table 3-2***, including the roadway classification, number of lanes, median types, and speed limits designated by the City of San Marino.

3.4 Traffic Count Data

The traffic count data for the four (4) study intersections are based on the historical traffic count data utilized in the *Citywide Traffic Circulation Study*. The traffic counts for all of the study intersections were conducted during the weekday morning peak period (7:00 AM to 9:00 AM) and weekday evening peak period (4:00 PM to 6:00 PM) in November 2019. The year 2019 manual traffic count data has been adjusted by an annual ambient growth rate (i.e., 1.0 percent per year) to reflect year 2021 existing conditions. Traffic volumes at the study intersections show the weekday morning and weekday afternoon peak periods typically associated with peak commute hours in the metropolitan area.



S Signalized Intersection

U Unsignalized Intersection

Stop Sign

[A] No Right-Turn on Red (8-9 AM, 2-3:30 PM School Days)

Project Site

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Figure 3-3
Existing Lane Configurations

San Marino Center Improvement Project

Table 3-2
EXISTING ROADWAY DESCRIPTIONS

ROADWAY	CLASSIFICATION [1]	TRAVEL LANES		MEDIAN TYPES [4]	SPEED LIMIT
		DIRECTION [2]	NO. LANES [3]		
Virginia Road					
-North of Huntington Drive	Collector	NB-SB	2	N/A	25
-South of Huntington Drive	Local	NB-SB	2	N/A	25
Cambridge Road	Local Street	NB-SB	2	N/A	25
West Drive	Local Street	NB-SB	2	N/A	35
San Marino Avenue					
-North of Huntington Drive	Parkway	NB-SB	4	RMI	35
-South of Huntington Drive	Collector	NB-SB	2	N/A	25
Huntington Drive	Parkway	EB-WB	6	RMI	40
Roanoke Road	Local Street	EB-WB	2	N/A	25

Notes:
[1] Roadway classifications obtained from the *City of San Marino Circulation Element*, adopted August 1995.
[2] Direction of roadways in the project area: NB-SB = northbound and southbound; and EB-WB = eastbound and westbound.
[3] Number of lanes in both directions on the roadway.
[4] Median type of the road: RMI = Raised Median Island; 2WLT = 2-Way Left-Turn Lane; and N/A = Not Applicable.

It should also be noted that new traffic counts were not collected in the midst of the Covid-19 pandemic since it may represent atypical conditions. Thus, based on coordination with City staff, since historical traffic counts were available in the study area and for establishing existing conditions consistency with the *Citywide Traffic Circulation Study*, it was determined that the historical traffic count data at the four (4) study intersections would be appropriate and thus were utilized to determine the existing traffic conditions.

The existing weekday AM and weekday PM peak hour intersection traffic volumes by approach are summarized in ***Table 3-3***. The existing vehicular turning movements at the study intersections during the weekday AM and weekday PM peak hours are shown in ***Figures 3-4*** and ***3-5***, respectively. For each study intersection, the highest one-hour total traffic volumes (i.e., four consecutive 15-minute time intervals) traversing through the intersection during the 7:00 to 9:00 AM and 4:00 to 6:00 PM time periods were selected so as to determine the respective weekday AM and PM peak hour traffic volumes for each study intersection. For purposes of the traffic impact analysis, this common traffic engineering practice ensures that a more conservative (i.e., worst-case) assessment of existing operating conditions be attained for each study intersection. Therefore, the traffic volumes shown in *Figures 3-4* and *3-5* for the study intersections do not necessarily reflect the same exact one-hour time period during the morning and/or afternoon peak commuter conditions (i.e., one intersection's peak hour may have occurred between 7:30 and 8:30 AM, while another intersection's peak hour may have occurred between 7:45 and 8:45 AM). Summary data worksheets of the manual traffic counts of the study intersections are contained in ***Appendix B.***

3.5 Cumulative Development Projects

The forecast of future pre-project conditions was prepared in accordance to procedures outlined in Section 15130 of the CEQA Guidelines. Specifically, the CEQA Guidelines provide two options for developing the future traffic volume forecast:

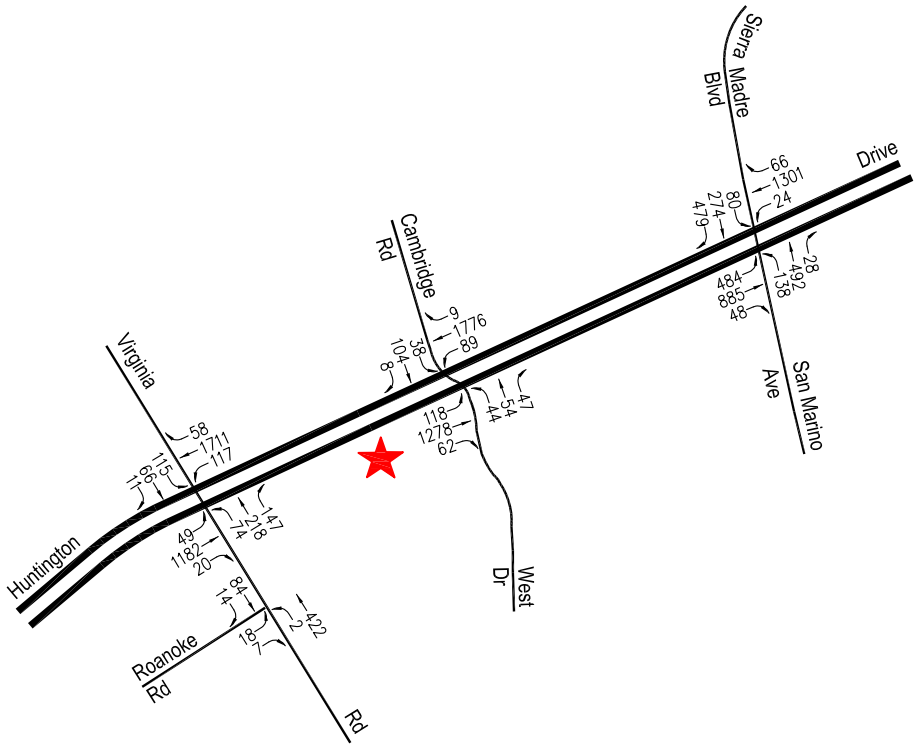
> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or
>
> (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency."

Although the CEQA Guidelines do not strictly apply to the local transportation assessment required by the City of San Marino, this traffic analysis provides a highly conservative estimate of future pre-

Table 3-3
EXISTING TRAFFIC VOLUMES [1]
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	DATE	DIR	AM PEAK HOUR		PM PEAK HOUR	
				BEGAN	VOLUME	BEGAN	VOLUME
1	Virginia Road / Huntington Drive	11/07/2019	NB	8:15 AM	439	5:15 PM	177
			SB		192		456
			EB		1,251		1,827
			WB		1,886		1,477
2	Virginia Road / Roanoke Road	11/07/2019	NB	7:45 AM	424	5:15 PM	181
			SB		98		398
			EB		25		9
			WB		0		0
3	Cambridge Road - West Drive / Huntington Drive	11/07/2019	NB	7:45 AM	145	5:30 PM	159
			SB		150		164
			EB		1,458		1,992
			WB		1,874		1,511
4	Sierra Madre Boulevard- San Marino Avenue / Huntington Drive	11/07/2019	NB	8:00 AM	658	4:45 PM	389
			SB		833		1,179
			EB		1,417		1,942
			WB		1,391		1,107

[1] Counts conducted by IDAX Data. The traffic counts were adjusted by 1% per year to account for ambient growth in determining year 2021 conditions.



Project Site

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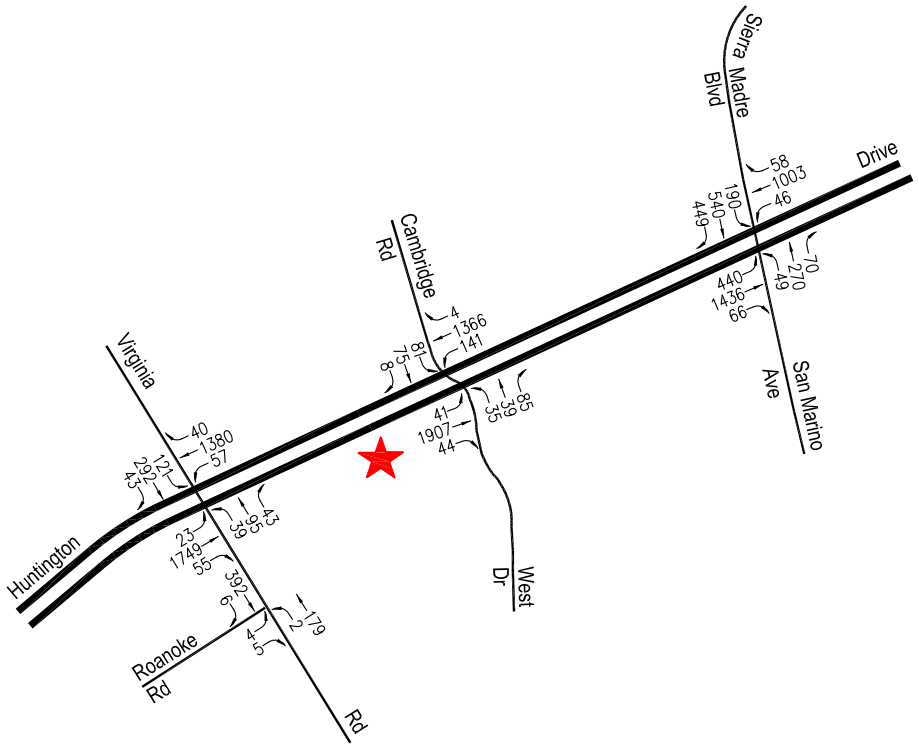
Figure 3-4
Existing Traffic Volumes
Weekday AM Peak Hour
San Marino Center Improvement Project



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Project Site

Figure 3-5

Existing Traffic Volumes

Weekday PM Peak Hour

San Marino Center Improvement Project

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project traffic volumes as it incorporates both the "A" and "B" options for purposes of developing the forecast.

3.5.1 *Related Projects*

A forecast of on-street traffic conditions prior to occupancy of the proposed project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area (i.e., within an approximate one-mile radius from the project site). With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impacts of all ongoing development. The related projects research was based on information on file with the City of San Marino and the City of Alhambra Community Development Departments. The list of related projects in the project site area is presented in ***Table 3-4***. The location of the related projects is shown in ***Figure 3-6***.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*[7], or they were obtained from other traffic studies as sourced. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 3-4*. The related projects traffic volumes were distributed and assigned to the street system based on the projects' locations in relation to the study intersections, their proximity to major traffic corridors, proposed land uses, nearby population and employment centers, etc. The anticipated distribution of the related projects traffic volumes to the study intersections during the weekday AM and weekday PM peak hours are displayed in ***Figures 3-7*** and ***3-8***, respectively.

3.5.2 *Ambient Traffic Growth Factor*

Horizon year background traffic growth estimates have been calculated using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown related projects in the study area as well as account for typical growth in traffic volumes due to the development of projects outside the study area. An annual growth rate of one percent (1.0%) per year was selected for this analysis in consultation with City of San Marino staff during the scoping process.

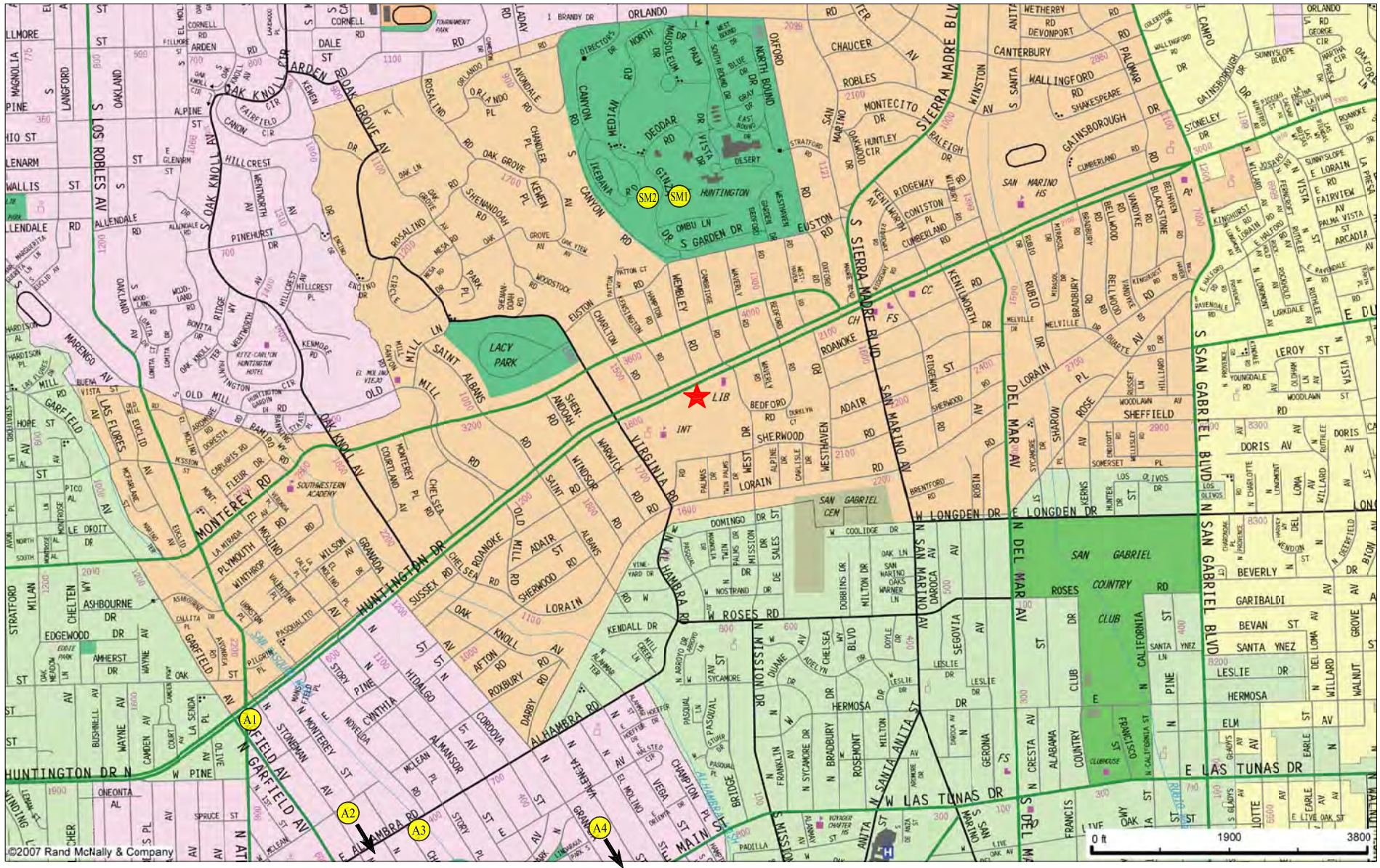
Therefore, application of this one percent (1.0%) ambient growth factor in addition to the forecast traffic generated by the related projects allows for a very conservative forecast of future traffic volumes in the project study area as incorporation of both (i.e., an ambient traffic growth rate and a detailed list of cumulative development projects) is expected to overstate potential future traffic volumes.

[7] Institute of Transportation Engineers *Trip Generation Manual*, 10th Edition, Washington, D.C., 2017.

Table 3-4
RELATED PROJECTS LIST AND TRIP GENERATION [1]

MAP NO.	PROJECT STATUS	PROJECT NAME/NUMBER ADDRESS/LOCATION	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2]	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			LAND-USE	SIZE		VOLUMES	IN	OUT	TOTAL	IN	OUT	TOTAL
City of San Marino												
SM1	Under Construction	The Huntington Library, Art Museum, and Botanical Gardens 1151 Oxford Road	Rose Garden Tea Room Expansion	68 Seats	[3]	177	1	0	1	13	6	19
SM2	Under Construction	The Huntington Library, Art Museum, and Botanical Gardens 1151 Oxford Road	Japanese Heritage House Restoration & Relocation	-- --	--	Nom.	Nom.	Nom.	Nom.	Nom.	Nom.	Nom.
City of Alhambra												
A1	Proposed	1224 N. Atlantic Boulevard	Restaurant	3,267 GSF	[4]	1,539	67	64	131	56	51	107
			Retail	3,646 GLSF	[5]	138	2	1	3	7	7	14
A2	Proposed	700 N. Stoneman Avenue	Condominium	79 DU	[6]	430	7	21	28	21	14	35
A3	Proposed	300 E. Alhambra Road	Condominium	6 DU	[7]	44	1	2	3	2	1	3
A4	Proposed	918 - 924 E. Main Street	Retail	2,899 GLSF	[5]	109	2	1	3	5	6	11
			Office	10,971 GSF	[8]	107	11	2	13	2	11	13
TOTAL						2,544	91	91	182	106	96	202

[1] Sources: City of San Marino and the City of Alhambra Community Development Departments. ITE "Trip Generation Manual", 10th Edition, 2017.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 931 (Quality Restaurant) trip generation average rates.
[4] ITE Land Use Code 934 (Fast-Food Restaurant with Drive-Through) trip generation average rates.
[5] ITE Land Use Code 820 (Shopping Center) trip generation average rates.
[6] ITE Land Use Code 221 (Multifamily Housing [Mid-Rise]) trip generation average rates.
[7] ITE Land Use Code 220 (Multifamily Housing [Low-Rise]) trip generation average rates.
[8] ITE Land Use Code 710 (General Office) trip generation average rates.



MAP SOURCE: RAND MCNALLY & COMPANY

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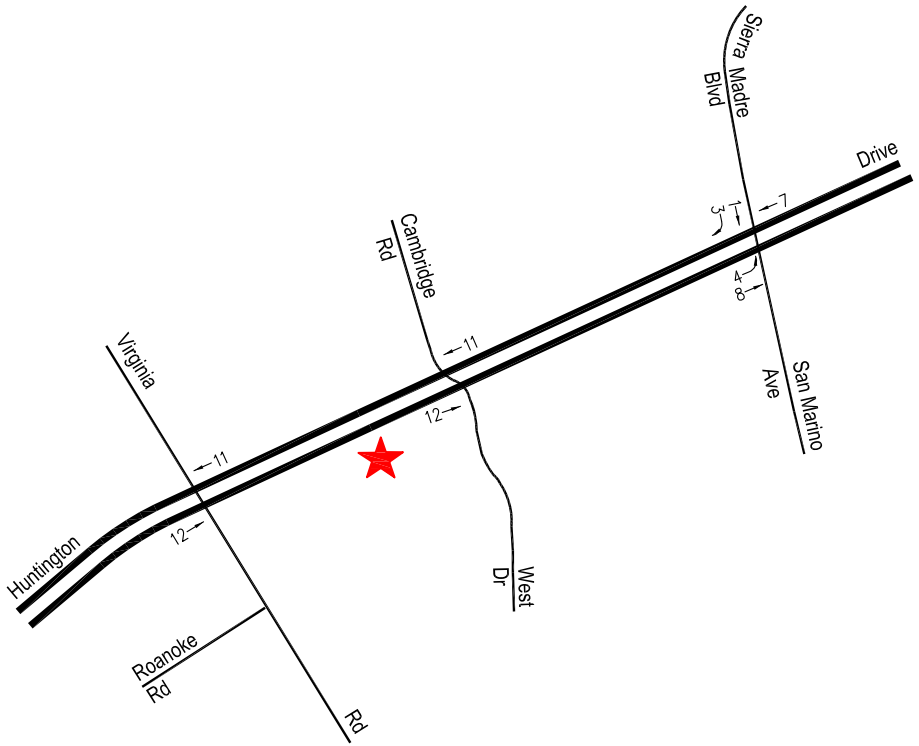
- Project Site
- (SM) City of San Marino Related Project
- (A) City of Alhambra Related Project

Figure 3-6
Location of Related Projects

San Marino Center Improvement Project



Project Site

Figure 3-7

Related Projects Traffic Volumes

Weekday AM Peak Hour

San Marino Center Improvement Project

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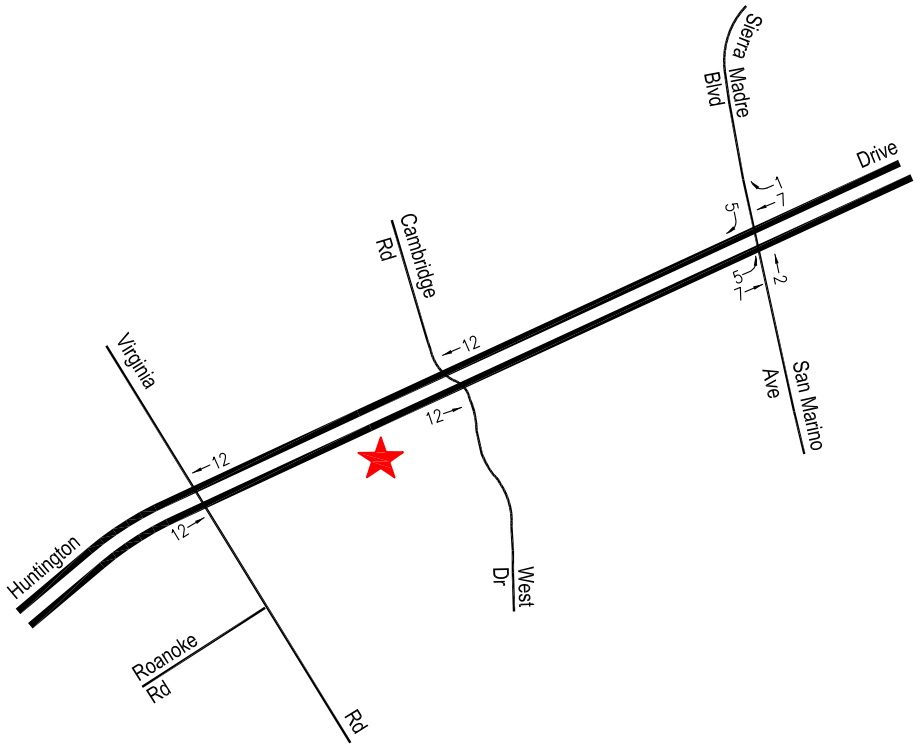


Project Site

Figure 3-8

Related Projects Traffic Volumes

Weekday PM Peak Hour

San Marino Center Improvement Project

4.0 CEQA TRANSPORTATION ASSESSMENT

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the CEQA Guidelines in November 2017 that amends the Appendix G question for transportation impacts to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the CEQA Guidelines asking if the project will result in a substantial increase in vehicle miles traveled (VMT). The California Natural Resources Agency certified and adopted the revisions to the CEQA Guidelines in December of 2018, and as of July 1, 2020 the provisions of the new section are in effect statewide. Concurrently, OPR developed the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), which provides non-binding recommendations on the implementation of VMT methodology which has significantly informed the way VMT analyses are conducted in the State. Accordingly, for the purpose of environmental review under CEQA, the City of San Marino has adopted significance criteria for transportation impacts based on VMT for land use projects and plans which is generally consistent with the recommendations provided by OPR in the *Technical Advisory*.

4.1 Vehicle Miles Traveled (VMT) Project Screening

Traditionally, public agencies have set certain thresholds to determine whether a project requires detailed transportation analysis or if it could be assumed to have less than significant environmental impacts without additional study. The City of San Marino has adopted three (3) screening criteria which may be applied to screen proposed projects out of detailed VMT analysis. Proposed projects are not required to satisfy all of the screening criteria in order to screen out of further VMT analysis; satisfaction of one criterion is sufficient for screening purposes. The following sections provide a detailed explanation of each screening criteria as it relates to the proposed project.

4.1.1 *Transit Priority Area Screening*

CEQA Guidelines Section 15064.3(b)(1) states in part: "Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact." In keeping with the statutory presumption of less than significant impacts due to nearby high-quality transit, the City of San Marino has adopted a transit priority area[8] (TPA) screening criterion. Projects which are located within a TPA are presumed to have a less than significant impact, absent substantial evidence to the contrary. This presumption may not be appropriate if:

- The project has a floor area ratio (FAR) of less than 0.75.
- The project includes more parking for use by residents, customers, or employees of the project than required by the City.

[8] Public Resources Code Section 21099(a)(7): ""Transit priority area" means an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan."

- The project is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Southern California Association of Governments [SCAG]).
- The project replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The San Gabriel Valley Council of Governments (SGVCOG) Vehicle Miles Traveled Evaluation Tool ("VMT Evaluation Tool"), which was developed by Fehr & Peers as part of the SB 743 VMT Implementation Study effort, was utilized to conduct TPA screening in the City of San Marino.

As described in *Section 3.2*, public transit service is provided in the vicinity of the proposed project. The Los Angeles County Metropolitan Transportation Authority (Metro) Transit line and the Montebello bus line which provide services in the immediate vicinity of the project site, do not meet the criteria for a high-quality transit corridor[9]. Based on a review of the existing transit service in the vicinity, the proposed project is not expected to screen out of VMT analysis due to being located within a TPA. The VMT Evaluation Tool likewise concludes that the project fails the TPA screening criterion. Screening worksheets generated by the tool for the proposed project are included in ***Appendix C***.

4.1.2 *Low VMT Area Screening*

It is assumed that projects which will be located within areas which currently exhibit low VMT, and that incorporate similar features pertaining to density, land use mix, and transit availability, will tend to exhibit similarly low VMT. In areas where the existing VMT generation already falls below the applicable thresholds, and where projects are likely to generate similar levels of VMT, projects may be screened out of preparing detailed VMT analysis. OPR notes that such screening is appropriate for residential and office projects.

The City of San Marino has adopted a low VMT area screening criterion which may apply to residential, office, or other employment-related and mixed-use land use types. The SCAG Travel Demand Forecasting Model was used to establish VMT performance for individual Traffic Analysis Zones (TAZ). The VMT values for each TAZ are then compared to the applicable City thresholds (i.e., VMT per capita, per employee, or per service population) to determine if the TAZ can be considered a low VMT area. Locations within the City of San Marino which qualify for the low VMT area screening are to be identified through the VMT Evaluation Tool.

As reported in the screening worksheets provided in *Appendix C*, the project is situated within TAZ 22139300, which currently exhibits 27.95 total VMT per service population. The threshold for office project types is noted as 29.77 total VMT per service population. Therefore, the TAZ currently exhibit VMT below the applicable thresholds and could be considered a low VMT area. The proposed project site therefore meets the low VMT area screening criterion.

[9] Public Resources Code Section 21155(b): "For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours."

4.1.3 *Project Type Screening*

Consistent with the OPR's *Technical Advisory*, the City of San Marino has determined the following potential screening criteria for certain land development projects that may be presumed to result in a less than significant VMT impact as mentioned in the City's adopted Resolution No. 20-18, Exhibit 2:

- Local-serving retail less than 50,000 square feet, including gas stations, banks, restaurants, shopping center.
- Local-serving K-12 schools, local parks, daycare centers, etc.
- Local-serving hotels (e.g., non-destination hotels)
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (public libraries, fire stations, local government)
- Affordable, supportive, or transitional housing
- Assisted living facilities, senior housing
- Projects generating less than 110 daily vehicle trips
- Public parking garages and public parking lots

As mentioned in the City's Resolution and OPR's *Technical Advisory*, local serving uses typically redistributes and reroutes local trips rather than create new trips. By adding local serving opportunities into the urban fabric and thereby improving destination proximity, local-serving projects tends to shorten trips and reduce VMT. It is also noted that lead agencies may presume such local-serving projects create a less than significant transportation impact. Similarly, the proposed San Marino Center Improvement project will serve the local population and is considered a community institution, thereby shortening travel distances and reducing VMT. Thus, the proposed project can be presumed to result in a less than significant VMT impact based on State guidance because it would reduce VMT by shortening trip lengths, similar to local-serving retail developments and local-serving projects.

The City's VMT screening assessment worksheet is included in *Appendix C*. Therefore, the proposed project satisfies the criteria to be considered a local serving use and is screened out from further VMT analysis as it is presumed to cause less than significant transportation impacts.

4.1.4 *Summary of Screening Conclusions*

The City of San Marino has adopted three screening criteria which may be applied to screen proposed projects out of detailed VMT analysis. The project does not meet the criteria to be screened out of VMT analysis based on its location within a TPA. The project does, however, satisfy the criteria based on its location within a low VMT-generating area and based on the project land use type as a local serving use. Therefore, the project is screened out of further VMT analysis.

4.2 VMT Impact Conclusions

As described in *Section 4.1.4*, the project meets the criteria for a local serving project and is screened out of further VMT analysis. The screening criterion is based on the presumption that local serving projects will cause less than significant impacts. The project is also located within a low VMT-generating area. Therefore, through satisfaction of the screening criteria, the project is determined to result in a less than significant transportation impact.

4.3 Active Transportation and Public Transit Analysis

A significant impact may also occur "if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities". The following section provides a brief review of the City's adopted policies, plans, and programs pertaining to active transportation and public transit analysis.

4.3.1 *Adopted Policies, Plans, or Programs*

The City's Circulation Element (1995) and the Final General Plan (2003) sets forth actions and policies pertaining to accident and traffic safety, transit and public transportation, ensuring easy and convenient access to the regional facilities, bicycle routes and pedestrian facilities, among other things. Relevant adopted policies include:

- Objective L.8: Huntington Drive – Designate areas for commercial use on Huntington Drive consistent with existing commercial locations.

- Policy 12: Develop and implement neighborhood traffic control plans which will reduce the speed and volume of traffic on residential streets to acceptable levels.

- Policy 17: Improve safety at school drop-off areas and employ appropriate traffic control measures in the vicinity of schools to maximize safety for school children walking or bicycling to/from school.

- Policy 18: The City shall work with public transit agencies to ensure that transit lines are routed on streets in accordance with the policies of [the] Circulation Element.

- Policy 23: The City shall develop a bicycle plan which provides opportunities for safe, recreational bike usage and provides continuity between land uses in San Marino.

- Policy 24: The City shall evaluate the sidewalk system throughout the City, in all neighborhoods, and where approval for sidewalk installation is provided by residents.

- Policy 25: In areas of the City, where commercial or public facilities are located, the City shall implement measures to enhance the pedestrian and bicycle environment, to attempt to slow passing vehicular traffic, and to ensure handicapped accessibility in accordance with the requirements of the Americans with Disabilities Act.

- Policy 26: Install pedestrian-activated signals, where appropriate, and crosswalks to provide safe, adequate pedestrian accessibility for shopping areas and residences.

- Policy 36: The City shall encourage its residents and employees to utilize alternative modes of transportation such as buses, light rail transit, carpools, Dial-A-Ride vehicles, bicycles and walking and shall take measures to ensure that these alternate modes are available in the City.

- Policy 37: The City shall encourage Transportation Demand Management programs as a mechanism to reduce parking demands in the City.

As mentioned previously, the *2014 Draft San Marino Bicycle and Pedestrian Plan* includes objectives pertaining to programs that support bicycling, including programs that introduce and promote education, encouragement, and outreach, and encourage non-motorized travel to shops and restaurants. The Plan also provides specific recommendations including several options for providing bike lanes and improved pedestrian crossing markings along the entire length of Huntington Drive in order to promote walking and bicycling activities within the City. The *San Marino Safe Routes to School Program (2012-2015)* involved collaboration between the City and schools to improve the safety of students traveling to/from school with an increased focus on students and road safety.

4.3.2 *Qualitative Impact Conclusions*

The proposed project is not expected to result in a significant impact on active transportation or public transit in the vicinity of the project site. As described in *Section 3.1* herein, the project site is planned to accommodate pedestrian and bicycle access via exclusive walkways which connect the site to the public sidewalks. The walkways minimize the extent of pedestrian and bicycle interaction with vehicles at the site and provide a comfortable, convenient, and safe environment which in turn can encourage use of active transportation modes. The project site is further planned to provide bicycle parking facilities for use by employees and the public. The proposed project is therefore found to be in alignment with the City's Circulation Element and Final General Plan as well as the other Plans' goals to promote pedestrian and bicycle safety and provide appropriate and supportive active multi-modal transportation infrastructure.

The proposed project is located adjacent to Huntington Drive, which is currently served by public bus transit service provided by Metro. As noted in *Section 3.2*, the project site is within walking distance from an existing bus stop located along Huntington Drive at West Drive. The proposed project is not expected to affect access or safety at the existing bus stops, nor is it expected to hinder public transit service along Huntington Drive. The proposed project is not expected to preclude the City from constructing bicycle facilities or pursuing bicycle network improvements along local roadways within the study area. Development of the proposed project will not prevent the City from completing any proposed transit, bicycle, or pedestrian facilities.

Since the proposed project is not found to result in conflicts with adopted policies, plans, or programs, nor is it expected to negatively affect the performance or safety of existing or planned

pedestrian, bicycle, or transit facilities, it is determined that the proposed project will have a less than significant impact on active transportation and public transit in the vicinity of the project site.

5.0 NON-CEQA ANALYSIS

The City of San Marino has established vehicle Level of Service (LOS) standards which local infrastructure will strive to maintain. The LOS standards apply to discretionary approvals of new land use projects. The following section presents the operational (i.e., Level of Service) analysis prepared for the proposed project pursuant to this requirement.

5.1 Analysis Methodology

In order to estimate the proposed project's effect on intersection operations, a multi-step process has been utilized. The first step is trip generation, which estimates the total arriving and departing traffic volumes on a peak hour and daily basis. The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound project traffic volumes. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area. The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area. The proposed project's forecast trip generation, distribution, and assignment is presented in *Section 2.8* herein. With the forecasting process complete and project traffic assignments developed, the effect of the proposed project is isolated by comparing operational conditions at the selected study intersections using existing and expected future traffic volumes without and with forecast project traffic.

Intersection analyses were prepared utilizing the *Synchro 11* software package which implements the Highway Capacity Manual (HCM) operational method to determine delay values and corresponding Levels of Service (LOS) for the study intersections. For the HCM operational method of analysis, LOS for intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents, and when there are no other vehicles on the road.

The HCM signalized methodology calculates the control delay for each of the subject traffic movements and determines the LOS for each constrained movement. The control delay for any particular movement is a function of the capacity of the approach and the degree of saturation. The overall control delay is measured in seconds per vehicle and the LOS is then determined. Intersection Levels of Service vary from LOS A (free flow condition) to LOS F (jammed condition). The six qualitative categories of Level of Service have been defined along with the corresponding HCM control delay value range and are shown in ***Table 5-1***. Detailed description of the HCM operations method and corresponding Levels of Service is also provided in ***Appendix D***.

TABLE 5-1

LEVEL OF SERVICE CRITERIA AND DELAY CHARACTERISTICS

Level of Service (LOS)	Control Delay (Sec/Veh)	Level of Service Description
A	≤ 10	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay values.
B	> 10 and ≤ 20	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	> 20 and ≤ 35	These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35 and ≤ 55	At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55 and ≤ 80	These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.
F	> 80	This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

5.2 Criteria for Non-CEQA Analysis

The relative effect of the added project traffic volumes to be generated by the proposed project during the weekday AM and PM peak hours was evaluated based on analysis of existing and future operating conditions at the study intersections, without and with the proposed project. The previously discussed capacity analysis procedures were utilized to evaluate the future *v/c* or delay relationships and service level characteristics at each study intersection. The effect of project-generated traffic at each study intersection was compared to the City of San Marino's intersection LOS standards. According to the *Citywide Traffic Circulation Study*, the acceptable LOS for intersections in the City is LOS D or better as established in the City's General Plan. It is assumed that the addition of project traffic to an intersection which results in the degradation of intersection operations from LOS D or better to LOS E or F operations is considered deficient and may require improvements.

5.3 Analysis Scenarios

In coordination with City staff, LOS calculations have been prepared for the following scenarios:

[a] Existing conditions.

[b] Existing with project conditions.

[c] Condition [a] plus one percent (1.0%) per year annual ambient traffic growth through year 2023 and with completion and occupancy of the related projects (i.e., future without project conditions).

[d] Condition [c] with completion and occupancy of the proposed project.

[e] Condition [d] with implementation of intersection improvement measures, if necessary.

The weekday AM and PM peak hour LOS analysis prepared for the study intersections using the HCM methodology is summarized in ***Table 5-2***. The HCM data worksheets for the analyzed intersections are provided in *Appendix D.*

5.4 Existing Conditions

5.4.1 *Existing Conditions*

As indicated in column [1] of *Table 5-2*, three of the four study intersections are presently operating at LOS D or better during the weekday AM and PM peak hours under existing conditions. One of the study intersections (i.e., Sierra Madre Boulevard-San Marino Avenue/Huntington Drive) currently operates at LOS F during both the weekday AM and PM peak hours. The existing traffic volumes at the study intersections during the weekday AM and PM peak hours was previously displayed in *Figures 3-4* and *3-5*, respectively.

5.4.2 *Existing With Project Conditions*

As shown in column [2] of *Table 5-2,* three of the four intersections are expected to continue operating at LOS D or better during the weekday AM and PM peak hours under the existing with project conditions. The LOS and delays at the study intersections incrementally increase with the addition of project-generated traffic. One of the study intersections (i.e., Sierra Madre Boulevard-San Marino Avenue/Huntington Drive) will continue to operate at LOS F during both the weekday AM and PM peak hours with the addition of project traffic. The proposed project is not expected to cause any of the study intersections to operate at a deficient LOS, therefore no project-specific intersection improvements or project-specific transportation demand management measures are proposed or required. ***Figures 5-1*** and ***5-2*** illustrate the existing with project traffic volumes at the study intersections during the weekday AM and PM peak hours, respectively.

5.5 Future Year 2024 Cumulative Conditions

5.5.1 *Future Year 2024 Cumulative Without Project Conditions*

The future cumulative baseline conditions were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth). The LOS and delays at the study intersections are incrementally

Table 5-2
SUMMARY OF DELAYS AND LEVELS OF SERVICE
WEEKDAY AM AND PM PEAK HOURS

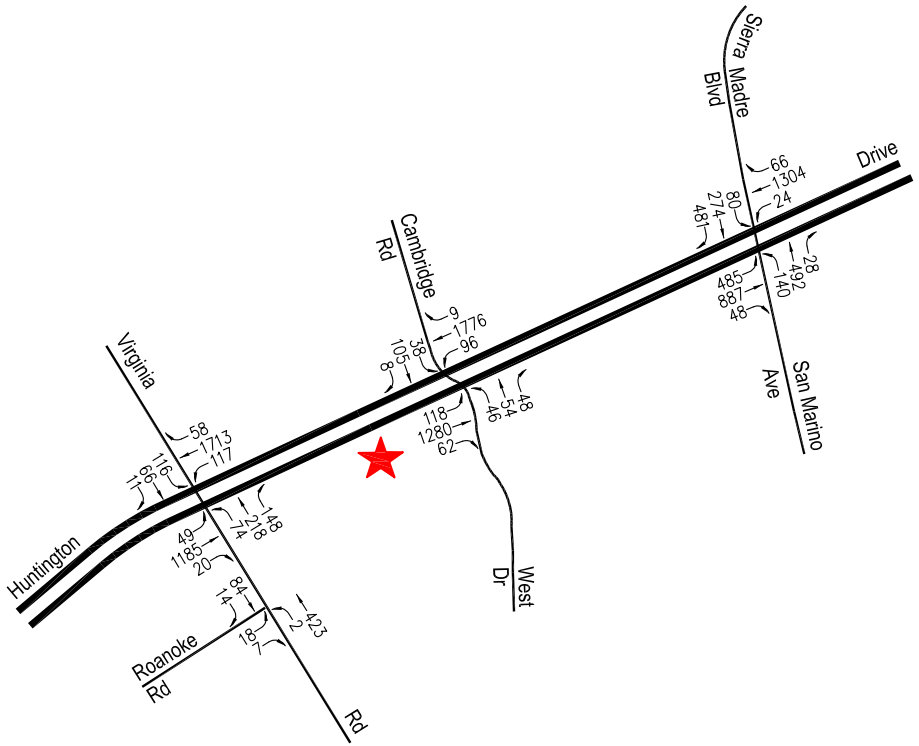
NO.	INTERSECTION	TRAFFIC CONTROL	PEAK HOUR	[1] YEAR 2021 EXISTING DELAY [a]	[1] YEAR 2021 EXISTING LOS [b]	[2] YEAR 2021 EXISTING W/ PROJECT DELAY [a]	[2] YEAR 2021 EXISTING W/ PROJECT LOS [b]	[2] CHANGE IN DELAY [(2)-(1)]	[2] SIGNIF. IMPACT [c]	[3] YEAR 2023 FUTURE PRE-PROJECT DELAY [a]	[3] YEAR 2023 FUTURE PRE-PROJECT LOS [b]	[4] YEAR 2023 FUTURE W/ PROJECT DELAY [a]	[4] YEAR 2023 FUTURE W/ PROJECT LOS [b]	[4] CHANGE IN DELAY [(4)-(3)]	[4] SIGNIF. IMPACT [c]
1	Virginia Road/ Huntington Drive	Signalized	AM	26.9	C	27.0	C	0.1	No	27.5	C	27.6	C	0.1	No
			PM	20.8	C	20.9	C	0.1	No	21.3	C	21.4	C	0.1	No
2	Virginia Road/ Roanoke Road	All-Way Stop	AM	10.7	B	10.7	B	0.0	No	10.9	B	10.9	B	0.0	No
			PM	10.3	B	10.3	B	0.0	No	10.5	B	10.5	B	0.0	No
3	Cambridge Road-West Drive/ Huntington Drive	Signalized	AM	41.7	D	43.7	D	2.0	No	42.5	D	44.8	D	2.3	No
			PM	44.2	D	47.7	D	3.5	No	45.7	D	48.7	D	3.0	No
4	Sierra Madre Blvd-San Marino Ave/ Huntington Drive	Signalized	AM	176.4	F	177.0	F	0.6	No	184.3	F	185.1	F	0.8	No
			PM	152.7	F	154.0	F	1.3	No	162.5	F	164.4	F	1.9	No

[a] Intersection analysis based on the Highway Capacity Manual, 6th Edition operational analysis methodologies. Reported control delay values in seconds per vehicle.

[b] Intersection Levels of Service are based on the following criteria:

Signalized Intersection Control Delay (s/veh)	Unsignalized Intersection Control Delay (s/veh)	LOS
<= 10	<= 10	A
> 10-20	> 10-15	B
> 20-35	> 15-25	C
> 35-55	> 25-35	D
> 55-80	> 35-50	E
> 80	> 50	F

[c] The acceptable LOS for intersections in the City is LOS D or better as established in the City's General Plan. The addition of project traffic to an intersection which results in the degradation of intersection operations from LOS D or better to LOS E or F is considered deficient.



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Project Site

Figure 5-1

Existing With Project Traffic Volumes

Weekday AM Peak Hour

San Marino Center Improvement Project

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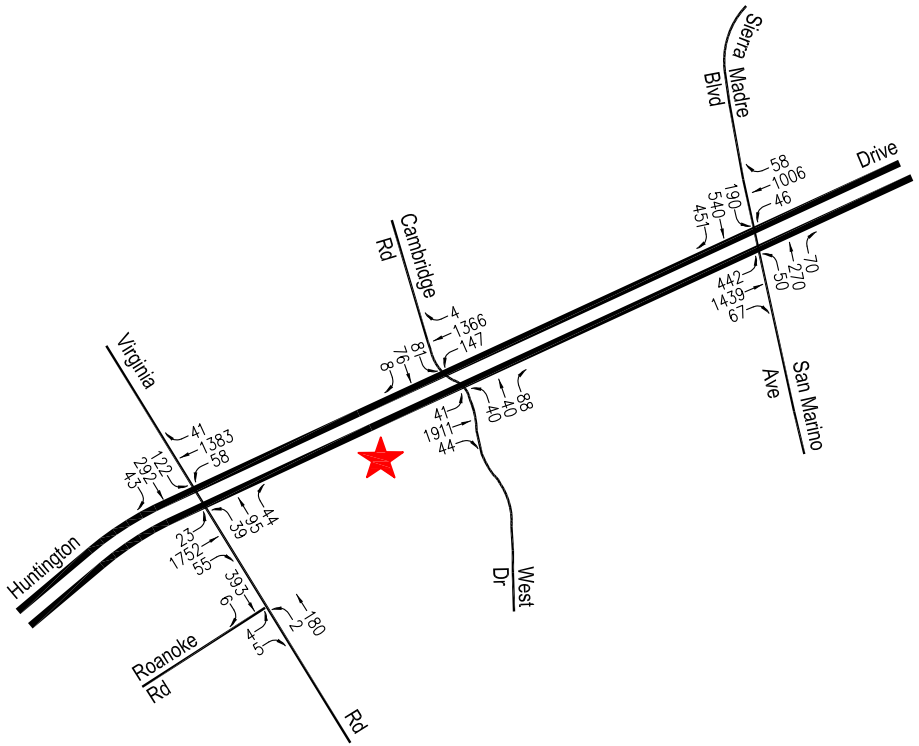

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Project Site

Figure 5-2

Existing With Project Traffic Volumes

Weekday PM Peak Hour

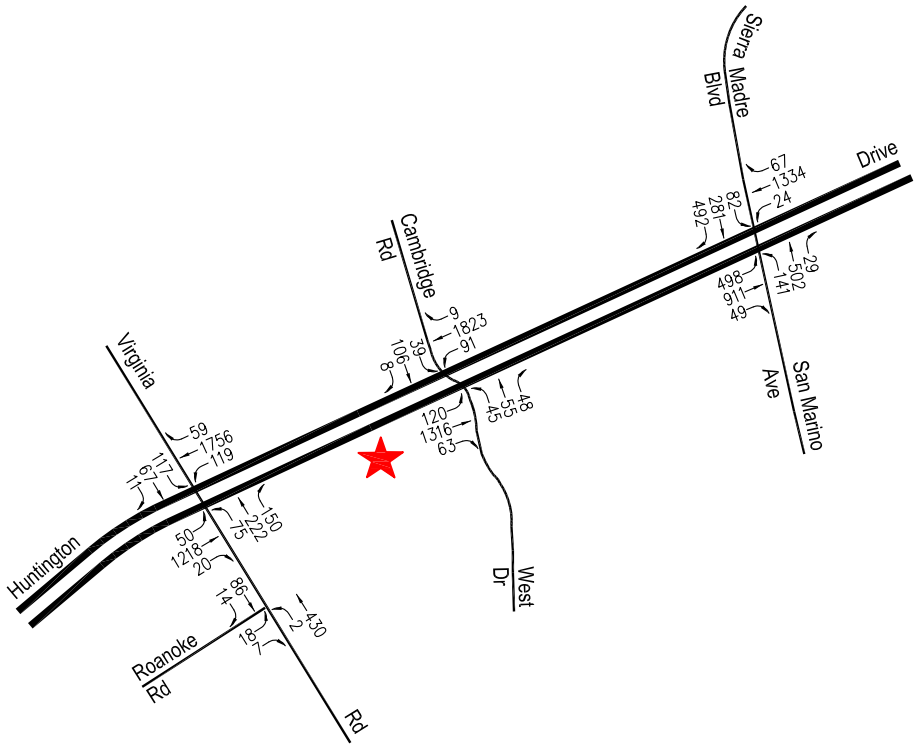
San Marino Center Improvement Project

LINSCOTT LAW & GREENSPAN engineers

increased with the addition of ambient traffic and traffic generated by the related projects listed in *Table 3-4*. As presented in column [3] of *Table 5-2*, three of the study intersections are expected to operate at LOS D or better during the weekday AM and weekday PM peak hours with the addition of growth in ambient traffic and related projects traffic under the future without project conditions. One of the study intersections (i.e., Sierra Madre Boulevard-San Marino Avenue/Huntington Drive) will continue to operate at LOS F during both the weekday AM and PM peak hours for the future cumulative without project condition. The future without project (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 5-3*** and ***5-4***, respectively.

5.5.2 *Future Year 2024 Cumulative With Project Conditions*

As shown in column [4] of *Table 5-2*, three of the study intersections are expected to continue operating at LOS D or better under the future with project condition. One of the study intersections (i.e., Sierra Madre Boulevard-San Marino Avenue/Huntington Drive) is expected to continue to operate at LOS F during both the weekday AM and PM peak hours for the future with project condition. The LOS and delays at the study intersections incrementally increase with the addition of project-generated traffic. The proposed project is not expected to cause any of the study intersections to operate at a deficient LOS, therefore no project-specific intersection improvements or project-specific transportation demand management measures are proposed or required. The future with project (existing, ambient growth, related projects and project) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 5-5*** and ***5-6***, respectively.



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Project Site

Figure 5-3

Future Without Project Traffic Volumes

Weekday AM Peak Hour

San Marino Center Improvement Project

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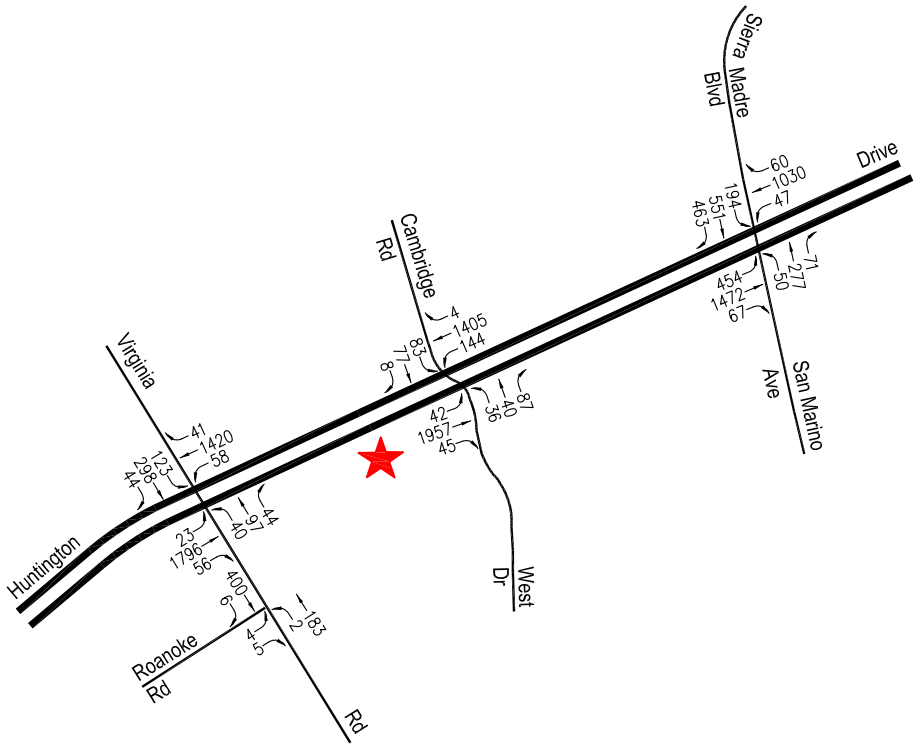

Project Site

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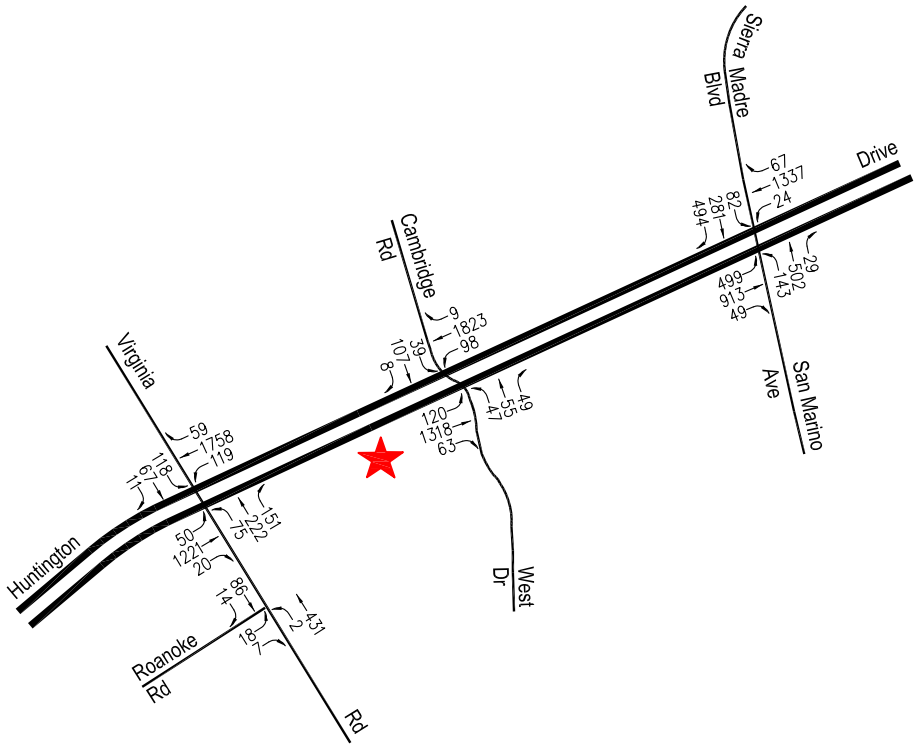
Figure 5-4

Future Without Project Traffic Volumes

Weekday PM Peak Hour

San Marino Center Improvement Project



N

Project Site

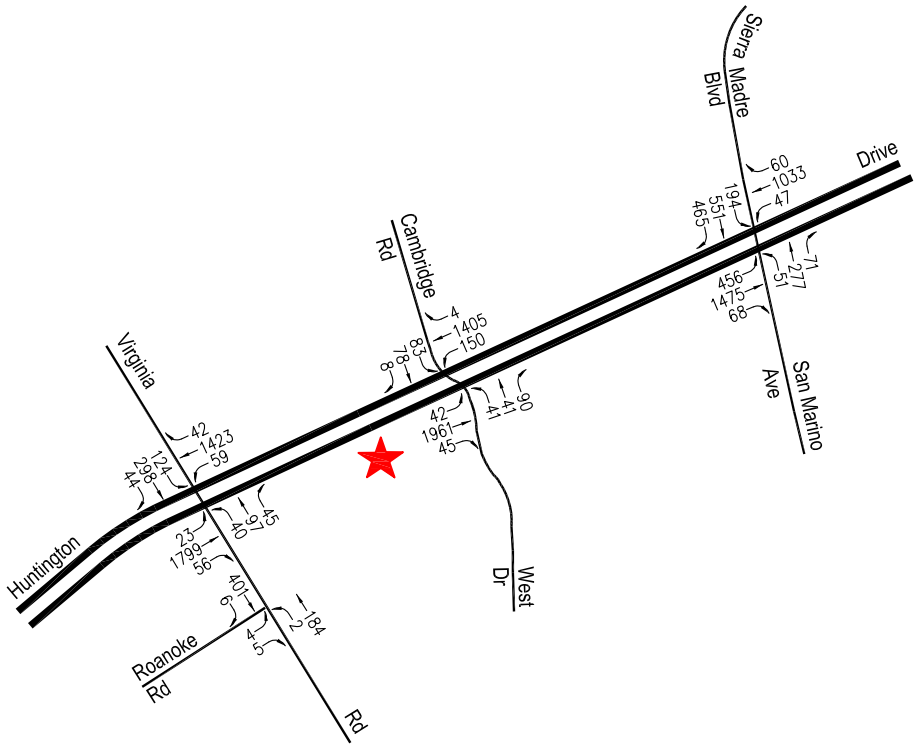
LINSCOTT LAW & GREENSPAN engineers

Figure 5-5

Future With Project Traffic Volumes

Weekday AM Peak Hour

San Marino Center Improvement Project



N

Project Site

Figure 5-6

Future With Project Traffic Volumes

Weekday PM Peak Hour

San Marino Center Improvement Project

6.0 SUMMARY AND CONCLUSIONS

- ***Project Description*** – The project site is located at 1800 Huntington Drive, along the south side of Huntington Drive west of West Drive in the City of San Marino, California. The proposed project consists of revitalizing and updating the existing San Marino Center (SMC) including rehabilitation of the building interior to include additional offices to accommodate six (6) City Recreation Department staff, optimization of the interior public gathering space, replacement of the heating/air conditioning, plumbing and electrical systems and light fixtures to current building code standards, renovation of the building and grounds for compliance with the Americans with Disabilities Act (ADA), and building façade similar to that of the adjacent buildings. The SMC building totals 10,832 gross square feet of building floor area. The project build-out and occupancy year is anticipated by the year 2023.

- ***Project Site Access*** – Vehicular access to the project site is planned to be accommodated by two existing driveways on West Drive and two existing driveways on Huntington Drive. Pedestrian and bicycle access to the project site will be accommodated via exclusive walkways which connect from the public sidewalks to the facility.

- ***Project Parking –*** Parking for the San Marino Center exists on the west and south sides of the building, in the parking lot of the Henry E. Huntington Middle School, through a cooperative agreement with the San Marino Unified School District for use of up to 48 spaces for both the SMC and the Crowell Public Library. In 2019, the shared parking use agreement for non-exclusive use of the 48 spaces was renewed for a 10-year term. Given the review of the shared parking demand analysis and comparisons with the parking supply, it can be concluded that surpluses of 9 and 33 parking spaces are forecast to occur during peak weekday and weekend conditions, respectively, assuming that the 17 on-street spaces along Huntington Drive and West Drive along the library frontages are available for shared use.

- ***Project Trip Generation*** – The proposed project is expected to generate 19 new vehicle trips (13 inbound trips and 6 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 25 new vehicle trips (12 inbound trips and 13 outbound trips). Over a 24-hour period, the proposed project is forecast to generate approximately 312 new daily trip ends (156 inbound trips and 156 outbound trips) during a typical weekday. For purposes of the LOS analysis for the non-CEQA transportation assessment, the ITE trip generation forecast was utilized as it was slightly higher when compared to that based on the site-specific programming data.

- ***CEQA Vehicle Miles Traveled Assessment*** – Consistent with the requirements of CEQA Guidelines Section 15064.3, the City of San Marino has adopted significance criteria for transportation impacts based on vehicle miles traveled for land use development projects. The City has also adopted three criteria for screening projects out of detailed VMT analysis. The proposed San Marino Center Improvement project meets the criteria to be screened out of VMT analysis as it will serve the local population and is considered a community institution, thereby

shortening travel distances and reducing VMT. This screening criterion is based on the presumption that by adding opportunities into the urban fabric and improving destination proximity, local serving projects/developments tend to shorten trips and reduce VMT. The project is also located within a low VMT-generating area. Therefore, through satisfaction of the screening criteria, the proposed project is determined to have a less than significant transportation impact.

- ***CEQA Active Transportation and Public Transit Assessment*** – A significant impact may also occur "if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities". The proposed project is found to be in alignment with the City's Circulation Element, the Final General Plan, the 2014 Draft San Marino Bicycle and Pedestrian Plan, the San Marino Safe Routes to School Program, and the City of San Marino Huntington Drive Safe Streets Corridor Plan goals to promote pedestrian and bicycle safety and provide appropriate and supportive active transportation infrastructure. Further, development of the proposed project will not prevent the City from completing any proposed transit, bicycle, or pedestrian facilities. It is therefore determined that the proposed project will result in a less than significant impact on active transportation and public transit in the vicinity of the project site.

- ***Non-CEQA Analysis*** – Four study intersections were reviewed for consistency with the City of San Marino's adopted Level of Service (LOS) standards. The study intersections were evaluated using the City-approved Highway Capacity Manual (HCM) methodology to determine the LOS under existing, existing with project, and future without and with project conditions. Based on application of the City's LOS standards, the proposed project is not required to identify or construct intersection improvements at any of the study intersections.

APPENDIX A

SHARED PARKING ANALYSIS WORKSHEETS

Appendix Table A-1

MIDDLE SCHOOL

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	**Middle School**						
Size	**60 /Employees**						
Peak Pkg Rate[2]	**1.40 /Employee**						
Weekday Pkg Rate[3]	**1.40 /Employee**						
Gross Spaces	**84 Spaces**						
Adjusted Gross	***1.00***	**84 Spaces**					
Spaces[4]	**26 Guest Spc.**		**58 Staff Spc.**		**42 Event Spc.**		**Shared**
Time of Day	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**Parking Demand**
6:00 AM	0%	0	0%	0	0%	0	0
7:00 AM	1%	0	100%	58	0%	0	58
8:00 AM	20%	5	100%	58	0%	0	63
9:00 AM	60%	16	100%	58	0%	0	74
10:00 AM	100%	26	100%	58	0%	0	84
11:00 AM	45%	12	100%	58	0%	0	70
12:00 PM	15%	4	100%	58	0%	0	62
1:00 PM	45%	12	100%	58	0%	0	70
2:00 PM	95%	25	100%	58	0%	0	83
3:00 PM	45%	12	100%	58	100%	42	112
4:00 PM	15%	4	100%	58	100%	42	104
5:00 PM	10%	3	100%	58	100%	42	103
6:00 PM	5%	1	0%	0	100%	42	43
7:00 PM	2%	1	0%	0	50%	21	22
8:00 PM	1%	0	0%	0	50%	21	21
9:00 PM	0%	0	0%	0	25%	11	11
10:00 PM	0%	0	0%	0	0%	0	0
11:00 PM	0%	0	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0%	0	0

Notes:

[1] Source: "Shared Parking", Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

[2] Peak parking rates based on the ITE *Parking Generation Manual* , 5th Edition, average peak period parking demand ratio for the middle school/junior high school (Land Use Code 522).

[3] The weekend parking ratio was assumed to be similar to the weekday given the various weekend activities held at the Huntington Middle School (i.e., sports classes/competitions, Chinese School, etc.)

[4] Gross spaces not adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table A-1

MIDDLE SCHOOL

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	**Middle School**						
Size	**60 /Employees**						
Peak Pkg Rate[2]	**1.40 /Employee**						
Weekend Pkg Rate[3]	**1.40 /Employee**						
Gross Spaces	**84 Spaces**						
Adjusted Gross	***1.00***	**84 Spaces**					
Spaces[4]	**0 Guest Spc.**		**0 Staff Spc.**		**84 Event Spc.**		**Shared**
Time of Day	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**Parking Demand**
6:00 AM	0%	0	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	50%	42	42
8:00 AM	0%	0	0%	0	100%	84	84
9:00 AM	0%	0	0%	0	100%	84	84
10:00 AM	0%	0	0%	0	100%	84	84
11:00 AM	0%	0	0%	0	100%	84	84
12:00 PM	0%	0	0%	0	75%	63	63
1:00 PM	0%	0	0%	0	75%	63	63
2:00 PM	0%	0	0%	0	75%	63	63
3:00 PM	0%	0	0%	0	75%	63	63
4:00 PM	0%	0	0%	0	75%	63	63
5:00 PM	0%	0	0%	0	75%	63	63
6:00 PM	0%	0	0%	0	75%	63	63
7:00 PM	0%	0	0%	0	75%	63	63
8:00 PM	0%	0	0%	0	50%	42	42
9:00 PM	0%	0	0%	0	0%	0	0
10:00 PM	0%	0	0%	0	0%	0	0
11:00 PM	0%	0	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0%	0	0

Notes:

[1] Source: "Shared Parking", Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

[2] Peak parking rates based on the ITE *Parking Generation Manual* , 5th Edition, average peak period parking demand ratio for the middle school/junior high school (Land Use Code 522).

[3] The weekend parking ratio was assumed to be similar to the weekday given the various weekend activities held at the Huntington Middle School (i.e., sports classes/competitions, Chinese School, etc.)

[4] Gross spaces not adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table A-2

COMMUNITY CENTER

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Community Center				
Size	10.8 KSF				
Peak Pkg Rate[2]	1.0 /350 SF				
Weekday Pkg Rate[3]	1.0 /350 SF				
Gross Spaces	43 Spaces				
Adjusted Gross	*1.00*	43 Spaces			
Spaces[4]	38 Visitor Spc.		5 Emp. Spc.		Shared
Time of Day	% Of Peak[5]	# Of Spaces	% Of Peak[5]	# Of Spaces	Parking Demand
6:00 AM	0%	0	0%	0	0
7:00 AM	8%	3	8%	0	3
8:00 AM	41%	16	41%	2	18
9:00 AM	41%	16	41%	2	18
10:00 AM	91%	35	91%	5	40
11:00 AM	85%	32	85%	4	36
12:00 PM	52%	20	52%	3	23
1:00 PM	52%	20	52%	3	23
2:00 PM	33%	13	33%	2	15
3:00 PM	14%	5	14%	1	6
4:00 PM	14%	5	14%	1	6
5:00 PM	0%	0	0%	0	0
6:00 PM	44%	17	44%	2	19
7:00 PM	100%	38	100%	5	43
8:00 PM	100%	38	100%	5	43
9:00 PM	44%	17	44%	2	19
10:00 PM	44%	17	44%	2	19
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: "Shared Parking", Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

[2] Peak parking rates based on the City of San Marino Municipal Code off-street parking requirements.

[3] The weekday and weekend parking rates are based on the Code parking ratio for office use and no weekday vs. weekend parking variations are assumed in the base parking ratios.

[4] Gross spaces not adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] The hourly parking profile was determined based on site-specific programming information for the weekday and weekend time periods as provided by the Project Applicant team.

Appendix Table A-2

COMMUNITY CENTER

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	**Community Center**				
Size	**10.8 KSF**				
Peak Pkg Rate[2]	**1.0 /350 SF**				
Weekend Pkg Rate[3]	**1.0 /350 SF**				
Gross Spaces	**43 Spaces**				
Adjusted Gross	***1.00***	**43 Spaces**			
Spaces[4]	**39 Visitor Spc.**		**4 Emp. Spc.**		**Shared**
Time of Day	**% Of Peak[5]**	**# Of Spaces**	**% Of Peak[5]**	**# Of Spaces**	**Parking Demand**
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	0
8:00 AM	40%	16	40%	2	18
9:00 AM	48%	19	48%	2	21
10:00 AM	48%	19	48%	2	21
11:00 AM	48%	19	48%	2	21
12:00 PM	48%	19	48%	2	21
1:00 PM	48%	19	48%	2	21
2:00 PM	48%	19	48%	2	21
3:00 PM	40%	16	40%	2	18
4:00 PM	100%	39	100%	4	43
5:00 PM	100%	39	100%	4	43
6:00 PM	100%	39	100%	4	43
7:00 PM	100%	39	100%	4	43
8:00 PM	100%	39	100%	4	43
9:00 PM	100%	39	100%	4	43
10:00 PM	0%	0	0%	0	0
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: "Shared Parking", Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

[2] Peak parking rates based on the City of San Marino Municipal Code off-street parking requirements.

[3] The weekday and weekend parking rates are based on the Code parking ratio for office use and no weekday vs. weekend parking variations are assumed in the base parking ratios.

[4] Gross spaces not adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table A-3

LIBRARY

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	**Library**				
Size	**33.9 KSF**				
Peak Pkg Rate[2]	**2.25 /KSF**				
Weekday Pkg Rate[3]	**2.25 /KSF**				
Gross Spaces	**76 Spaces**				
Adjusted Gross	***1.00***	**76 Spaces**			
Spaces[4]	**68 Guest Spc.**		**8 Emp. Spc.**		**Shared**
Time of Day	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**Parking Demand**
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	10%	1	1
8:00 AM	0%	0	50%	4	4
9:00 AM	100%	68	100%	8	76
10:00 AM	100%	68	100%	8	76
11:00 AM	98%	67	100%	8	75
12:00 PM	98%	67	100%	8	75
1:00 PM	78%	53	100%	8	61
2:00 PM	72%	49	100%	8	57
3:00 PM	65%	44	100%	8	52
4:00 PM	70%	48	100%	8	56
5:00 PM	79%	54	90%	7	61
6:00 PM	60%	41	75%	6	47
7:00 PM	50%	34	50%	4	38
8:00 PM	40%	27	20%	2	29
9:00 PM	0%	0	10%	1	1
10:00 PM	0%	0	0%	0	0
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: "Shared Parking", Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

[2] Peak parking rates based on the ULI Shared Parking base parking ratios for public library use as summarized in Figure 2-2.

[3] The weekday and weekend parking rates are based on the weekday vs. weekend parking variations as summarized in Figure 2-2 of the "Shared Parking" manual.

[4] Gross spaces not adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table A-3

LIBRARY

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	**Library**				
Size	**33.9 KSF**				
Peak Pkg Rate[2]	**2.25 /KSF**				
Weekend Pkg Rate[3]	**2.10 /KSF**				
Gross Spaces	**71 Spaces**				
Adjusted Gross	***1.00***	**71 Spaces**			
Spaces[4]	**64 Guest Spc.**		**7 Emp. Spc.**		**Shared**
Time of Day	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**Parking Demand**
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	0
8:00 AM	0%	0	10%	1	1
9:00 AM	0%	0	50%	4	4
10:00 AM	100%	64	100%	7	71
11:00 AM	90%	58	100%	7	65
12:00 PM	80%	51	100%	7	58
1:00 PM	65%	42	100%	7	49
2:00 PM	50%	32	100%	7	39
3:00 PM	35%	22	50%	4	26
4:00 PM	11%	7	10%	1	8
5:00 PM	5%	3	10%	1	4
6:00 PM	5%	3	10%	1	4
7:00 PM	0%	0	10%	1	1
8:00 PM	0%	0	0%	0	0
9:00 PM	0%	0	0%	0	0
10:00 PM	0%	0	0%	0	0
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: "Shared Parking", Third Edition, Urban Land Institute, ICSC, and National Parking Association, 2020.

[2] Peak parking rates based on the ULI Shared Parking base parking ratios for public library use as summarized in Figure 2-2.

[3] The weekday and weekend parking rates are based on the weekday vs. weekend parking variations as summarized in Figure 2-2 of the "Shared Parking" manual.

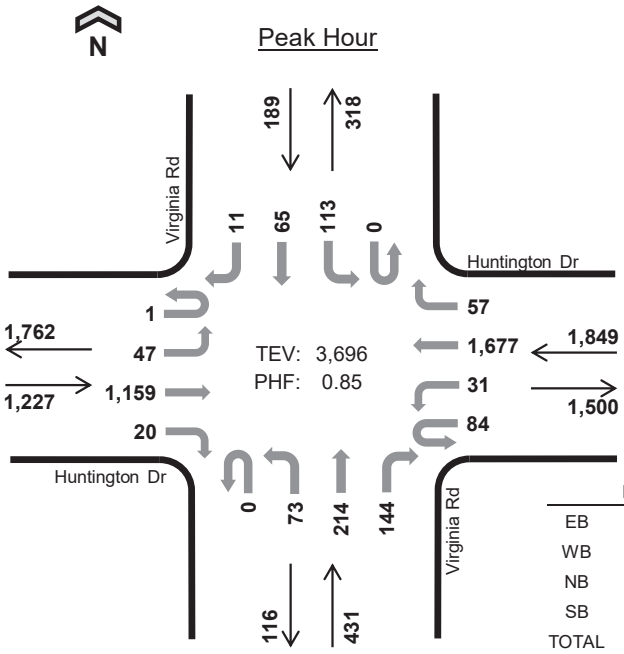
[4] Gross spaces not adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

APPENDIX B

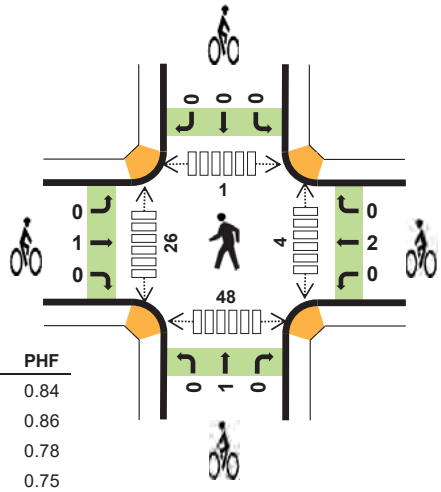
TRAFFIC, PEDESTRIAN, AND BICYCLE COUNT DATA

Virginia Rd
Huntington Dr

Date: 11-07-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	1.3%	0.84
WB	0.7%	0.86
NB	0.5%	0.78
SB	1.1%	0.75
TOTAL	0.9%	0.85



Two-Hour Count Summaries

Interval Start		Huntington Dr Eastbound				Huntington Dr Westbound				Virginia Rd Northbound				Virginia Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	2	167	1	5	5	409	10	0	12	25	7	0	8	8	1	660	0
7:15 AM		0	7	197	3	1	4	440	9	0	17	36	6	0	6	8	2	736	0
7:30 AM		**0**	**11**	**255**	**2**	**13**	**1**	**447**	**10**	**0**	**12**	**59**	**12**	**0**	**18**	**10**	**0**	**850**	0
7:45 AM		**0**	**9**	**325**	**7**	**18**	**9**	**380**	**12**	**0**	**21**	**72**	**46**	**0**	**44**	**13**	**6**	**962**	3,208
8:00 AM		**0**	**15**	**232**	**4**	**18**	**15**	**376**	**13**	**0**	**19**	**44**	**32**	**0**	**12**	**20**	**3**	**803**	3,351
8:15 AM		**1**	**12**	**347**	**7**	**35**	**6**	**474**	**22**	**0**	**21**	**39**	**54**	**0**	**39**	**22**	**2**	**1,081**	**3,696**
8:30 AM		1	11	249	1	11	10	384	14	0	16	43	21	0	5	17	3	786	3,632
8:45 AM		0	6	248	3	1	13	379	14	0	9	43	5	0	12	15	4	752	3,422
Count Total		2	73	2,020	28	102	63	3,289	104	0	127	361	183	0	144	113	21	6,630	0
Peak Hour	**All**	**1**	**47**	**1,159**	**20**	**84**	**31**	**1,677**	**57**	**0**	**73**	**214**	**144**	**0**	**113**	**65**	**11**	**3,696**	**0**
	HV	**0**	**2**	**14**	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**33**	**0**
	HV%	**0%**	**4%**	**1%**	**0%**	**0%**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**1%**	**2%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	4	0	0	*8*	3	0	0	0	*3*	0	2	0	0	*2*
7:15 AM	2	6	0	0	*8*	1	0	0	0	*1*	1	1	2	2	*6*
7:30 AM	**2**	**6**	**0**	**0**	***8***	**0**	**1**	**0**	**0**	***1***	**0**	**5**	**0**	**6**	*11*
7:45 AM	**5**	**2**	**0**	**1**	***8***	**0**	**1**	**0**	**0**	***1***	**1**	**11**	**0**	**10**	*22*
8:00 AM	**3**	**2**	**2**	**0**	***7***	**1**	**0**	**1**	**0**	***2***	**0**	**4**	**0**	**7**	*11*
8:15 AM	**6**	**3**	**0**	**1**	***10***	**0**	**0**	**0**	**0**	***0***	**3**	**6**	**1**	**25**	***35***
8:30 AM	3	6	0	0	*9*	0	0	0	0	*0*	0	1	1	2	*4*
8:45 AM	3	4	0	0	*7*	1	0	0	0	*1*	1	4	1	2	*8*
Count Total	28	33	2	2	*65*	6	2	1	0	*9*	6	34	5	54	*99*
Peak Hour	**16**	**13**	**2**	**2**	***33***	**1**	**2**	**1**	**0**	***4***	**4**	**26**	**1**	**48**	***79***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Huntington Dr Eastbound				Huntington Dr Westbound				Virginia Rd Northbound				Virginia Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8	0
7:15 AM	0	0	2	0	0	0	4	2	0	0	0	0	0	0	0	0	8	0
7:30 AM	**0**	**0**	**2**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	0
7:45 AM	**0**	**1**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	32
8:00 AM	**0**	**1**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**7**	31
8:15 AM	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**10**	**33**
8:30 AM	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	0	9	34
8:45 AM	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7	33
Count Total	0	2	26	0	0	0	31	2	0	0	2	0	0	1	1	0	65	0
Peak Hour	**0**	**2**	**14**	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**33**	**0**

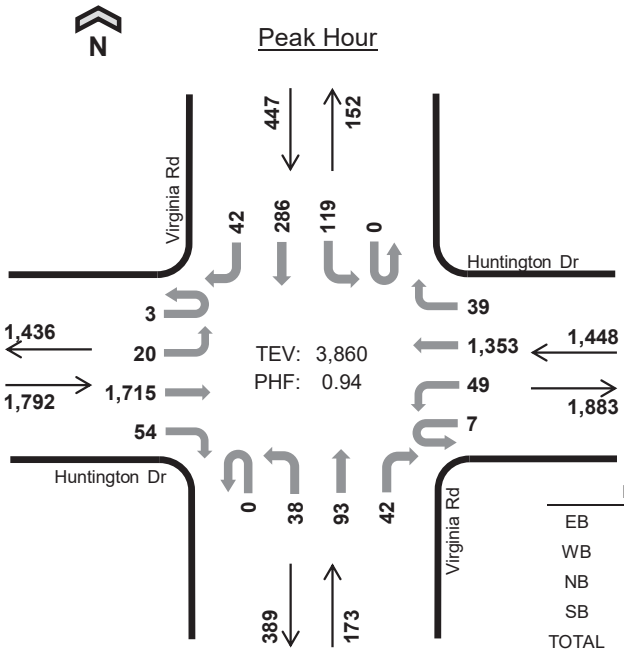
Two-Hour Count Summaries - Bikes

Interval Start	Huntington Dr Eastbound			Huntington Dr Westbound			Virginia Rd Northbound			Virginia Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	3	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	3
Count Total	1	4	1	0	2	0	0	1	0	0	0	0	9	0
Peak Hour	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	**0**

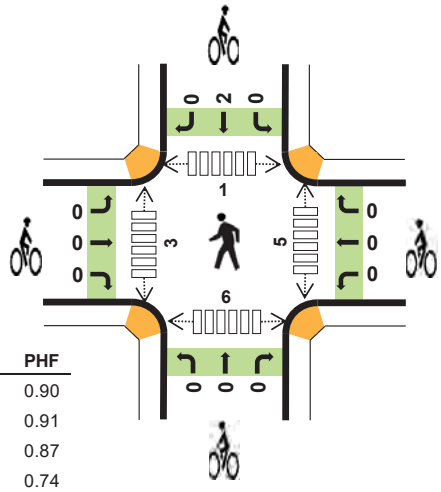
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Virginia Rd
Huntington Dr

Date: 11-07-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.3%	0.90
WB	0.3%	0.91
NB	0.0%	0.87
SB	1.3%	0.74
TOTAL	0.4%	0.94



Two-Hour Count Summaries

Interval Start		Huntington Dr Eastbound				Huntington Dr Westbound				Virginia Rd Northbound				Virginia Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		1	7	373	10	0	9	261	9	0	4	22	9	0	36	60	6	807	0
4:15 PM		1	8	416	21	1	7	312	13	0	5	15	10	0	32	58	4	903	0
4:30 PM		1	12	396	9	7	11	277	11	0	13	25	8	0	23	76	9	878	0
4:45 PM		0	5	463	11	2	9	296	11	0	3	26	10	0	21	57	9	923	3,511
5:00 PM		**0**	**11**	**411**	**15**	**1**	**10**	**330**	**7**	**0**	**8**	**28**	**9**	**0**	**26**	**74**	**13**	**943**	3,647
5:15 PM		**0**	**5**	**405**	**14**	**1**	**15**	**372**	**12**	**0**	**13**	**27**	**10**	**0**	**40**	**94**	**18**	**1,026**	3,770
5:30 PM		**2**	**2**	**418**	**12**	**3**	**12**	**331**	**8**	**0**	**10**	**22**	**13**	**0**	**32**	**71**	**7**	**943**	3,835
5:45 PM		**1**	**2**	**481**	**13**	**2**	**12**	**320**	**12**	**0**	**7**	**16**	**10**	**0**	**21**	**47**	**4**	**948**	**3,860**
Count Total		6	52	3,363	105	17	85	2,499	83	0	63	181	79	0	231	537	70	7,371	0
Peak Hour	**All**	**3**	**20**	**1,715**	**54**	**7**	**49**	**1,353**	**39**	**0**	**38**	**93**	**42**	**0**	**119**	**286**	**42**	**3,860**	**0**
	HV	**0**	**0**	**4**	**1**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**3**	**16**	**0**
	HV%	**0%**	**0%**	**0%**	**2%**	**0%**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**2%**	**0%**	**7%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	3	0	2	*8*	0	0	0	0	*0*	2	10	1	10	*23*
4:15 PM	4	3	0	0	*7*	0	0	0	1	*1*	2	9	0	8	*19*
4:30 PM	2	6	0	1	*9*	2	0	0	0	*2*	0	6	0	4	*10*
4:45 PM	4	0	0	0	*4*	1	0	0	0	*1*	0	3	0	0	*3*
5:00 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**0**	**3**	*4*
5:15 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**1**	*4*
5:30 PM	**3**	**1**	**0**	**4**	***8***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**0**	**1**	*2*
5:45 PM	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**0**	**1**	***5***
Count Total	18	17	0	9	*44*	3	0	0	3	*6*	9	31	2	28	*70*
Peak Hour	**5**	**5**	**0**	**6**	***16***	**0**	**0**	**0**	**2**	***2***	**5**	**3**	**1**	**6**	***15***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Huntington Dr Eastbound				Huntington Dr Westbound				Virginia Rd Northbound				Virginia Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	3	0	0	0	2	1	0	0	0	0	0	1	1	0	8	0
4:15 PM	0	0	4	0	0	0	2	1	0	0	0	0	0	0	0	0	7	0
4:30 PM	0	0	2	0	0	1	5	0	0	0	0	0	0	0	1	0	9	0
4:45 PM	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4	28
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	22
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	17
5:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**1**	**8**	16
5:45 PM	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**16**
Count Total	0	0	16	2	0	1	14	2	0	0	0	0	0	3	3	3	44	0
Peak Hour	**0**	**0**	**4**	**1**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**3**	**16**	**0**

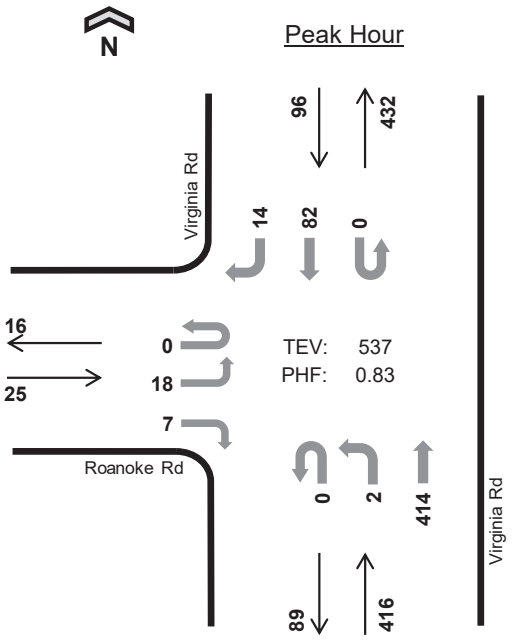
Two-Hour Count Summaries - Bikes

Interval Start	Huntington Dr Eastbound			Huntington Dr Westbound			Virginia Rd Northbound			Virginia Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	5
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	3
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	3	0	0	0	0	0	0	0	0	3	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**

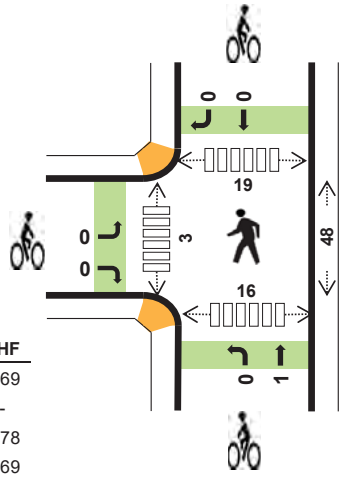
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Virginia Rd
Roanoke Rd

Peak Hour



Date: 11-07-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	0.0%	0.69
WB	-	-
NB	0.5%	0.78
SB	1.0%	0.69
TOTAL	0.6%	0.83

Two-Hour Count Summaries

Interval Start	Roanoke Rd Eastbound				n/a Westbound				Virginia Rd Northbound				Virginia Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	0	0	0	0	0	0	0	0	41	0	0	0	11	0	54	0
7:15 AM	0	3	0	0	0	0	0	0	0	0	57	0	1	0	8	2	71	0
7:30 AM	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**91**	**0**	**0**	**0**	**13**	**0**	**107**	0
7:45 AM	**0**	**8**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**133**	**0**	**0**	**0**	**18**	**1**	**162**	394
8:00 AM	**0**	**6**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**97**	**0**	**0**	**0**	**27**	**2**	**135**	475
8:15 AM	**0**	**2**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**93**	**0**	**0**	**0**	**24**	**11**	**133**	**537**
8:30 AM	0	2	0	1	0	0	0	0	0	2	60	0	0	0	24	7	96	526
8:45 AM	0	1	0	2	0	0	0	0	0	1	57	0	0	0	25	3	89	453
Count Total	0	26	0	10	0	0	0	0	0	5	629	0	1	0	150	26	847	0
Peak Hour All	**0**	**18**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**2**	**414**	**0**	**0**	**0**	**82**	**14**	**537**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	1	*1*	3	1	1	1	*6*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	4	0	2	2	*8*
7:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**2**	**2**	**2**	**2**	*8*
7:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**8**	**0**	*12*
8:00 AM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**1**	**0**	***1***	**8**	**0**	**0**	**5**	*13*
8:15 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**34**	**1**	**9**	**9**	***53***
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	13	1	2	2	*18*
8:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	4	0	0	5	*9*
Count Total	0	0	2	1	*3*	0	0	1	1	*2*	72	5	24	26	*127*
Peak Hr	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**1**	**0**	***1***	**48**	**3**	**19**	**16**	***86***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Roanoke Rd				n/a				Virginia Rd				Virginia Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	**0**

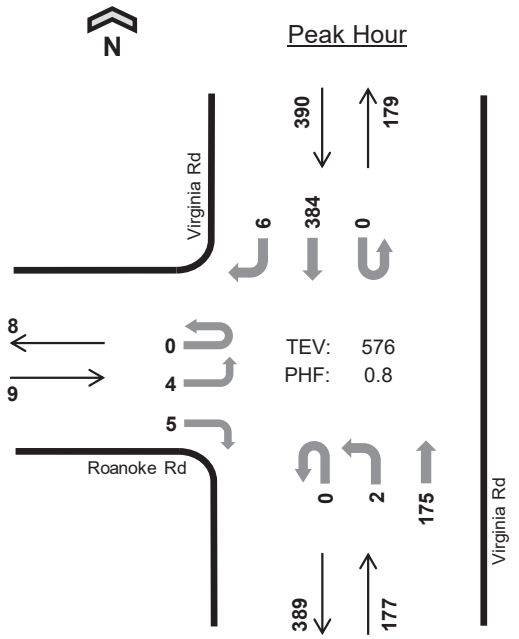
Two-Hour Count Summaries - Bikes

Interval Start	Roanoke Rd			n/a			Virginia Rd			Virginia Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	1	0	0	1	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**

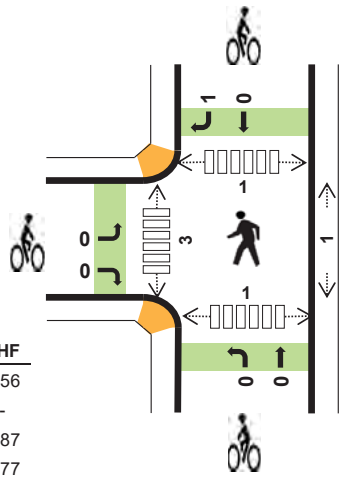
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Virginia Rd
Roanoke Rd

Date: 11-07-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.0%	0.56
WB	-	-
NB	0.0%	0.87
SB	0.8%	0.77
TOTAL	0.5%	0.80



Two-Hour Count Summaries

Interval Start	Roanoke Rd Eastbound				n/a Westbound				Virginia Rd Northbound				Virginia Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	0	0	0	1	28	0	0	0	73	1	104	0
4:15 PM	0	3	0	2	0	0	0	0	0	0	27	0	0	0	91	2	125	0
4:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**43**	**0**	**0**	**0**	**92**	**0**	**137**	0
4:45 PM	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**38**	**0**	**0**	**0**	**75**	**3**	**121**	487
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**0**	**0**	**94**	**0**	**138**	521
5:15 PM	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**51**	**0**	**0**	**0**	**123**	**3**	**180**	**576**
5:30 PM	0	0	0	1	0	0	0	0	0	1	33	0	0	0	85	1	121	560
5:45 PM	0	0	0	2	0	0	0	0	0	1	37	0	0	0	78	1	119	558
Count Total	0	8	0	10	0	0	0	0	0	5	300	0	0	0	711	11	1,045	0
Peak Hour All	**0**	**4**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**2**	**175**	**0**	**0**	**0**	**384**	**6**	**576**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	1	5	1	*7*
4:15 PM	0	0	0	1	*1*	0	0	0	1	*1*	4	2	1	3	*10*
4:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**1**	**1**	*4*
4:45 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
5:00 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**0**	*1*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	0	0	1	*1*	0	0	0	1	*1*	0	1	0	1	*2*
5:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	0	0	0	6	*6*	1	0	0	3	*4*	5	7	7	7	*26*
Peak Hr	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**1**	***1***	**1**	**3**	**1**	**1**	***6***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Roanoke Rd				n/a				Virginia Rd				Virginia Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**0**

Two-Hour Count Summaries - Bikes

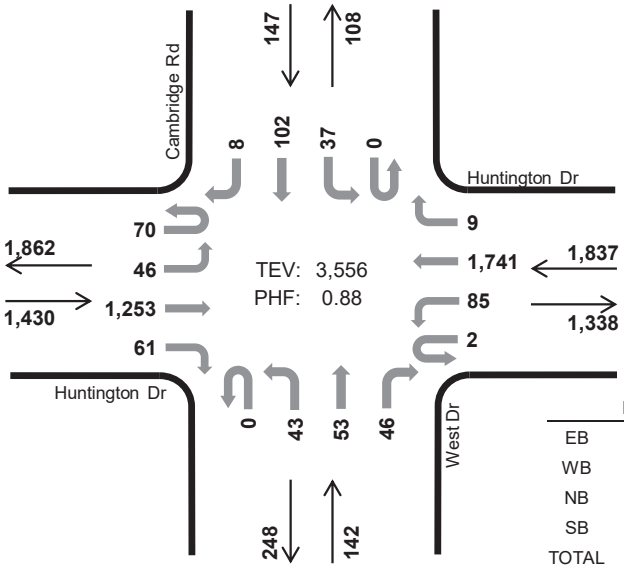
Interval Start	Roanoke Rd			n/a			Virginia Rd			Virginia Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	1	0	0	0	0	0	0	0	1	2	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

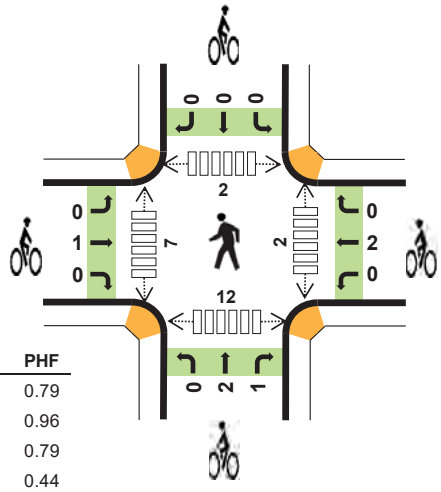
West Dr
Huntington Dr

Date: 11-07-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	0.9%	0.79
WB	0.7%	0.96
NB	0.0%	0.79
SB	0.7%	0.44
TOTAL	0.7%	0.88



Two-Hour Count Summaries

Interval Start	Huntington Dr Eastbound				Huntington Dr Westbound				West Dr Northbound				Cambridge Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	9	5	180	4	0	5	408	0	0	4	6	6	0	2	2	0	631	0
7:15 AM	1	2	173	1	0	6	439	1	0	5	7	5	0	0	3	2	645	0
7:30 AM	**8**	**5**	**250**	**4**	**0**	**28**	**450**	**1**	**0**	**11**	**15**	**19**	**0**	**9**	**22**	**3**	**825**	0
7:45 AM	**20**	**11**	**407**	**16**	**0**	**32**	**401**	**2**	**0**	**6**	**19**	**16**	**0**	**15**	**68**	**0**	**1,013**	3,114
8:00 AM	**7**	**8**	**246**	**13**	**2**	**19**	**449**	**4**	**0**	**13**	**12**	**5**	**0**	**7**	**4**	**4**	**793**	3,276
8:15 AM	**35**	**22**	**350**	**28**	**0**	**6**	**441**	**2**	**0**	**13**	**7**	**6**	**0**	**6**	**8**	**1**	**925**	**3,556**
8:30 AM	18	7	312	12	0	16	371	0	0	16	11	12	0	9	5	2	791	3,522
8:45 AM	1	2	259	9	0	8	397	2	0	8	12	6	0	7	5	0	716	3,225
Count Total	99	62	2,177	87	2	120	3,356	12	0	76	89	75	0	55	117	12	6,339	0
Peak Hour All	**70**	**46**	**1,253**	**61**	**2**	**85**	**1,741**	**9**	**0**	**43**	**53**	**46**	**0**	**37**	**102**	**8**	**3,556**	**0**
Peak Hour HV	**0**	**0**	**13**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**26**	**0**
Peak Hour HV%	**0%**	**0%**	**1%**	**0%**	**0%**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**3%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	5	0	0	*9*	1	0	0	0	*1*	0	0	0	0	*0*
7:15 AM	4	3	0	0	*7*	0	0	1	0	*1*	0	0	0	5	*5*
7:30 AM	**1**	**5**	**0**	**0**	***6***	**0**	**1**	**1**	**0**	***2***	**2**	**3**	**0**	**3**	*8*
7:45 AM	**6**	**3**	**0**	**0**	***9***	**1**	**1**	**1**	**0**	***3***	**0**	**4**	**2**	**4**	*10*
8:00 AM	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**4**	*4*
8:15 AM	**4**	**3**	**0**	**1**	***8***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**1**	***1***
8:30 AM	5	6	0	0	*11*	0	0	0	0	*0*	1	2	0	4	*7*
8:45 AM	3	3	1	0	*7*	0	0	0	0	*0*	2	0	0	0	*2*
Count Total	29	29	1	1	*60*	2	2	4	0	*8*	5	9	2	21	*37*
Peak Hour	**13**	**12**	**0**	**1**	***26***	**1**	**2**	**3**	**0**	***6***	**2**	**7**	**2**	**12**	***23***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Huntington Dr Eastbound				Huntington Dr Westbound				West Dr Northbound				Cambridge Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9	0
7:15 AM	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7	0
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	0
7:45 AM	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	31
8:00 AM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	25
8:15 AM	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**26**
8:30 AM	0	0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	11	31
8:45 AM	0	0	3	0	0	0	3	0	0	0	0	1	0	0	0	0	7	29
Count Total	0	0	29	0	0	0	29	0	0	0	0	1	0	1	0	0	60	0
Peak Hour	**0**	**0**	**13**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**26**	**0**

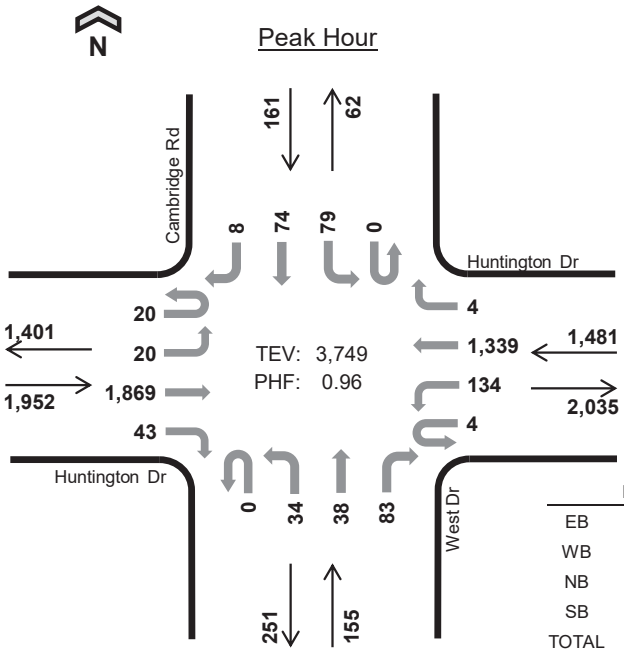
Two-Hour Count Summaries - Bikes

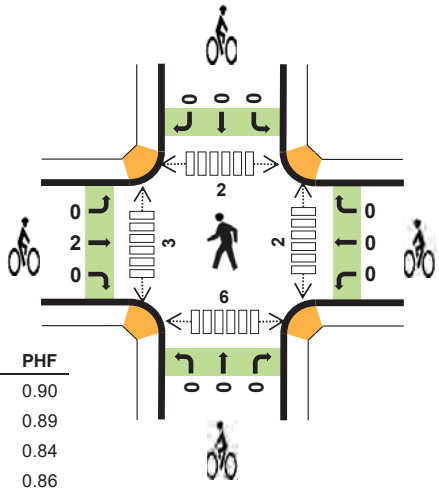
Interval Start	Huntington Dr Eastbound			Huntington Dr Westbound			West Dr Northbound			Cambridge Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	7
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**6**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	2	0	0	2	0	0	3	1	0	0	0	8	0
Peak Hour	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

West Dr
Huntington Dr

Date: 11-07-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.7%	0.90
WB	0.3%	0.89
NB	0.0%	0.84
SB	0.0%	0.86
TOTAL	0.5%	0.96

Two-Hour Count Summaries

Interval Start		Huntington Dr Eastbound				Huntington Dr Westbound				West Dr Northbound				Cambridge Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		2	7	394	10	4	14	269	1	0	10	9	13	0	9	7	3	752	0
4:15 PM		4	1	454	7	1	24	324	2	0	5	8	16	0	13	10	0	869	0
4:30 PM		0	4	428	7	3	28	284	0	0	15	8	15	0	17	11	0	820	0
4:45 PM		10	2	466	12	0	25	312	1	0	15	8	18	0	15	13	1	898	3,339
5:00 PM		**8**	**8**	**443**	**13**	**1**	**37**	**307**	**0**	**0**	**16**	**6**	**24**	**0**	**17**	**19**	**0**	**899**	3,486
5:15 PM		**0**	**5**	**420**	**8**	**0**	**40**	**375**	**3**	**0**	**6**	**15**	**18**	**0**	**20**	**23**	**4**	**937**	3,554
5:30 PM		**2**	**2**	**490**	**9**	**3**	**30**	**361**	**1**	**0**	**5**	**10**	**25**	**0**	**22**	**14**	**3**	**977**	3,711
5:45 PM		**10**	**5**	**516**	**13**	**0**	**27**	**296**	**0**	**0**	**7**	**7**	**16**	**0**	**20**	**18**	**1**	**936**	**3,749**
Count Total		36	34	3,611	79	12	225	2,528	8	0	79	71	145	0	133	115	12	7,088	0
Peak Hour	**All**	**20**	**20**	**1,869**	**43**	**4**	**134**	**1,339**	**4**	**0**	**34**	**38**	**83**	**0**	**79**	**74**	**8**	**3,749**	**0**
	HV	**0**	**0**	**12**	**1**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**
	HV%	**0%**	**0%**	**1%**	**2%**	**0%**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	5	3	0	0	*8*	0	1	0	0	*1*	0	1	0	3	*4*
4:15 PM	4	3	0	0	*7*	0	0	0	0	*0*	0	0	0	5	*5*
4:30 PM	2	6	0	0	*8*	1	0	0	0	*1*	0	0	0	3	*3*
4:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	1	1	3	*5*
5:00 PM	**3**	**2**	**0**	**0**	***5***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
5:15 PM	**3**	**1**	**0**	**0**	***4***	**1**	**0**	**0**	**0**	***1***	**0**	**3**	**2**	**0**	*5*
5:30 PM	**5**	**1**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**1**	*3*
5:45 PM	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**4**	***4***
Count Total	25	17	0	0	*42*	3	1	0	0	*4*	2	5	3	20	*30*
Peak Hour	**13**	**5**	**0**	**0**	***18***	**2**	**0**	**0**	**0**	***2***	**2**	**3**	**2**	**6**	***13***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Huntington Dr Eastbound				Huntington Dr Westbound				West Dr Northbound				Cambridge Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8	0
4:15 PM	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7	0
4:30 PM	0	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	8	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	24
5:00 PM	**0**	**0**	**3**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	21
5:15 PM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	18
5:30 PM	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	16
5:45 PM	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**18**
Count Total	0	0	24	1	0	1	16	0	0	0	0	0	0	0	0	0	42	0
Peak Hour	**0**	**0**	**12**	**1**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**

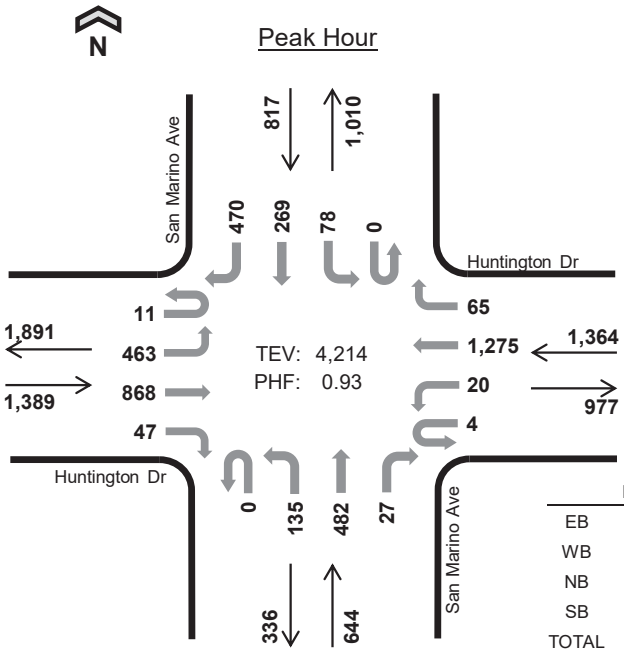
Two-Hour Count Summaries - Bikes

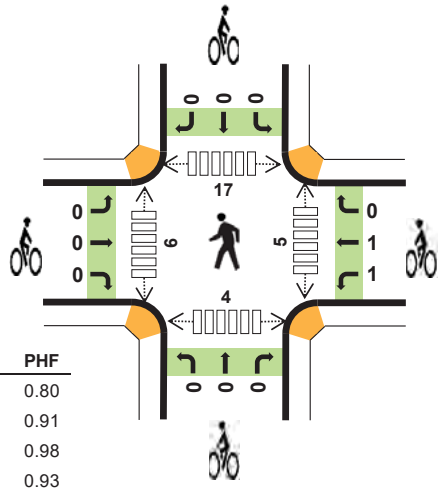
Interval Start	Huntington Dr Eastbound			Huntington Dr Westbound			West Dr Northbound			Cambridge Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	3	0	0	1	0	0	0	0	0	0	0	4	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

San Marino Ave
Huntington Dr

Date: 11-07-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	0.9%	0.80
WB	1.0%	0.91
NB	0.6%	0.98
SB	0.4%	0.93
TOTAL	0.8%	0.93

Two-Hour Count Summaries

Interval Start		Huntington Dr Eastbound				Huntington Dr Westbound				San Marino Ave Northbound				San Marino Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		3	66	106	3	4	4	368	11	0	26	78	4	0	4	33	77	787	0
7:15 AM		4	77	85	3	0	7	319	11	0	28	93	4	0	2	54	104	791	0
7:30 AM		3	86	175	2	0	3	420	16	0	27	105	6	0	13	43	113	1,012	0
7:45 AM		**3**	**127**	**289**	**13**	**1**	**7**	**298**	**16**	**0**	**36**	**125**	**3**	**0**	**18**	**70**	**131**	**1,137**	3,727
8:00 AM		**2**	**92**	**184**	**11**	**1**	**4**	**357**	**14**	**0**	**40**	**108**	**9**	**0**	**23**	**56**	**112**	**1,013**	3,953
8:15 AM		**3**	**116**	**180**	**9**	**2**	**3**	**351**	**20**	**0**	**30**	**122**	**6**	**0**	**21**	**67**	**110**	**1,040**	4,202
8:30 AM		**3**	**128**	**215**	**14**	**0**	**6**	**269**	**15**	**0**	**29**	**127**	**9**	**0**	**16**	**76**	**117**	**1,024**	**4,214**
8:45 AM		3	82	195	6	3	8	346	17	0	26	87	6	0	20	52	91	942	4,019
Count Total		24	774	1,429	61	11	42	2,728	120	0	242	845	47	0	117	451	855	7,746	0
Peak Hour	**All**	**11**	**463**	**868**	**47**	**4**	**20**	**1,275**	**65**	**0**	**135**	**482**	**27**	**0**	**78**	**269**	**470**	**4,214**	**0**
	HV	**0**	**4**	**8**	**0**	**0**	**1**	**12**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**1**	**2**	**32**	**0**
	HV%	**0%**	**1%**	**1%**	**0%**	**0%**	**5%**	**1%**	**0%**	**-**	**1%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	8	1	2	*15*	0	0	0	0	*0*	2	1	3	1	*7*
7:15 AM	4	3	2	3	*12*	0	0	0	0	*0*	2	0	2	3	*7*
7:30 AM	0	7	2	1	*10*	0	0	0	0	*0*	3	2	3	2	*10*
7:45 AM	**4**	**3**	**0**	**0**	***7***	**0**	**1**	**0**	**0**	***1***	**3**	**3**	**8**	**1**	*15*
8:00 AM	**3**	**2**	**1**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**6**	**2**	*10*
8:15 AM	**3**	**2**	**1**	**2**	***8***	**0**	**1**	**0**	**0**	***1***	**2**	**1**	**2**	**1**	*6*
8:30 AM	**2**	**6**	**2**	**1**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
8:45 AM	2	6	0	2	*10*	0	0	0	0	*0*	1	0	1	0	*2*
Count Total	22	37	9	11	*79*	0	2	0	0	*2*	13	9	26	10	*58*
Peak Hour	**12**	**13**	**4**	**3**	***32***	**0**	**2**	**0**	**0**	***2***	**5**	**6**	**17**	**4**	***32***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Huntington Dr Eastbound				Huntington Dr Westbound				San Marino Ave Northbound				San Marino Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	3	1	0	0	0	6	2	0	0	1	0	0	0	1	1	15	0
7:15 AM	0	1	3	0	0	0	3	0	0	1	1	0	0	1	2	0	12	0
7:30 AM	0	0	0	0	0	0	7	0	0	0	2	0	0	0	0	1	10	0
7:45 AM	**0**	**2**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	44
8:00 AM	**0**	**1**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	35
8:15 AM	**0**	**1**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**8**	31
8:30 AM	**0**	**0**	**2**	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**11**	**32**
8:45 AM	0	1	1	0	0	0	6	0	0	0	0	0	0	0	1	1	10	35
Count Total	0	9	13	0	0	1	34	2	0	2	7	0	0	1	5	5	79	0
Peak Hour	**0**	**4**	**8**	**0**	**0**	**1**	**12**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**1**	**2**	**32**	**0**

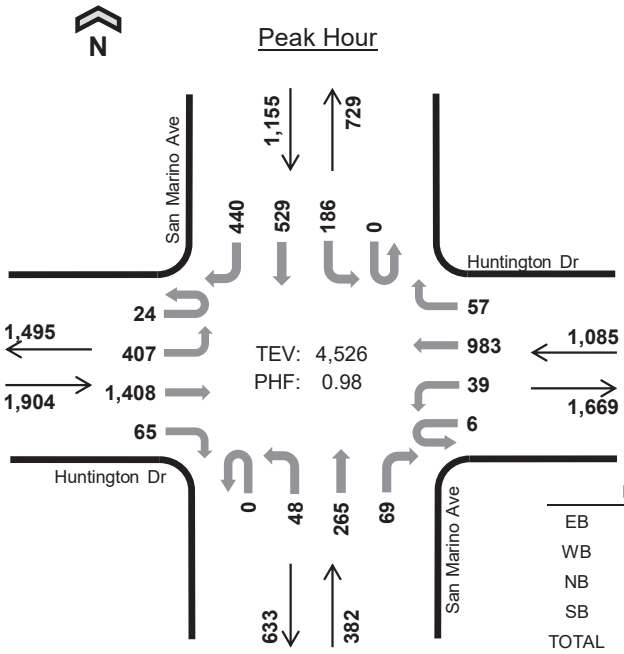
Two-Hour Count Summaries - Bikes

Interval Start	Huntington Dr Eastbound			Huntington Dr Westbound			San Marino Ave Northbound			San Marino Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	1	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

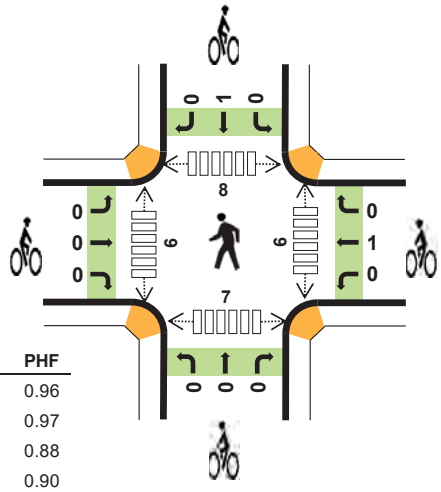
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

San Marino Ave
Huntington Dr

Date: 11-07-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.6%	0.96
WB	0.5%	0.97
NB	0.0%	0.88
SB	0.3%	0.90
TOTAL	0.4%	0.98



Two-Hour Count Summaries

Interval Start	Huntington Dr Eastbound				Huntington Dr Westbound				San Marino Ave Northbound				San Marino Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	8	99	293	10	1	14	166	17	0	17	53	14	0	35	135	106	968	0
4:15 PM	1	66	333	18	1	7	236	19	0	21	61	6	0	47	150	97	1,063	0
4:30 PM	4	103	367	20	4	11	221	10	0	12	60	9	0	52	123	75	1,071	0
4:45 PM	7	109	320	14	2	11	227	16	0	17	65	14	0	63	136	96	1,097	4,199
5:00 PM	**2**	**89**	**375**	**17**	**1**	**8**	**223**	**20**	**0**	**13**	**62**	**13**	**0**	**48**	**144**	**116**	**1,131**	4,362
5:15 PM	**8**	**102**	**309**	**21**	**1**	**11**	**254**	**12**	**0**	**11**	**68**	**9**	**0**	**44**	**158**	**120**	**1,128**	4,427
5:30 PM	**7**	**102**	**364**	**13**	**1**	**11**	**252**	**15**	**0**	**12**	**75**	**22**	**0**	**54**	**124**	**103**	**1,155**	4,511
5:45 PM	**7**	**114**	**360**	**14**	**3**	**9**	**254**	**10**	**0**	**12**	**60**	**25**	**0**	**40**	**103**	**101**	**1,112**	**4,526**
Count Total	44	784	2,721	127	14	82	1,833	119	0	115	504	112	0	383	1,073	814	8,725	0
Peak Hour All	**24**	**407**	**1,408**	**65**	**6**	**39**	**983**	**57**	**0**	**48**	**265**	**69**	**0**	**186**	**529**	**440**	**4,526**	**0**
Peak Hour HV	**1**	**0**	**10**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**20**	**0**
Peak Hour HV%	**4%**	**0%**	**1%**	**0%**	**0%**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**1%**	**0%**	**1%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	5	4	1	1	*11*	0	0	0	0	*0*	3	0	6	1	*10*
4:15 PM	3	4	1	2	*10*	0	0	0	0	*0*	2	3	9	0	*14*
4:30 PM	3	3	0	2	*8*	0	0	0	0	*0*	0	3	2	0	*5*
4:45 PM	1	1	0	1	*3*	0	0	1	1	*2*	0	1	2	2	*5*
5:00 PM	**4**	**0**	**0**	**2**	***6***	**0**	**0**	**0**	**1**	***1***	**2**	**4**	**4**	**2**	*12*
5:15 PM	**1**	**1**	**0**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**1**	**2**	*6*
5:30 PM	**4**	**2**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**2**	**1**	*5*
5:45 PM	**2**	**2**	**0**	**0**	***4***	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**1**	**2**	***4***
Count Total	23	17	2	10	*52*	0	1	1	2	*4*	11	13	27	10	*61*
Peak Hour	**11**	**5**	**0**	**4**	***20***	**0**	**1**	**0**	**1**	***2***	**6**	**6**	**8**	**7**	***27***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Huntington Dr Eastbound				Huntington Dr Westbound				San Marino Ave Northbound				San Marino Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	3	1	0	0	4	0	0	0	0	1	0	0	1	0	11	0
4:15 PM	0	1	2	0	1	0	3	0	0	0	1	0	0	1	0	1	10	0
4:30 PM	0	0	3	0	0	1	2	0	0	0	0	0	0	2	0	0	8	0
4:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	3	32
5:00 PM	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**	27
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**4**	21
5:30 PM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	19
5:45 PM	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**20**
Count Total	1	2	19	1	1	1	15	0	0	0	1	1	0	4	2	4	52	0
Peak Hour	**1**	**0**	**10**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**20**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Huntington Dr Eastbound			Huntington Dr Westbound			San Marino Ave Northbound			San Marino Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	2	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
Count Total	0	0	0	0	1	0	0	1	0	0	2	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

APPENDIX C

SAN GABRIEL VALLEY COG VEHICLE MILES TRAVELED EVALUATION TOOL SCREENING WORKSHEETS

SGVCOG VMT Evaluation Tool Report

Project Details

Timestamp of Analysis: August 30, 2021, 11:05:15 AM

Project Name: San Marino Center Improvement Project

Project Description: The proposed project consists of revitalizing and updating the existing San Marino Center (SMC) building facade similar to that of the adjacent buildings.

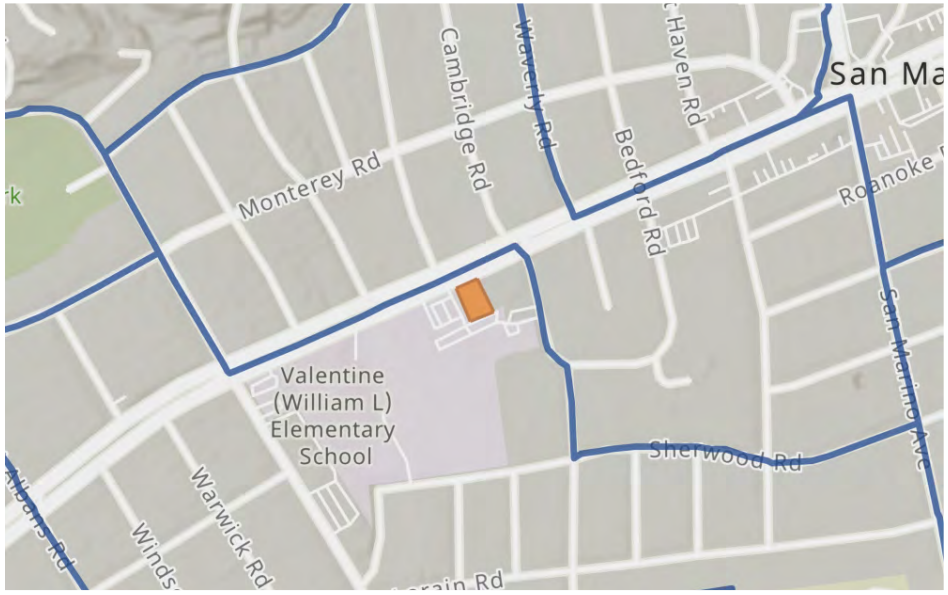
Project Location

Jurisdiction: San Marino

APN	TAZ
5334-024-903	22139300

Inside a TPA?

No (Fail)



Analysis Details

Data Version: SCAG Regional Travel Demand Model 2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2021

Project Land Use

Residential:

Single Family DU:

Multifamily DU:

Total DUs: 0

Non-Residential:

Office KSF:

Local Serving Retail KSF:

Industrial KSF:

Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 0 %

Parking:

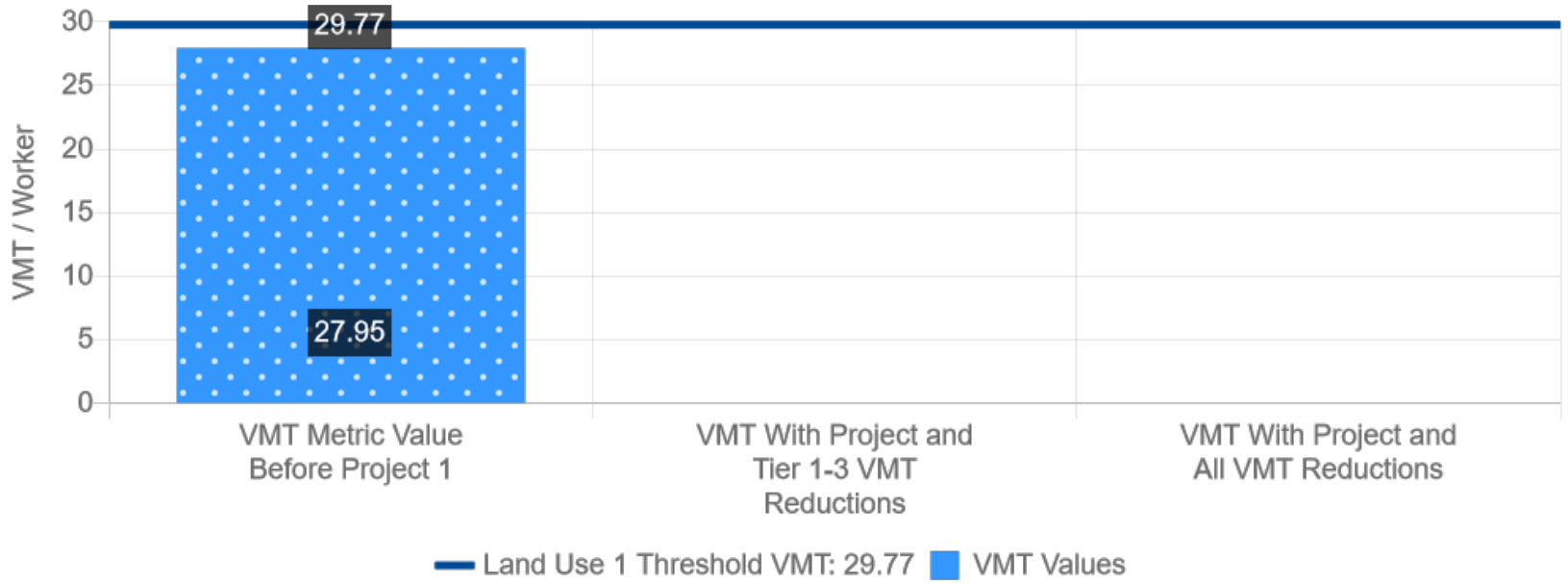
Motor Vehicle Parking:

Bicycle Parking:

Office Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Office
VMT Without Project 1:	Total VMT per Service Population
VMT Baseline Description 1:	SGVCOG Average
VMT Baseline Value 1:	35.02
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	27.95	null	null
Low VMT Screening Analysis	Yes (Pass)	null	null



APPENDIX D

HCM AND LEVELS OF SERVICE EXPLANATION
HCM DATA WORKSHEETS – WEEKDAY AM AND PM PEAK HOURS

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for traffic signals are stated in terms of the average control delay per vehicle. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the *v/c* ratio for the lane group in question.

Level of Service Criteria for Signalized Intersections

Level of Service	Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay values.

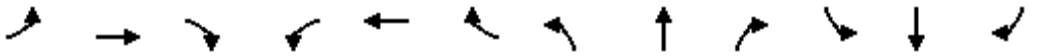
LOS B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

LOS C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.

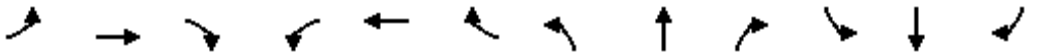
LOS F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the lane groups. It may also occur at high *v/c* ratios with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	1182	20	117	1711	58	74	218	147	115	66	11
Future Volume (veh/h)	49	1182	20	117	1711	58	74	218	147	115	66	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	1285	22	127	1860	63	80	237	160	125	72	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	2839	49	119	2930	99	350	469	398	200	469	398
Arrive On Green	0.04	0.55	0.55	0.07	0.58	0.58	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	5170	89	1781	5072	172	1314	1870	1585	987	1870	1585
Grp Volume(v), veh/h	53	846	461	127	1248	675	80	237	160	125	72	12
Grp Sat Flow(s),veh/h/ln	1781	1702	1854	1781	1702	1839	1314	1870	1585	987	1870	1585
Q Serve(g_s), s	3.5	17.9	17.9	8.0	29.3	29.4	6.1	13.0	10.1	14.9	3.6	0.7
Cycle Q Clear(g_c), s	3.5	17.9	17.9	8.0	29.3	29.4	9.7	13.0	10.1	28.0	3.6	0.7
Prop In Lane	1.00		0.05	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	1870	1018	119	1966	1062	350	469	398	200	469	398
V/C Ratio(X)	0.78	0.45	0.45	1.07	0.63	0.64	0.23	0.51	0.40	0.62	0.15	0.03
Avail Cap(c_a), veh/h	119	1870	1018	119	1966	1062	524	717	608	331	717	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	16.2	16.2	56.0	16.9	16.9	38.8	38.6	37.5	50.6	35.0	33.9
Incr Delay (d2), s/veh	6.9	0.8	1.5	102.5	1.6	2.9	0.1	0.3	0.2	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	11.4	12.4	11.5	17.0	18.7	3.6	10.1	7.1	6.7	3.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.1	17.0	17.7	158.5	18.5	19.8	38.9	38.9	37.7	51.7	35.1	33.9
LnGrp LOS	E	B	B	F	B	B	D	D	D	D	D	C
Approach Vol, veh/h		1360			2050			477			209	
Approach Delay, s/veh		19.1			27.6			38.5			45.0	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	74.3		37.1	12.0	70.9		37.1				
Change Period (Y+Rc), s	4.0	5.0		7.0	4.0	5.0		7.0				
Max Green Setting (Gmax), s	8.0	50.0		46.0	8.0	50.0		46.0				
Max Q Clear Time (g_c+I1), s	5.5	31.4		15.0	10.0	19.9		30.0				
Green Ext Time (p_c), s	0.0	3.0		0.2	0.0	1.8		0.1				

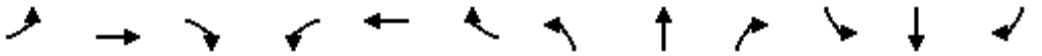
Intersection Summary			
HCM 6th Ctrl Delay		26.9	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1749	55	57	1380	40	39	95	43	121	292	43
Future Volume (veh/h)	23	1749	55	57	1380	40	39	95	43	121	292	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1901	60	62	1500	43	42	103	47	132	317	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	3073	97	80	3191	91	119	407	345	273	407	345
Arrive On Green	0.02	0.60	0.60	0.04	0.63	0.63	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	5085	160	1781	5102	146	1018	1870	1585	1237	1870	1585
Grp Volume(v), veh/h	25	1272	689	62	1001	542	42	103	47	132	317	47
Grp Sat Flow(s),veh/h/ln	1781	1702	1842	1781	1702	1844	1018	1870	1585	1237	1870	1585
Q Serve(g_s), s	1.7	28.3	28.4	4.1	18.7	18.7	4.9	5.5	2.9	11.9	19.2	2.9
Cycle Q Clear(g_c), s	1.7	28.3	28.4	4.1	18.7	18.7	24.0	5.5	2.9	17.3	19.2	2.9
Prop In Lane	1.00		0.09	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	2057	1113	80	2129	1153	119	407	345	273	407	345
V/C Ratio(X)	0.60	0.62	0.62	0.78	0.47	0.47	0.35	0.25	0.14	0.48	0.78	0.14
Avail Cap(c_a), veh/h	119	2057	1113	119	2129	1153	288	717	608	478	717	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	15.0	15.0	56.7	11.9	11.9	55.5	38.9	37.8	46.0	44.2	37.8
Incr Delay (d2), s/veh	4.9	1.4	2.6	8.9	0.7	1.4	0.7	0.1	0.1	0.5	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	16.3	17.8	3.7	11.4	12.4	2.3	4.6	2.0	6.6	13.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	16.4	17.6	65.6	12.7	13.3	56.2	39.0	37.9	46.5	45.4	37.9
LnGrp LOS	E	B	B	E	B	B	E	D	D	D	D	D
Approach Vol, veh/h		1986			1605			192			496	
Approach Delay, s/veh		17.4			14.9			42.5			45.0	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	80.0		33.1	9.4	77.5		33.1				
Change Period (Y+Rc), s	4.0	5.0		7.0	4.0	5.0		7.0				
Max Green Setting (Gmax), s	8.0	50.0		46.0	8.0	50.0		46.0				
Max Q Clear Time (g_c+I1), s	3.7	20.7		26.0	6.1	30.4		21.2				
Green Ext Time (p_c), s	0.0	2.3		0.1	0.0	3.1		0.3				

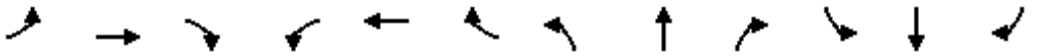
Intersection Summary			
HCM 6th Ctrl Delay		20.8	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	1185	20	117	1713	58	74	218	148	116	66	11
Future Volume (veh/h)	49	1185	20	117	1713	58	74	218	148	116	66	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	1288	22	127	1862	63	80	237	161	126	72	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	2835	48	119	2925	99	351	471	399	201	471	399
Arrive On Green	0.04	0.55	0.55	0.07	0.58	0.58	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	5170	88	1781	5072	171	1314	1870	1585	987	1870	1585
Grp Volume(v), veh/h	53	848	462	127	1249	676	80	237	161	126	72	12
Grp Sat Flow(s),veh/h/ln	1781	1702	1854	1781	1702	1840	1314	1870	1585	987	1870	1585
Q Serve(g_s), s	3.5	18.0	18.0	8.0	29.4	29.5	6.1	13.0	10.2	15.1	3.6	0.7
Cycle Q Clear(g_c), s	3.5	18.0	18.0	8.0	29.4	29.5	9.6	13.0	10.2	28.1	3.6	0.7
Prop In Lane	1.00		0.05	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	1866	1017	119	1963	1061	351	471	399	201	471	399
V/C Ratio(X)	0.78	0.45	0.45	1.07	0.64	0.64	0.23	0.50	0.40	0.63	0.15	0.03
Avail Cap(c_a), veh/h	119	1866	1017	119	1963	1061	524	717	608	331	717	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	16.3	16.3	56.0	17.0	17.0	38.7	38.5	37.4	50.5	34.9	33.8
Incr Delay (d2), s/veh	6.9	0.8	1.5	102.5	1.6	2.9	0.1	0.3	0.2	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	11.5	12.5	11.5	17.1	18.8	3.6	10.1	7.2	6.8	3.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.1	17.1	17.8	158.5	18.6	19.9	38.8	38.8	37.6	51.7	35.0	33.9
LnGrp LOS	E	B	B	F	B	B	D	D	D	D	C	C
Approach Vol, veh/h		1363			2052			478			210	
Approach Delay, s/veh		19.2			27.7			38.4			44.9	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	74.2		37.2	12.0	70.8		37.2				
Change Period (Y+Rc), s	4.0	5.0		7.0	4.0	5.0		7.0				
Max Green Setting (Gmax), s	8.0	50.0		46.0	8.0	50.0		46.0				
Max Q Clear Time (g_c+I1), s	5.5	31.5		15.0	10.0	20.0		30.1				
Green Ext Time (p_c), s	0.0	3.0		0.2	0.0	1.8		0.1				

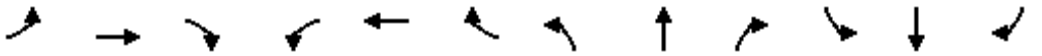
Intersection Summary			
HCM 6th Ctrl Delay		27.0	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1752	55	58	1383	41	39	95	44	122	292	43
Future Volume (veh/h)	23	1752	55	58	1383	41	39	95	44	122	292	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1904	60	63	1503	45	42	103	48	133	317	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	3070	97	81	3186	95	119	407	345	273	407	345
Arrive On Green	0.02	0.60	0.60	0.05	0.63	0.63	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	5086	160	1781	5094	153	1018	1870	1585	1236	1870	1585
Grp Volume(v), veh/h	25	1274	690	63	1004	544	42	103	48	133	317	47
Grp Sat Flow(s),veh/h/ln	1781	1702	1842	1781	1702	1843	1018	1870	1585	1236	1870	1585
Q Serve(g_s), s	1.7	28.4	28.5	4.2	18.8	18.8	4.9	5.5	2.9	12.0	19.2	2.9
Cycle Q Clear(g_c), s	1.7	28.4	28.5	4.2	18.8	18.8	24.0	5.5	2.9	17.4	19.2	2.9
Prop In Lane	1.00		0.09	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	2055	1112	81	2129	1153	119	407	345	273	407	345
V/C Ratio(X)	0.60	0.62	0.62	0.78	0.47	0.47	0.35	0.25	0.14	0.49	0.78	0.14
Avail Cap(c_a), veh/h	119	2055	1112	119	2129	1153	288	717	608	478	717	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	15.1	15.1	56.7	11.9	11.9	55.5	38.9	37.9	46.1	44.2	37.8
Incr Delay (d2), s/veh	4.9	1.4	2.6	9.8	0.8	1.4	0.7	0.1	0.1	0.5	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	16.3	17.9	3.8	11.4	12.4	2.3	4.6	2.1	6.7	13.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	16.5	17.7	66.5	12.7	13.3	56.2	39.0	37.9	46.6	45.4	37.9
LnGrp LOS	E	B	B	E	B	B	E	D	D	D	D	D
Approach Vol, veh/h		1989			1611			193			497	
Approach Delay, s/veh		17.5			15.0			42.5			45.0	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	80.0		33.1	9.4	77.4		33.1				
Change Period (Y+Rc), s	4.0	5.0		7.0	4.0	5.0		7.0				
Max Green Setting (Gmax), s	8.0	50.0		46.0	8.0	50.0		46.0				
Max Q Clear Time (g_c+I1), s	3.7	20.8		26.0	6.2	30.5		21.2				
Green Ext Time (p_c), s	0.0	2.3		0.1	0.0	3.1		0.3				

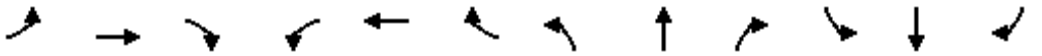
Intersection Summary			
HCM 6th Ctrl Delay		20.9	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1218	20	119	1756	59	75	222	150	117	67	11
Future Volume (veh/h)	50	1218	20	119	1756	59	75	222	150	117	67	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	1324	22	129	1909	64	82	241	163	127	73	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	2819	47	119	2905	97	355	477	404	202	477	404
Arrive On Green	0.04	0.54	0.54	0.07	0.57	0.57	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	5173	86	1781	5074	170	1313	1870	1585	981	1870	1585
Grp Volume(v), veh/h	54	871	475	129	1280	693	82	241	163	127	73	12
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	1781	1702	1840	1313	1870	1585	981	1870	1585
Q Serve(g_s), s	3.6	18.8	18.8	8.0	30.9	31.0	6.2	13.2	10.2	15.3	3.6	0.7
Cycle Q Clear(g_c), s	3.6	18.8	18.8	8.0	30.9	31.0	9.8	13.2	10.2	28.5	3.6	0.7
Prop In Lane	1.00		0.05	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	1855	1011	119	1949	1053	355	477	404	202	477	404
V/C Ratio(X)	0.78	0.47	0.47	1.09	0.66	0.66	0.23	0.51	0.40	0.63	0.15	0.03
Avail Cap(c_a), veh/h	119	1855	1011	119	1949	1053	523	717	608	328	717	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	16.7	16.7	56.0	17.6	17.6	38.5	38.2	37.1	50.4	34.6	33.5
Incr Delay (d2), s/veh	6.8	0.9	1.6	107.7	1.7	3.2	0.1	0.3	0.2	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	11.9	13.0	11.8	17.8	19.6	3.6	10.2	7.2	6.9	3.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.9	17.6	18.3	163.7	19.3	20.8	38.6	38.5	37.4	51.6	34.7	33.6
LnGrp LOS	E	B	B	F	B	C	D	D	D	D	C	C
Approach Vol, veh/h		1400			2102			486			212	
Approach Delay, s/veh		19.6			28.7			38.1			44.8	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	73.7		37.6	12.0	70.4		37.6				
Change Period (Y+Rc), s	4.0	5.0		7.0	4.0	5.0		7.0				
Max Green Setting (Gmax), s	8.0	50.0		46.0	8.0	50.0		46.0				
Max Q Clear Time (g_c+I1), s	5.6	33.0		15.2	10.0	20.8		30.5				
Green Ext Time (p_c), s	0.0	3.1		0.2	0.0	1.9		0.1				

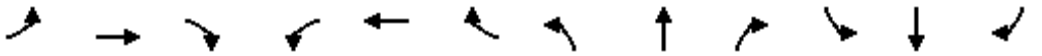
Intersection Summary			
HCM 6th Ctrl Delay		27.5	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1796	56	58	1420	41	40	97	44	123	298	44
Future Volume (veh/h)	23	1796	56	58	1420	41	40	97	44	123	298	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1952	61	63	1543	45	43	105	48	134	324	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	3047	95	81	3165	92	120	416	352	277	416	352
Arrive On Green	0.02	0.60	0.60	0.05	0.62	0.62	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	5087	159	1781	5099	149	1010	1870	1585	1234	1870	1585
Grp Volume(v), veh/h	25	1305	708	63	1030	558	43	105	48	134	324	48
Grp Sat Flow(s),veh/h/ln	1781	1702	1842	1781	1702	1844	1010	1870	1585	1234	1870	1585
Q Serve(g_s), s	1.7	29.9	30.0	4.2	19.7	19.7	5.0	5.6	2.9	12.0	19.6	2.9
Cycle Q Clear(g_c), s	1.7	29.9	30.0	4.2	19.7	19.7	24.6	5.6	2.9	17.6	19.6	2.9
Prop In Lane	1.00		0.09	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	2039	1103	81	2113	1144	120	416	352	277	416	352
V/C Ratio(X)	0.60	0.64	0.64	0.78	0.49	0.49	0.36	0.25	0.14	0.48	0.78	0.14
Avail Cap(c_a), veh/h	119	2039	1103	119	2113	1144	283	717	608	476	717	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	15.6	15.7	56.7	12.4	12.4	55.4	38.4	37.4	45.7	43.9	37.4
Incr Delay (d2), s/veh	4.9	1.6	2.9	9.8	0.8	1.5	0.7	0.1	0.1	0.5	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	17.1	18.8	3.8	11.9	13.0	2.3	4.6	2.1	6.7	14.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	17.2	18.5	66.5	13.2	13.9	56.1	38.6	37.5	46.2	45.1	37.5
LnGrp LOS	E	B	B	E	B	B	E	D	D	D	D	D
Approach Vol, veh/h		2038			1651			196			506	
Approach Delay, s/veh		18.2			15.4			42.1			44.7	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	79.5		33.7	9.4	76.9		33.7				
Change Period (Y+Rc), s	4.0	5.0		7.0	4.0	5.0		7.0				
Max Green Setting (Gmax), s	8.0	50.0		46.0	8.0	50.0		46.0				
Max Q Clear Time (g_c+I1), s	3.7	21.7		26.6	6.2	32.0		21.6				
Green Ext Time (p_c), s	0.0	2.4		0.1	0.0	3.2		0.3				

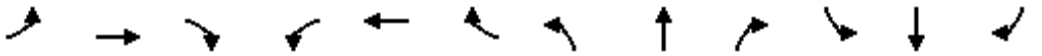
Intersection Summary			
HCM 6th Ctrl Delay		21.3	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1221	20	119	1758	59	75	222	151	118	67	11
Future Volume (veh/h)	50	1221	20	119	1758	59	75	222	151	118	67	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	1327	22	129	1911	64	82	241	164	128	73	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	2814	47	119	2900	97	356	479	406	203	479	406
Arrive On Green	0.04	0.54	0.54	0.07	0.57	0.57	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	5173	86	1781	5074	170	1313	1870	1585	980	1870	1585
Grp Volume(v), veh/h	54	873	476	129	1281	694	82	241	164	128	73	12
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	1781	1702	1840	1313	1870	1585	980	1870	1585
Q Serve(g_s), s	3.6	18.9	18.9	8.0	31.0	31.1	6.2	13.2	10.3	15.4	3.6	0.7
Cycle Q Clear(g_c), s	3.6	18.9	18.9	8.0	31.0	31.1	9.8	13.2	10.3	28.6	3.6	0.7
Prop In Lane	1.00		0.05	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	1852	1009	119	1946	1052	356	479	406	203	479	406
V/C Ratio(X)	0.78	0.47	0.47	1.09	0.66	0.66	0.23	0.50	0.40	0.63	0.15	0.03
Avail Cap(c_a), veh/h	119	1852	1009	119	1946	1052	524	717	608	328	717	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	16.8	16.8	56.0	17.7	17.7	38.4	38.1	37.0	50.3	34.6	33.5
Incr Delay (d2), s/veh	6.8	0.9	1.6	107.7	1.8	3.3	0.1	0.3	0.2	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	11.9	13.1	11.8	17.9	19.7	3.6	10.1	7.3	6.9	3.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.9	17.6	18.4	163.7	19.4	20.9	38.5	38.4	37.3	51.5	34.6	33.5
LnGrp LOS	E	B	B	F	B	C	D	D	D	D	C	C
Approach Vol, veh/h		1403			2104			487			213	
Approach Delay, s/veh		19.7			28.8			38.0			44.7	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	73.6		37.7	12.0	70.3		37.7				
Change Period (Y+Rc), s	4.0	5.0		7.0	4.0	5.0		7.0				
Max Green Setting (Gmax), s	8.0	50.0		46.0	8.0	50.0		46.0				
Max Q Clear Time (g_c+I1), s	5.6	33.1		15.2	10.0	20.9		30.6				
Green Ext Time (p_c), s	0.0	3.1		0.2	0.0	1.9		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		27.6	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1799	56	59	1423	42	40	97	45	124	298	44
Future Volume (veh/h)	23	1799	56	59	1423	42	40	97	45	124	298	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1955	61	64	1547	46	43	105	49	135	324	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	3044	95	82	3163	94	120	416	352	277	416	352
Arrive On Green	0.02	0.60	0.60	0.05	0.62	0.62	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	5087	159	1781	5096	152	1010	1870	1585	1233	1870	1585
Grp Volume(v), veh/h	25	1307	709	64	1033	560	43	105	49	135	324	48
Grp Sat Flow(s),veh/h/ln	1781	1702	1842	1781	1702	1843	1010	1870	1585	1233	1870	1585
Q Serve(g_s), s	1.7	30.0	30.2	4.3	19.8	19.8	5.0	5.6	3.0	12.2	19.6	2.9
Cycle Q Clear(g_c), s	1.7	30.0	30.2	4.3	19.8	19.8	24.6	5.6	3.0	17.7	19.6	2.9
Prop In Lane	1.00		0.09	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	2037	1102	82	2113	1144	120	416	352	277	416	352
V/C Ratio(X)	0.60	0.64	0.64	0.78	0.49	0.49	0.36	0.25	0.14	0.49	0.78	0.14
Avail Cap(c_a), veh/h	119	2037	1102	119	2113	1144	283	717	608	476	717	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	15.7	15.7	56.6	12.4	12.4	55.4	38.4	37.4	45.7	43.9	37.4
Incr Delay (d2), s/veh	4.9	1.6	2.9	10.7	0.8	1.5	0.7	0.1	0.1	0.5	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	17.2	18.9	3.9	12.0	13.1	2.3	4.6	2.1	6.8	14.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	17.3	18.6	67.3	13.2	13.9	56.1	38.6	37.5	46.2	45.1	37.5
LnGrp LOS	E	B	B	E	B	B	E	D	D	D	D	D
Approach Vol, veh/h		2041			1657			197			507	
Approach Delay, s/veh		18.3			15.5			42.1			44.7	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	79.5		33.7	9.5	76.8		33.7				
Change Period (Y+Rc), s	4.0	5.0		7.0	4.0	5.0		7.0				
Max Green Setting (Gmax), s	8.0	50.0		46.0	8.0	50.0		46.0				
Max Q Clear Time (g_c+I1), s	3.7	21.8		26.6	6.3	32.2		21.6				
Green Ext Time (p_c), s	0.0	2.4		0.1	0.0	3.2		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		21.4	
HCM 6th LOS		C	

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	7	2	422	84	14
Future Vol, veh/h	18	7	2	422	84	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	8	2	459	91	15
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.3	11.5	8
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	0%	72%	0%
Vol Thru, %	100%	0%	86%
Vol Right, %	0%	28%	14%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	424	25	98
LT Vol	2	18	0
Through Vol	422	0	84
RT Vol	0	7	14
Lane Flow Rate	461	27	107
Geometry Grp	1	1	1
Degree of Util (X)	0.52	0.039	0.129
Departure Headway (Hd)	4.062	5.125	4.362
Convergence, Y/N	Yes	Yes	Yes
Cap	880	702	827
Service Time	2.121	3.132	2.366
HCM Lane V/C Ratio	0.524	0.038	0.129
HCM Control Delay	11.5	8.3	8
HCM Lane LOS	B	A	A
HCM 95th-tile Q	3.1	0.1	0.4

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	5	2	179	392	6
Future Vol, veh/h	4	5	2	179	392	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	5	2	195	426	7
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.1	8.7	11.1
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	1%	44%	0%
Vol Thru, %	99%	0%	98%
Vol Right, %	0%	56%	2%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	181	9	398
LT Vol	2	4	0
Through Vol	179	0	392
RT Vol	0	5	6
Lane Flow Rate	197	10	433
Geometry Grp	1	1	1
Degree of Util (X)	0.239	0.014	0.491
Departure Headway (Hd)	4.376	5.025	4.089
Convergence, Y/N	Yes	Yes	Yes
Cap	826	715	874
Service Time	2.376	3.033	2.153
HCM Lane V/C Ratio	0.238	0.014	0.495
HCM Control Delay	8.7	8.1	11.1
HCM Lane LOS	A	A	B
HCM 95th-tile Q	0.9	0	2.8

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	7	2	423	84	14
Future Vol, veh/h	18	7	2	423	84	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	8	2	460	91	15
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.3	11.5	8
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	0%	72%	0%
Vol Thru, %	100%	0%	86%
Vol Right, %	0%	28%	14%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	425	25	98
LT Vol	2	18	0
Through Vol	423	0	84
RT Vol	0	7	14
Lane Flow Rate	462	27	107
Geometry Grp	1	1	1
Degree of Util (X)	0.521	0.039	0.129
Departure Headway (Hd)	4.062	5.129	4.363
Convergence, Y/N	Yes	Yes	Yes
Cap	882	702	826
Service Time	2.121	3.134	2.367
HCM Lane V/C Ratio	0.524	0.038	0.13
HCM Control Delay	11.5	8.3	8
HCM Lane LOS	B	A	A
HCM 95th-tile Q	3.1	0.1	0.4

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	5	2	180	393	6
Future Vol, veh/h	4	5	2	180	393	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	5	2	196	427	7
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.1	8.7	11.1
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	1%	44%	0%
Vol Thru, %	99%	0%	98%
Vol Right, %	0%	56%	2%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	182	9	399
LT Vol	2	4	0
Through Vol	180	0	393
RT Vol	0	5	6
Lane Flow Rate	198	10	434
Geometry Grp	1	1	1
Degree of Util (X)	0.235	0.014	0.493
Departure Headway (Hd)	4.277	5.03	4.09
Convergence, Y/N	Yes	Yes	Yes
Cap	825	716	876
Service Time	2.377	3.03	2.15
HCM Lane V/C Ratio	0.24	0.014	0.495
HCM Control Delay	8.7	8.1	11.1
HCM Lane LOS	A	A	B
HCM 95th-tile Q	0.9	0	2.8

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	7	2	430	86	14
Future Vol, veh/h	18	7	2	430	86	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	8	2	467	93	15
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.4	11.7	8
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	0%	72%	0%
Vol Thru, %	100%	0%	86%
Vol Right, %	0%	28%	14%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	432	25	100
LT Vol	2	18	0
Through Vol	430	0	86
RT Vol	0	7	14
Lane Flow Rate	470	27	109
Geometry Grp	1	1	1
Degree of Util (X)	0.53	0.039	0.132
Departure Headway (Hd)	4.064	5.149	4.372
Convergence, Y/N	Yes	Yes	Yes
Cap	878	699	824
Service Time	2.124	3.155	2.377
HCM Lane V/C Ratio	0.535	0.039	0.132
HCM Control Delay	11.7	8.4	8
HCM Lane LOS	B	A	A
HCM 95th-tile Q	3.2	0.1	0.5

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	5	2	183	400	6
Future Vol, veh/h	4	5	2	183	400	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	5	2	199	435	7
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.1	8.8	11.3
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	1%	44%	0%
Vol Thru, %	99%	0%	99%
Vol Right, %	0%	56%	1%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	185	9	406
LT Vol	2	4	0
Through Vol	183	0	400
RT Vol	0	5	6
Lane Flow Rate	201	10	441
Geometry Grp	1	1	1
Degree of Util (X)	0.245	0.014	0.502
Departure Headway (Hd)	4.383	5.052	4.093
Convergence, Y/N	Yes	Yes	Yes
Cap	824	711	874
Service Time	2.385	3.062	2.158
HCM Lane V/C Ratio	0.244	0.014	0.505
HCM Control Delay	8.8	8.1	11.3
HCM Lane LOS	A	A	B
HCM 95th-tile Q	1	0	2.9

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	7	2	431	86	14
Future Vol, veh/h	18	7	2	431	86	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	8	2	468	93	15
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.4	11.7	8
HCM LOS	A	B	A

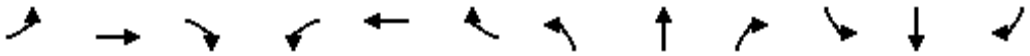
Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	0%	72%	0%
Vol Thru, %	100%	0%	86%
Vol Right, %	0%	28%	14%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	433	25	100
LT Vol	2	18	0
Through Vol	431	0	86
RT Vol	0	7	14
Lane Flow Rate	471	27	109
Geometry Grp	1	1	1
Degree of Util (X)	0.531	0.039	0.132
Departure Headway (Hd)	4.064	5.151	4.373
Convergence, Y/N	Yes	Yes	Yes
Cap	880	698	824
Service Time	2.124	3.157	2.377
HCM Lane V/C Ratio	0.535	0.039	0.132
HCM Control Delay	11.7	8.4	8
HCM Lane LOS	B	A	A
HCM 95th-tile Q	3.2	0.1	0.5

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	5	2	184	401	6
Future Vol, veh/h	4	5	2	184	401	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	5	2	200	436	7
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.1	8.8	11.3
HCM LOS	A	A	B

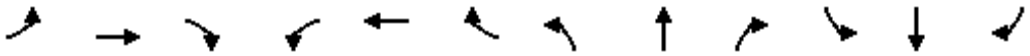
Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	1%	44%	0%
Vol Thru, %	99%	0%	99%
Vol Right, %	0%	56%	1%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	186	9	407
LT Vol	2	4	0
Through Vol	184	0	401
RT Vol	0	5	6
Lane Flow Rate	202	10	442
Geometry Grp	1	1	1
Degree of Util (X)	0.246	0.014	0.503
Departure Headway (Hd)	4.386	5.057	4.093
Convergence, Y/N	Yes	Yes	Yes
Cap	823	711	872
Service Time	2.386	3.065	2.159
HCM Lane V/C Ratio	0.245	0.014	0.507
HCM Control Delay	8.8	8.1	11.3
HCM Lane LOS	A	A	B
HCM 95th-tile Q	1	0	2.9



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	1278	62	89	1776	9	44	54	47	38	104	8
Future Volume (veh/h)	118	1278	62	89	1776	9	44	54	47	38	104	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	128	1389	67	97	1930	10	48	59	51	41	113	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	3588	173	59	3769	20	86	85	63	77	156	11
Arrive On Green	0.03	0.72	0.72	0.03	0.72	0.72	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1781	4990	241	1781	5242	27	381	692	511	320	1275	93
Grp Volume(v), veh/h	128	947	509	97	1253	687	158	0	0	163	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1827	1781	1702	1865	1584	0	0	1688	0	0
Q Serve(g_s), s	4.0	13.0	13.0	4.0	19.7	19.7	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.0	13.0	13.0	4.0	19.7	19.7	11.7	0.0	0.0	11.3	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.01	0.30		0.32	0.25		0.06
Lane Grp Cap(c), veh/h	59	2447	1313	59	2447	1341	234	0	0	245	0	0
V/C Ratio(X)	2.16	0.39	0.39	1.63	0.51	0.51	0.68	0.00	0.00	0.67	0.00	0.00
Avail Cap(c_a), veh/h	59	2447	1313	59	2447	1341	702	0	0	746	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.0	6.6	6.6	58.0	7.5	7.5	51.1	0.0	0.0	50.9	0.0	0.0
Incr Delay (d2), s/veh	571.5	0.5	0.9	349.0	0.8	1.4	3.4	0.0	0.0	3.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.9	7.9	8.5	13.3	10.9	12.1	8.5	0.0	0.0	8.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	629.5	7.0	7.4	407.0	8.3	8.9	54.5	0.0	0.0	54.0	0.0	0.0
LnGrp LOS	F	A	A	F	A	A	D	A	A	D	A	A
Approach Vol, veh/h		1584			2037			158			163	
Approach Delay, s/veh		57.5			27.5			54.5			54.0	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	90.8		21.2	8.0	90.8		21.2				
Change Period (Y+Rc), s	4.0	4.5		6.5	4.0	4.5		6.5				
Max Green Setting (Gmax), s	4.0	51.5		49.5	4.0	51.5		49.5				
Max Q Clear Time (g_c+I1), s	6.0	21.7		13.7	6.0	15.0		13.3				
Green Ext Time (p_c), s	0.0	24.4		1.0	0.0	21.6		1.0				

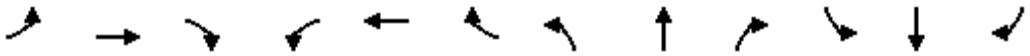
Intersection Summary			
HCM 6th Ctrl Delay		41.7	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1907	44	141	1366	4	35	39	85	81	75	8
Future Volume (veh/h)	41	1907	44	141	1366	4	35	39	85	81	75	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	45	2073	48	153	1485	4	38	42	92	88	82	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	3531	82	59	3621	10	78	79	139	139	109	11
Arrive On Green	0.03	0.69	0.69	0.03	0.69	0.69	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1781	5134	119	1781	5258	14	271	515	904	614	711	70
Grp Volume(v), veh/h	45	1373	748	153	961	528	172	0	0	179	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1849	1781	1702	1868	1689	0	0	1395	0	0
Q Serve(g_s), s	3.0	25.3	25.4	4.0	14.7	14.7	0.0	0.0	0.0	4.0	0.0	0.0
Cycle Q Clear(g_c), s	3.0	25.3	25.4	4.0	14.7	14.7	11.3	0.0	0.0	15.4	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.01	0.22		0.53	0.49		0.05
Lane Grp Cap(c), veh/h	58	2341	1272	59	2344	1286	297	0	0	260	0	0
V/C Ratio(X)	0.78	0.59	0.59	2.58	0.41	0.41	0.58	0.00	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	59	2341	1272	59	2344	1286	719	0	0	662	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.6	9.8	9.8	58.0	8.1	8.1	47.7	0.0	0.0	49.5	0.0	0.0
Incr Delay (d2), s/veh	42.6	1.1	2.0	756.0	0.5	1.0	1.8	0.0	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.7	13.9	15.4	23.5	8.9	9.8	8.7	0.0	0.0	9.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	100.3	10.9	11.8	814.0	8.6	9.1	49.5	0.0	0.0	52.7	0.0	0.0
LnGrp LOS	F	B	B	F	A	A	D	A	A	D	A	A
Approach Vol, veh/h		2166			1642			172			179	
Approach Delay, s/veh		13.1			83.8			49.5			52.7	
Approach LOS		B			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	87.1		25.0	8.0	87.0		25.0				
Change Period (Y+Rc), s	4.0	4.5		6.5	4.0	4.5		6.5				
Max Green Setting (Gmax), s	4.0	51.5		49.5	4.0	51.5		49.5				
Max Q Clear Time (g_c+I1), s	5.0	16.7		13.3	6.0	27.4		17.4				
Green Ext Time (p_c), s	0.0	21.5		1.1	0.0	21.4		1.1				

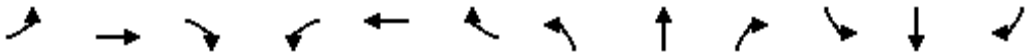
Intersection Summary			
HCM 6th Ctrl Delay		44.2	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	1280	62	96	1776	9	46	54	48	38	105	8
Future Volume (veh/h)	118	1280	62	96	1776	9	46	54	48	38	105	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	128	1391	67	104	1930	10	50	59	52	41	114	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	3575	172	59	3755	19	88	85	64	77	160	12
Arrive On Green	0.03	0.72	0.72	0.03	0.72	0.72	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1781	4991	240	1781	5242	27	391	676	509	317	1278	93
Grp Volume(v), veh/h	128	949	509	104	1253	687	161	0	0	164	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1827	1781	1702	1865	1575	0	0	1687	0	0
Q Serve(g_s), s	4.0	13.2	13.2	4.0	19.8	19.8	0.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.0	13.2	13.2	4.0	19.8	19.8	12.0	0.0	0.0	11.3	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.01	0.31		0.32	0.25		0.05
Lane Grp Cap(c), veh/h	59	2438	1309	59	2438	1336	237	0	0	249	0	0
V/C Ratio(X)	2.16	0.39	0.39	1.75	0.51	0.51	0.68	0.00	0.00	0.66	0.00	0.00
Avail Cap(c_a), veh/h	59	2438	1309	59	2438	1336	700	0	0	746	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.0	6.7	6.7	58.0	7.6	7.6	51.0	0.0	0.0	50.6	0.0	0.0
Incr Delay (d2), s/veh	571.5	0.5	0.9	398.2	0.8	1.4	3.4	0.0	0.0	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.9	8.0	8.6	14.5	11.1	12.2	8.6	0.0	0.0	8.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	629.5	7.2	7.6	456.2	8.4	9.1	54.4	0.0	0.0	53.6	0.0	0.0
LnGrp LOS	F	A	A	F	A	A	D	A	A	D	A	A
Approach Vol, veh/h		1586			2044			161			164	
Approach Delay, s/veh		57.5			31.4			54.4			53.6	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	90.5		21.5	8.0	90.5		21.5				
Change Period (Y+Rc), s	4.0	4.5		6.5	4.0	4.5		6.5				
Max Green Setting (Gmax), s	4.0	51.5		49.5	4.0	51.5		49.5				
Max Q Clear Time (g_c+I1), s	6.0	21.8		14.0	6.0	15.2		13.3				
Green Ext Time (p_c), s	0.0	24.3		1.0	0.0	21.6		1.0				

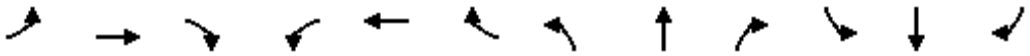
Intersection Summary			
HCM 6th Ctrl Delay		43.7	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1911	44	147	1366	4	40	40	88	81	76	8
Future Volume (veh/h)	41	1911	44	147	1366	4	40	40	88	81	76	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	45	2077	48	160	1485	4	43	43	96	88	83	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	3512	81	59	3601	10	84	78	139	138	111	11
Arrive On Green	0.03	0.68	0.68	0.03	0.68	0.68	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	5135	118	1781	5258	14	296	492	879	595	705	68
Grp Volume(v), veh/h	45	1376	749	160	961	528	182	0	0	180	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1849	1781	1702	1868	1667	0	0	1369	0	0
Q Serve(g_s), s	3.0	25.7	25.8	4.0	14.9	14.9	0.0	0.0	0.0	3.6	0.0	0.0
Cycle Q Clear(g_c), s	3.0	25.7	25.8	4.0	14.9	14.9	12.2	0.0	0.0	15.8	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.01	0.24		0.53	0.49		0.05
Lane Grp Cap(c), veh/h	58	2328	1265	59	2332	1279	300	0	0	260	0	0
V/C Ratio(X)	0.78	0.59	0.59	2.69	0.41	0.41	0.61	0.00	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	59	2328	1265	59	2332	1279	714	0	0	656	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.6	10.1	10.1	58.0	8.3	8.3	47.6	0.0	0.0	49.2	0.0	0.0
Incr Delay (d2), s/veh	42.6	1.1	2.0	808.1	0.5	1.0	2.0	0.0	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.7	14.2	15.6	24.7	9.1	10.0	9.1	0.0	0.0	9.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	100.3	11.2	12.1	866.1	8.8	9.3	49.6	0.0	0.0	52.5	0.0	0.0
LnGrp LOS	F	B	B	F	A	A	D	A	A	D	A	A
Approach Vol, veh/h		2170			1649			182			180	
Approach Delay, s/veh		13.3			92.2			49.6			52.5	
Approach LOS		B			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	86.7		25.4	8.0	86.6		25.4				
Change Period (Y+Rc), s	4.0	4.5		6.5	4.0	4.5		6.5				
Max Green Setting (Gmax), s	4.0	51.5		49.5	4.0	51.5		49.5				
Max Q Clear Time (g_c+I1), s	5.0	16.9		14.2	6.0	27.8		17.8				
Green Ext Time (p_c), s	0.0	21.4		1.2	0.0	21.1		1.1				

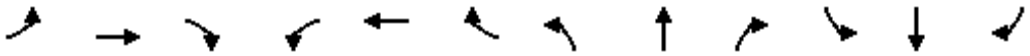
Intersection Summary			
HCM 6th Ctrl Delay		47.7	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1316	63	91	1823	9	45	55	48	39	106	8
Future Volume (veh/h)	120	1316	63	91	1823	9	45	55	48	39	106	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	130	1430	68	99	1982	10	49	60	52	42	115	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	3577	170	59	3755	19	87	86	64	78	159	11
Arrive On Green	0.03	0.72	0.72	0.03	0.72	0.72	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1781	4994	237	1781	5243	26	380	686	509	321	1267	91
Grp Volume(v), veh/h	130	975	523	99	1287	705	161	0	0	166	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1828	1781	1702	1866	1575	0	0	1679	0	0
Q Serve(g_s), s	4.0	13.7	13.7	4.0	20.7	20.7	0.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.0	13.7	13.7	4.0	20.7	20.7	12.0	0.0	0.0	11.6	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.01	0.30		0.32	0.25		0.05
Lane Grp Cap(c), veh/h	59	2438	1309	59	2438	1336	237	0	0	248	0	0
V/C Ratio(X)	2.19	0.40	0.40	1.67	0.53	0.53	0.68	0.00	0.00	0.67	0.00	0.00
Avail Cap(c_a), veh/h	59	2438	1309	59	2438	1336	701	0	0	744	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.0	6.8	6.8	58.0	7.8	7.8	50.9	0.0	0.0	50.7	0.0	0.0
Incr Delay (d2), s/veh	586.2	0.5	0.9	363.0	0.8	1.5	3.4	0.0	0.0	3.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.3	8.2	8.9	13.6	11.5	12.7	8.6	0.0	0.0	8.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	644.2	7.3	7.7	421.0	8.6	9.3	54.3	0.0	0.0	53.8	0.0	0.0
LnGrp LOS	F	A	A	F	A	A	D	A	A	D	A	A
Approach Vol, veh/h		1628			2091			161			166	
Approach Delay, s/veh		58.3			28.3			54.3			53.8	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	90.4		21.6	8.0	90.4		21.6				
Change Period (Y+Rc), s	4.0	4.5		6.5	4.0	4.5		6.5				
Max Green Setting (Gmax), s	4.0	51.5		49.5	4.0	51.5		49.5				
Max Q Clear Time (g_c+I1), s	6.0	22.7		14.0	6.0	15.7		13.6				
Green Ext Time (p_c), s	0.0	24.1		1.0	0.0	22.1		1.0				

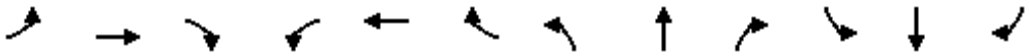
Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	1957	45	144	1405	4	36	40	87	83	77	8
Future Volume (veh/h)	42	1957	45	144	1405	4	36	40	87	83	77	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	46	2127	49	157	1527	4	39	43	95	90	84	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	3509	81	59	3594	9	79	81	143	141	112	11
Arrive On Green	0.03	0.68	0.68	0.03	0.68	0.68	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	5135	118	1781	5258	14	271	510	905	609	705	68
Grp Volume(v), veh/h	46	1409	767	157	989	542	177	0	0	183	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1849	1781	1702	1868	1685	0	0	1382	0	0
Q Serve(g_s), s	3.1	26.8	27.0	4.0	15.5	15.5	0.0	0.0	0.0	4.2	0.0	0.0
Cycle Q Clear(g_c), s	3.1	26.8	27.0	4.0	15.5	15.5	11.7	0.0	0.0	15.9	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.01	0.22		0.54	0.49		0.05
Lane Grp Cap(c), veh/h	59	2326	1264	59	2327	1277	304	0	0	264	0	0
V/C Ratio(X)	0.78	0.61	0.61	2.64	0.42	0.42	0.58	0.00	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	59	2326	1264	59	2327	1277	718	0	0	658	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.6	10.3	10.3	58.0	8.5	8.5	47.3	0.0	0.0	49.2	0.0	0.0
Incr Delay (d2), s/veh	43.6	1.2	2.2	785.8	0.6	1.0	1.8	0.0	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	14.7	16.2	24.2	9.4	10.3	8.8	0.0	0.0	9.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	101.2	11.4	12.5	843.8	9.0	9.5	49.1	0.0	0.0	52.5	0.0	0.0
LnGrp LOS	F	B	B	F	A	A	D	A	A	D	A	A
Approach Vol, veh/h		2222			1688			177			183	
Approach Delay, s/veh		13.7			86.8			49.1			52.5	
Approach LOS		B			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	86.5		25.5	8.0	86.5		25.5				
Change Period (Y+Rc), s	4.0	4.5		6.5	4.0	4.5		6.5				
Max Green Setting (Gmax), s	4.0	51.5		49.5	4.0	51.5		49.5				
Max Q Clear Time (g_c+I1), s	5.1	17.5		13.7	6.0	29.0		17.9				
Green Ext Time (p_c), s	0.0	21.8		1.2	0.0	20.4		1.1				

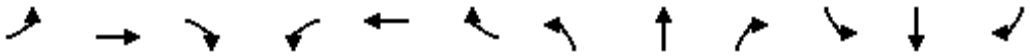
Intersection Summary	
HCM 6th Ctrl Delay	45.7
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1318	63	98	1823	9	47	55	49	39	107	8
Future Volume (veh/h)	120	1318	63	98	1823	9	47	55	49	39	107	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	130	1433	68	107	1982	10	51	60	53	42	116	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	3564	169	59	3741	19	89	86	65	78	163	12
Arrive On Green	0.03	0.71	0.71	0.03	0.71	0.71	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1781	4995	237	1781	5243	26	389	671	506	318	1270	90
Grp Volume(v), veh/h	130	977	524	107	1287	705	164	0	0	167	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1828	1781	1702	1866	1566	0	0	1678	0	0
Q Serve(g_s), s	4.0	13.8	13.8	4.0	20.9	20.9	0.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.0	13.8	13.8	4.0	20.9	20.9	12.3	0.0	0.0	11.6	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.01	0.31		0.32	0.25		0.05
Lane Grp Cap(c), veh/h	59	2429	1304	59	2429	1331	240	0	0	253	0	0
V/C Ratio(X)	2.19	0.40	0.40	1.80	0.53	0.53	0.68	0.00	0.00	0.66	0.00	0.00
Avail Cap(c_a), veh/h	59	2429	1304	59	2429	1331	698	0	0	744	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.0	6.9	6.9	58.0	7.9	7.9	50.8	0.0	0.0	50.4	0.0	0.0
Incr Delay (d2), s/veh	586.2	0.5	0.9	419.5	0.8	1.5	3.4	0.0	0.0	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.3	8.3	9.0	15.1	11.5	12.8	8.7	0.0	0.0	8.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	644.2	7.4	7.8	477.5	8.7	9.4	54.2	0.0	0.0	53.4	0.0	0.0
LnGrp LOS	F	A	A	F	A	A	D	A	A	D	A	A
Approach Vol, veh/h		1631			2099			164			167	
Approach Delay, s/veh		58.3			32.9			54.2			53.4	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	90.1		21.9	8.0	90.1		21.9				
Change Period (Y+Rc), s	4.0	4.5		6.5	4.0	4.5		6.5				
Max Green Setting (Gmax), s	4.0	51.5		49.5	4.0	51.5		49.5				
Max Q Clear Time (g_c+I1), s	6.0	22.9		14.3	6.0	15.8		13.6				
Green Ext Time (p_c), s	0.0	24.0		1.0	0.0	22.1		1.0				

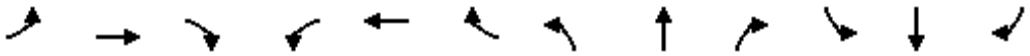
Intersection Summary			
HCM 6th Ctrl Delay		44.8	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	1961	45	150	1405	4	41	41	90	83	78	8
Future Volume (veh/h)	42	1961	45	150	1405	4	41	41	90	83	78	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1945	1870	1870	1945	1870	1945	1870	1870	1945	1870
Adj Flow Rate, veh/h	46	2132	49	163	1527	4	45	45	98	90	85	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	3489	80	59	3573	9	86	80	140	140	113	11
Arrive On Green	0.03	0.68	0.68	0.03	0.68	0.68	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	5135	118	1781	5258	14	301	494	865	590	698	66
Grp Volume(v), veh/h	46	1412	769	163	989	542	188	0	0	184	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1849	1781	1702	1868	1660	0	0	1354	0	0
Q Serve(g_s), s	3.1	27.3	27.4	4.0	15.7	15.7	0.0	0.0	0.0	3.7	0.0	0.0
Cycle Q Clear(g_c), s	3.1	27.3	27.4	4.0	15.7	15.7	12.7	0.0	0.0	16.3	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.01	0.24		0.52	0.49		0.05
Lane Grp Cap(c), veh/h	59	2312	1256	59	2313	1269	307	0	0	265	0	0
V/C Ratio(X)	0.78	0.61	0.61	2.75	0.43	0.43	0.61	0.00	0.00	0.70	0.00	0.00
Avail Cap(c_a), veh/h	59	2312	1256	59	2313	1269	713	0	0	652	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.6	10.5	10.6	58.0	8.7	8.7	47.3	0.0	0.0	49.0	0.0	0.0
Incr Delay (d2), s/veh	43.6	1.2	2.2	830.4	0.6	1.1	2.0	0.0	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	14.9	16.5	25.3	9.5	10.5	9.3	0.0	0.0	9.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	101.2	11.8	12.8	888.4	9.3	9.7	49.3	0.0	0.0	52.2	0.0	0.0
LnGrp LOS	F	B	B	F	A	A	D	A	A	D	A	A
Approach Vol, veh/h		2227			1694			188			184	
Approach Delay, s/veh		14.0			94.0			49.3			52.2	
Approach LOS		B			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	86.0		26.0	8.0	86.0		26.0				
Change Period (Y+Rc), s	4.0	4.5		6.5	4.0	4.5		6.5				
Max Green Setting (Gmax), s	4.0	51.5		49.5	4.0	51.5		49.5				
Max Q Clear Time (g_c+I1), s	5.1	17.7		14.7	6.0	29.4		18.3				
Green Ext Time (p_c), s	0.0	21.7		1.2	0.0	20.0		1.1				

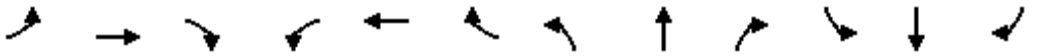
Intersection Summary			
HCM 6th Ctrl Delay		48.7	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	484	885	48	24	1301	66	138	492	28	80	274	479
Future Volume (veh/h)	484	885	48	24	1301	66	138	492	28	80	274	479
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	526	962	52	26	1414	72	150	535	30	87	298	521
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1644	89	105	1557	483	165	1277	71	160	1315	587
Arrive On Green	0.09	0.33	0.33	0.06	0.30	0.30	0.09	0.37	0.37	0.09	0.37	0.37
Sat Flow, veh/h	1781	4959	268	1781	5106	1585	1781	3421	192	1781	3554	1585
Grp Volume(v), veh/h	526	660	354	26	1414	72	150	277	288	87	298	521
Grp Sat Flow(s),veh/h/ln	1781	1702	1822	1781	1702	1585	1781	1777	1836	1781	1777	1585
Q Serve(g_s), s	12.0	22.5	22.6	2.0	37.3	4.6	11.7	16.2	16.3	6.5	8.1	43.2
Cycle Q Clear(g_c), s	12.0	22.5	22.6	2.0	37.3	4.6	11.7	16.2	16.3	6.5	8.1	43.2
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	153	1129	604	105	1557	483	165	663	685	160	1315	587
V/C Ratio(X)	3.45	0.58	0.59	0.25	0.91	0.15	0.91	0.42	0.42	0.54	0.23	0.89
Avail Cap(c_a), veh/h	153	1129	604	165	1557	483	165	812	839	165	1625	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	38.8	38.8	62.9	46.8	35.4	62.9	32.6	32.6	61.0	30.3	41.4
Incr Delay (d2), s/veh	1116.6	2.2	4.1	0.4	9.3	0.7	43.2	0.7	0.7	1.7	0.1	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	80.5	14.9	16.2	1.6	23.9	3.4	11.7	11.6	11.9	5.5	6.4	25.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1180.6	41.0	42.9	63.3	56.1	36.1	106.1	33.3	33.3	62.7	30.5	54.0
LnGrp LOS	F	D	D	E	E	D	F	C	C	E	C	D
Approach Vol, veh/h		1540			1512			715			906	
Approach Delay, s/veh		430.7			55.3			48.6			47.1	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	47.7	17.1	58.8	12.8	51.4	17.5	58.3
Change Period (Y+Rc), s	4.5	5.0	4.5	6.5	4.5	5.0	4.5	6.5
Max Green Setting (Gmax), s	12.0	30.5	13.0	64.0	13.0	29.5	13.0	64.0
Max Q Clear Time (g_c+I1), s	14.0	39.3	8.5	18.3	4.0	24.6	13.7	45.2
Green Ext Time (p_c), s	0.0	0.0	0.0	6.8	0.0	3.5	0.0	6.6

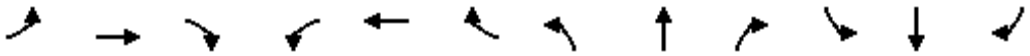
Intersection Summary	
HCM 6th Ctrl Delay	176.4
HCM 6th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	1436	66	46	1003	58	49	270	70	190	540	449
Future Volume (veh/h)	440	1436	66	46	1003	58	49	270	70	190	540	449
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	478	1561	72	50	1090	63	53	293	76	207	587	488
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1623	75	142	1625	505	144	1000	255	165	1310	584
Arrive On Green	0.09	0.32	0.32	0.08	0.32	0.32	0.08	0.36	0.36	0.09	0.37	0.37
Sat Flow, veh/h	1781	5002	231	1781	5106	1585	1781	2804	715	1781	3554	1585
Grp Volume(v), veh/h	478	1062	571	50	1090	63	53	184	185	207	587	488
Grp Sat Flow(s),veh/h/ln	1781	1702	1829	1781	1702	1585	1781	1777	1742	1781	1777	1585
Q Serve(g_s), s	12.0	42.9	42.9	3.7	25.9	4.0	3.9	10.4	10.7	13.0	17.5	39.3
Cycle Q Clear(g_c), s	12.0	42.9	42.9	3.7	25.9	4.0	3.9	10.4	10.7	13.0	17.5	39.3
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	153	1104	593	142	1625	505	144	634	621	165	1310	584
V/C Ratio(X)	3.13	0.96	0.96	0.35	0.67	0.12	0.37	0.29	0.30	1.25	0.45	0.84
Avail Cap(c_a), veh/h	153	1104	593	165	1625	505	165	812	796	165	1625	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	46.4	46.4	61.0	41.4	33.9	60.9	32.3	32.4	63.5	33.4	40.3
Incr Delay (d2), s/veh	975.8	19.3	28.7	0.6	2.2	0.5	0.6	0.4	0.5	153.2	0.4	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	71.9	28.5	32.2	3.1	16.7	2.9	3.3	8.1	8.2	20.4	12.2	23.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1039.8	65.8	75.1	61.6	43.6	34.4	61.5	32.7	32.9	216.7	33.8	48.6
LnGrp LOS	F	E	E	E	D	C	E	C	C	F	C	D
Approach Vol, veh/h		2111			1203			422			1282	
Approach Delay, s/veh		288.9			43.8			36.4			69.0	
Approach LOS		F			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	49.6	17.5	56.4	15.6	50.4	15.8	58.1
Change Period (Y+Rc), s	4.5	5.0	4.5	6.5	4.5	5.0	4.5	6.5
Max Green Setting (Gmax), s	12.0	30.5	13.0	64.0	13.0	29.5	13.0	64.0
Max Q Clear Time (g_c+I1), s	14.0	27.9	15.0	12.7	5.7	44.9	5.9	41.3
Green Ext Time (p_c), s	0.0	2.1	0.0	4.2	0.0	0.0	0.0	10.3

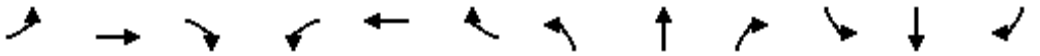
Intersection Summary	
HCM 6th Ctrl Delay	152.7
HCM 6th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	887	48	24	1304	66	140	492	28	80	274	481
Future Volume (veh/h)	485	887	48	24	1304	66	140	492	28	80	274	481
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	527	964	52	26	1417	72	152	535	30	87	298	523
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1639	88	105	1551	482	165	1281	72	160	1319	588
Arrive On Green	0.09	0.33	0.33	0.06	0.30	0.30	0.09	0.37	0.37	0.09	0.37	0.37
Sat Flow, veh/h	1781	4959	267	1781	5106	1585	1781	3421	192	1781	3554	1585
Grp Volume(v), veh/h	527	661	355	26	1417	72	152	277	288	87	298	523
Grp Sat Flow(s),veh/h/ln	1781	1702	1822	1781	1702	1585	1781	1777	1836	1781	1777	1585
Q Serve(g_s), s	12.0	22.6	22.7	2.0	37.4	4.6	11.8	16.2	16.3	6.5	8.1	43.4
Cycle Q Clear(g_c), s	12.0	22.6	22.7	2.0	37.4	4.6	11.8	16.2	16.3	6.5	8.1	43.4
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	153	1125	602	105	1551	482	165	665	687	160	1319	588
V/C Ratio(X)	3.45	0.59	0.59	0.25	0.91	0.15	0.92	0.42	0.42	0.54	0.23	0.89
Avail Cap(c_a), veh/h	153	1125	602	165	1551	482	165	812	839	165	1625	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	38.9	39.0	62.9	47.0	35.5	63.0	32.5	32.5	61.0	30.2	41.3
Incr Delay (d2), s/veh	1119.6	2.3	4.2	0.4	9.8	0.7	46.3	0.7	0.7	1.7	0.1	12.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	80.7	15.0	16.3	1.6	24.0	3.4	12.0	11.6	11.9	5.5	6.4	26.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1183.6	41.2	43.2	63.3	56.7	36.2	109.3	33.2	33.2	62.7	30.4	54.0
LnGrp LOS	F	D	D	E	E	D	F	C	C	E	C	D
Approach Vol, veh/h		1543			1515			717			908	
Approach Delay, s/veh		431.8			55.9			49.3			47.1	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	47.5	17.1	58.9	12.8	51.3	17.5	58.5
Change Period (Y+Rc), s	4.5	5.0	4.5	6.5	4.5	5.0	4.5	6.5
Max Green Setting (Gmax), s	12.0	30.5	13.0	64.0	13.0	29.5	13.0	64.0
Max Q Clear Time (g_c+I1), s	14.0	39.4	8.5	18.3	4.0	24.7	13.8	45.4
Green Ext Time (p_c), s	0.0	0.0	0.0	6.8	0.0	3.4	0.0	6.6

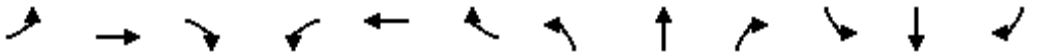
Intersection Summary	
HCM 6th Ctrl Delay	177.0
HCM 6th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	442	1439	67	46	1006	58	50	270	70	190	540	451
Future Volume (veh/h)	442	1439	67	46	1006	58	50	270	70	190	540	451
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	480	1564	73	50	1093	63	54	293	76	207	587	490
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1614	75	142	1618	502	145	1004	256	165	1313	586
Arrive On Green	0.09	0.32	0.32	0.08	0.32	0.32	0.08	0.36	0.36	0.09	0.37	0.37
Sat Flow, veh/h	1781	4999	233	1781	5106	1585	1781	2804	715	1781	3554	1585
Grp Volume(v), veh/h	480	1065	572	50	1093	63	54	184	185	207	587	490
Grp Sat Flow(s),veh/h/ln	1781	1702	1828	1781	1702	1585	1781	1777	1742	1781	1777	1585
Q Serve(g_s), s	12.0	43.2	43.2	3.7	26.1	4.0	4.0	10.4	10.7	13.0	17.5	39.5
Cycle Q Clear(g_c), s	12.0	43.2	43.2	3.7	26.1	4.0	4.0	10.4	10.7	13.0	17.5	39.5
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	153	1099	590	142	1618	502	145	636	624	165	1313	586
V/C Ratio(X)	3.14	0.97	0.97	0.35	0.68	0.13	0.37	0.29	0.30	1.25	0.45	0.84
Avail Cap(c_a), veh/h	153	1099	590	165	1618	502	165	812	796	165	1625	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	46.7	46.7	61.0	41.6	34.0	60.9	32.2	32.3	63.5	33.3	40.3
Incr Delay (d2), s/veh	981.7	20.6	30.1	0.6	2.3	0.5	0.6	0.4	0.5	153.2	0.4	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	72.3	28.9	32.6	3.1	16.8	2.9	3.3	8.1	8.2	20.4	12.2	23.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1045.7	67.3	76.9	61.6	43.9	34.5	61.5	32.6	32.7	216.7	33.7	48.6
LnGrp LOS	F	E	E	E	D	C	E	C	C	F	C	D
Approach Vol, veh/h		2117			1206			423			1284	
Approach Delay, s/veh		291.7			44.1			36.3			68.9	
Approach LOS		F			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	49.4	17.5	56.6	15.6	50.2	15.9	58.2
Change Period (Y+Rc), s	4.5	5.0	4.5	6.5	4.5	5.0	4.5	6.5
Max Green Setting (Gmax), s	12.0	30.5	13.0	64.0	13.0	29.5	13.0	64.0
Max Q Clear Time (g_c+I1), s	14.0	28.1	15.0	12.7	5.7	45.2	6.0	41.5
Green Ext Time (p_c), s	0.0	2.0	0.0	4.2	0.0	0.0	0.0	10.2

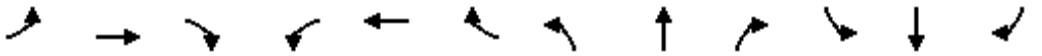
Intersection Summary	
HCM 6th Ctrl Delay	154.0
HCM 6th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	498	911	49	24	1334	67	141	502	29	82	281	492
Future Volume (veh/h)	498	911	49	24	1334	67	141	502	29	82	281	492
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	541	990	53	26	1450	73	153	546	32	89	305	535
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1604	86	105	1515	470	165	1300	76	160	1344	600
Arrive On Green	0.09	0.32	0.32	0.06	0.30	0.30	0.09	0.38	0.38	0.09	0.38	0.38
Sat Flow, veh/h	1781	4961	265	1781	5106	1585	1781	3412	200	1781	3554	1585
Grp Volume(v), veh/h	541	679	364	26	1450	73	153	284	294	89	305	535
Grp Sat Flow(s),veh/h/ln	1781	1702	1823	1781	1702	1585	1781	1777	1834	1781	1777	1585
Q Serve(g_s), s	12.0	23.6	23.7	2.0	39.0	4.8	11.9	16.5	16.5	6.7	8.2	44.3
Cycle Q Clear(g_c), s	12.0	23.6	23.7	2.0	39.0	4.8	11.9	16.5	16.5	6.7	8.2	44.3
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	153	1101	589	105	1515	470	165	677	699	160	1344	600
V/C Ratio(X)	3.54	0.62	0.62	0.25	0.96	0.16	0.92	0.42	0.42	0.56	0.23	0.89
Avail Cap(c_a), veh/h	153	1101	589	165	1515	470	165	812	839	165	1625	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	40.0	40.0	62.9	48.3	36.3	63.0	31.9	31.9	61.0	29.6	40.8
Incr Delay (d2), s/veh	1160.7	2.6	4.8	0.4	14.9	0.7	47.8	0.7	0.7	2.1	0.1	13.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	83.1	15.6	17.0	1.6	25.7	3.5	12.1	11.7	12.1	5.6	6.4	26.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1224.7	42.6	44.9	63.3	63.3	37.0	110.9	32.6	32.6	63.1	29.7	54.0
LnGrp LOS	F	D	D	E	E	D	F	C	C	E	C	D
Approach Vol, veh/h		1584			1549			731			929	
Approach Delay, s/veh		446.9			62.0			49.0			46.9	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	46.5	17.1	59.9	12.8	50.3	17.5	59.5
Change Period (Y+Rc), s	4.5	5.0	4.5	6.5	4.5	5.0	4.5	6.5
Max Green Setting (Gmax), s	12.0	30.5	13.0	64.0	13.0	29.5	13.0	64.0
Max Q Clear Time (g_c+I1), s	14.0	41.0	8.7	18.5	4.0	25.7	13.9	46.3
Green Ext Time (p_c), s	0.0	0.0	0.0	7.0	0.0	2.8	0.0	6.6

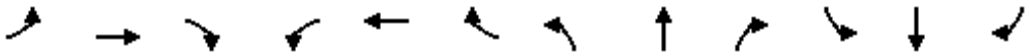
Intersection Summary	
HCM 6th Ctrl Delay	184.3
HCM 6th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	454	1472	67	47	1030	60	50	277	71	194	551	463
Future Volume (veh/h)	454	1472	67	47	1030	60	50	277	71	194	551	463
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	493	1600	73	51	1120	65	54	301	77	211	599	503
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1577	72	143	1580	490	145	1028	259	165	1340	598
Arrive On Green	0.09	0.31	0.31	0.08	0.31	0.31	0.08	0.37	0.37	0.09	0.38	0.38
Sat Flow, veh/h	1781	5005	228	1781	5106	1585	1781	2812	708	1781	3554	1585
Grp Volume(v), veh/h	493	1088	585	51	1120	65	54	188	190	211	599	503
Grp Sat Flow(s),veh/h/ln	1781	1702	1829	1781	1702	1585	1781	1777	1743	1781	1777	1585
Q Serve(g_s), s	12.0	44.1	44.1	3.8	27.2	4.1	4.0	10.5	10.8	13.0	17.7	40.5
Cycle Q Clear(g_c), s	12.0	44.1	44.1	3.8	27.2	4.1	4.0	10.5	10.8	13.0	17.7	40.5
Prop In Lane	1.00		0.12	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	153	1072	576	143	1580	490	145	650	637	165	1340	598
V/C Ratio(X)	3.23	1.01	1.02	0.36	0.71	0.13	0.37	0.29	0.30	1.28	0.45	0.84
Avail Cap(c_a), veh/h	153	1072	576	165	1580	490	165	812	797	165	1625	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	48.0	48.0	61.0	42.8	34.8	60.9	31.5	31.6	63.5	32.7	39.8
Incr Delay (d2), s/veh	1019.8	31.2	41.3	0.6	2.7	0.6	0.6	0.4	0.4	162.5	0.4	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	74.6	31.5	35.4	3.1	17.5	3.1	3.3	8.2	8.3	21.1	12.3	24.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1083.8	79.1	89.3	61.5	45.5	35.4	61.5	31.9	32.1	226.0	33.1	48.6
LnGrp LOS	F	F	F	E	D	D	E	C	C	F	C	D
Approach Vol, veh/h		2166			1236			432			1313	
Approach Delay, s/veh		310.6			45.6			35.7			70.0	
Approach LOS		F			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	48.3	17.5	57.7	15.7	49.1	15.9	59.3
Change Period (Y+Rc), s	4.5	5.0	4.5	6.5	4.5	5.0	4.5	6.5
Max Green Setting (Gmax), s	12.0	30.5	13.0	64.0	13.0	29.5	13.0	64.0
Max Q Clear Time (g_c+I1), s	14.0	29.2	15.0	12.8	5.8	46.1	6.0	42.5
Green Ext Time (p_c), s	0.0	1.1	0.0	4.4	0.0	0.0	0.0	10.2

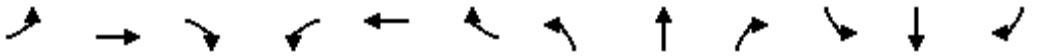
Intersection Summary	
HCM 6th Ctrl Delay	162.5
HCM 6th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	499	913	49	24	1337	67	143	502	29	82	281	494
Future Volume (veh/h)	499	913	49	24	1337	67	143	502	29	82	281	494
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	542	992	53	26	1453	73	155	546	32	89	305	537
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1599	85	105	1510	469	165	1304	76	160	1348	601
Arrive On Green	0.09	0.32	0.32	0.06	0.30	0.30	0.09	0.38	0.38	0.09	0.38	0.38
Sat Flow, veh/h	1781	4962	265	1781	5106	1585	1781	3412	200	1781	3554	1585
Grp Volume(v), veh/h	542	680	365	26	1453	73	155	284	294	89	305	537
Grp Sat Flow(s),veh/h/ln	1781	1702	1823	1781	1702	1585	1781	1777	1834	1781	1777	1585
Q Serve(g_s), s	12.0	23.7	23.7	2.0	39.2	4.8	12.1	16.4	16.5	6.7	8.2	44.5
Cycle Q Clear(g_c), s	12.0	23.7	23.7	2.0	39.2	4.8	12.1	16.4	16.5	6.7	8.2	44.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	153	1097	587	105	1510	469	165	679	701	160	1348	601
V/C Ratio(X)	3.55	0.62	0.62	0.25	0.96	0.16	0.94	0.42	0.42	0.56	0.23	0.89
Avail Cap(c_a), veh/h	153	1097	587	165	1510	469	165	812	839	165	1625	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	40.2	40.2	62.9	48.5	36.4	63.1	31.8	31.8	61.0	29.5	40.8
Incr Delay (d2), s/veh	1163.6	2.6	4.9	0.4	15.8	0.7	51.1	0.7	0.7	2.1	0.1	13.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	83.3	15.6	17.1	1.6	25.9	3.5	12.4	11.7	12.0	5.6	6.4	26.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1227.6	42.8	45.1	63.3	64.3	37.1	114.2	32.5	32.5	63.1	29.6	54.0
LnGrp LOS	F	D	D	E	E	D	F	C	C	E	C	D
Approach Vol, veh/h		1587			1552			733			931	
Approach Delay, s/veh		448.0			63.0			49.8			46.9	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	46.4	17.1	60.0	12.8	50.1	17.5	59.6
Change Period (Y+Rc), s	4.5	5.0	4.5	6.5	4.5	5.0	4.5	6.5
Max Green Setting (Gmax), s	12.0	30.5	13.0	64.0	13.0	29.5	13.0	64.0
Max Q Clear Time (g_c+I1), s	14.0	41.2	8.7	18.5	4.0	25.7	14.1	46.5
Green Ext Time (p_c), s	0.0	0.0	0.0	7.0	0.0	2.7	0.0	6.6

Intersection Summary	
HCM 6th Ctrl Delay	185.1
HCM 6th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	456	1475	68	47	1033	60	51	277	71	194	551	465
Future Volume (veh/h)	456	1475	68	47	1033	60	51	277	71	194	551	465
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	496	1603	74	51	1123	65	55	301	77	211	599	505
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1568	72	143	1572	488	146	1032	260	165	1343	599
Arrive On Green	0.09	0.31	0.31	0.08	0.31	0.31	0.08	0.37	0.37	0.09	0.38	0.38
Sat Flow, veh/h	1781	5002	231	1781	5106	1585	1781	2812	708	1781	3554	1585
Grp Volume(v), veh/h	496	1091	586	51	1123	65	55	188	190	211	599	505
Grp Sat Flow(s),veh/h/ln	1781	1702	1829	1781	1702	1585	1781	1777	1743	1781	1777	1585
Q Serve(g_s), s	12.0	43.9	43.9	3.8	27.3	4.1	4.1	10.5	10.8	13.0	17.7	40.7
Cycle Q Clear(g_c), s	12.0	43.9	43.9	3.8	27.3	4.1	4.1	10.5	10.8	13.0	17.7	40.7
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	153	1067	573	143	1572	488	146	652	640	165	1343	599
V/C Ratio(X)	3.25	1.02	1.02	0.36	0.71	0.13	0.38	0.29	0.30	1.28	0.45	0.84
Avail Cap(c_a), veh/h	153	1067	573	165	1572	488	165	812	797	165	1625	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	48.1	48.1	61.0	43.0	35.0	60.9	31.4	31.5	63.5	32.6	39.7
Incr Delay (d2), s/veh	1028.6	33.2	43.4	0.6	2.8	0.6	0.6	0.4	0.4	162.5	0.4	8.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	75.1	31.8	35.8	3.1	17.6	3.1	3.4	8.2	8.3	21.1	12.3	24.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1092.6	81.3	91.4	61.5	45.8	35.5	61.5	31.8	31.9	226.0	33.0	48.6
LnGrp LOS	F	F	F	E	D	D	E	C	C	F	C	D
Approach Vol, veh/h		2173			1239			433			1315	
Approach Delay, s/veh		314.9			45.9			35.6			69.9	
Approach LOS		F			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	48.1	17.5	57.9	15.7	48.9	16.0	59.4
Change Period (Y+Rc), s	4.5	5.0	4.5	6.5	4.5	5.0	4.5	6.5
Max Green Setting (Gmax), s	12.0	30.5	13.0	64.0	13.0	29.5	13.0	64.0
Max Q Clear Time (g_c+I1), s	14.0	29.3	15.0	12.8	5.8	45.9	6.1	42.7
Green Ext Time (p_c), s	0.0	1.0	0.0	4.4	0.0	0.0	0.0	10.2

Intersection Summary	
HCM 6th Ctrl Delay	164.4
HCM 6th LOS	F