



1642 South Central Avenue Project

MARCH 2022

PREPARED FOR
City of Glendale

PREPARED BY
SWCA Environmental Consultants

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LIST OF ACRONYMS AND ABBREVIATIONS

CAHSR	California High Speed Rail
CDFs	character-defining features
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
City	City of Glendale
CNEL	Community Noise Equivalent Level
CRHR	California Register of Historical Resources
dB	decibel
dBA	A-weighted decibel
DPR	California Department of Parks and Recreation 523 Series forms
EIR	Environmental Impact Report
FTA	Federal Transit Administration
HABS	Historic American Building Survey
HALS	Historic American Landscape Survey
HRA	Historic Resources Assessment
HVAC	heating, ventilation, and air conditioning
in/sec PPV	inches per second PPV
Ldn	Day/Night Noise Level
L _{eq}	Equivalent Continuous Noise Level
MMRP	mitigation monitoring and reporting program
NAHC	Native American Heritage Commission
NOP	Notice of Preparation of an Environmental Impact Report
NPS	National Park Service
NRHP	National Register of Historic Places
PPV	peak particle velocity
RMS	root-mean-square
SCAG	Southern California Association of Governments
STC	sound transmission class
STC	sound transmission class
VdB	root-mean-square velocity level denoted in the decibel scale

1.0 INTRODUCTION

This Chapter provides a summary and outlines the purpose and purpose of this EIR and summarizes the environmental review process.

1.1 Summary

This document is an environmental impact report (EIR) for the 1642 South Central Avenue Project (Project). This summary chapter is intended to highlight major areas of importance in the environmental analysis as required by Section 15123 of the California Environmental Quality Act (CEQA) Guidelines. This chapter provides a summary of the Project, the environmental impacts of the Project, the alternatives to the Project, including identification of the environmentally superior alternative, and the environmental issues to be resolved and areas of known controversy.

1.2 Proposed Project Description

The Project site is located at 1642 South Central Avenue, within the Tropico neighborhood of the City of Glendale (APN 5640-029-014). The Project site is a 0.23-acre rectangular parcel and is bounded to the north by South Central Avenue, to the west by Gardena Avenue, to the east by an industrial building constructed in 1985, and to the south by a single-family residence constructed in 1947.

The Project site is zoned SFMU (Commercial/Residential Mixed Use) and developed with two residential buildings (1642 South Central Avenue and 1608 Gardena Avenue) and a detached garage. The residence located at 1642 South Central Avenue was constructed in 1913, and a second residence located on the same lot but addressed on 1608 Gardena Avenue was constructed in 1920. The Project would demolish both residential dwelling units and the garage and construct a new 40,240-square-foot, five-story, 31-unit, rental housing building. Parking would be provided in a 16-space one-level subterranean garage. Per Government Code Section 65915 and Glendale Municipal Code Section 30.36 (Inclusionary Zoning Ordinance), three of the residential units would be reserved for very low-income households.

1.3 Project Objectives

The Project applicant's objectives are as follows:

- 1) Contribute to the health of the City through an economically viable infill project that would provide an increase in residential units to help meet housing demand in the City and better meet the Regional Housing Needs Assessment (RHNA) requirements for the region.
- 2) Construct a new multi-family residential building with new architectural designs and energy-efficient building systems that promote energy conservation that furthers the City's policy goals expressed in the Greener Glendale Plan
- 3) Provide new residential opportunities that offer multi-modal opportunities taking advantage of the close proximity to Larry Zarian Transportation Center.
- 4) Enhance the general welfare of the public by offering affordable housing opportunities and help meet the City's affordable housing goals and needs outlined in the City's Housing Element.
- 5) Develop new residential opportunities close to the existing retail amenities within South Glendale.

1.4 Summary of Impacts and Mitigation Measures

Table 1.1 summarizes all impacts of the proposed Project and associated mitigation measures identified in this EIR. Table 1.1 has four columns: the identified impact under each EIR issue area; the level of significance prior to implementation of mitigation; mitigation measures that would avoid or reduce the level of impacts; and the level of significance after implementation of mitigation measures. The levels of significance of impacts before and after implementation of applicable mitigation measures are identified as follows:

- **No Impact (NI)** – No adverse changes (or impacts) to the environment are expected.
- **Less Than Significant (LTS)** – Impact that would not exceed the defined significance criteria or would be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations.
- **Less Than Significant with Mitigation (LTSM)** – Impact that is significant but reduced to a less-than-significant level through implementation of the identified mitigation measure(s).
- **Significant and Unavoidable (SU)** – Impact that exceeds the defined significance criteria and cannot be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations, and for which there are no feasible mitigation measures that would bring the level to LTSM.

Table 1.1. Summary of Project Impacts Identified in the EIR

Impact	Level of Significance Before Mitigation	Mitigation and Improvement Measures	Level of Significance After Mitigation
<i>Legend:</i> NI = No Impact; LTS = Less than significant or negligible impact, no mitigation required; S = Significant; LTSM = Significant but mitigable to less than significant impact; SU = Significant and unavoidable adverse impact, no feasible mitigation; N/A = Not Applicable			
Section 3.B, Cultural Resources (Historic Architectural Resources)			
CR-1: The proposed Project would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines.	S	<p>Mitigation Measure M-CR-1: Documentation of Historical Resource</p> <p>Prior to issuance of a demolition permit, the Project applicant shall undertake Historic American Building/Historic American Landscape Survey (HABS/HALS) documentation of the building features. The documentation shall be undertaken by a professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History, History, or Architecture (as appropriate) to prepare written and photographic documentation of 1642 South Central Avenue. The specific scope of the documentation shall be reviewed and approved by City staff but shall include the following elements:</p> <p>Measured Drawings – A set of measured drawings shall be prepared that depict the existing size, scale, and dimension of the historic resource. The Project applicant shall submit original architectural drawings or an as-built set of architectural drawings (e.g., plans, sections, elevations). City staff will assist the consultant in determining the appropriate level of measured drawings.</p> <p>Historic American Buildings/Historic American Landscape Survey-Level Photographs – Either Historic American Buildings/Historic American Landscape Survey (HABS/HALS) standard large-format or digital photography shall be used. The scope of the digital photographs shall be reviewed by City staff for concurrence, and all digital photography shall be conducted according to the latest National Park Service (NPS) standards. The photography shall be undertaken by a qualified professional with demonstrated experience in HABS/HALS photography. Photograph views for the data set shall include contextual views; views of each side of the building and interior views, including any original interior features, where possible; oblique views of the building; and detail views of character-defining features.</p> <p>All views shall be referenced on a photographic key. This photographic key shall be on a map of the property and shall show the photograph number with an arrow to indicate the direction of the view. Historic photographs shall also be collected, reproduced, and included in the data set.</p> <p>The Project applicant shall transmit such documentation to the Glendale Public Library, the Glendale Historical Society, the Community Development Department, and the South Central Coastal Information Center. The HABS/HALS documentation scope will determine the requested documentation type for the Project site and the Project applicant will conduct outreach to identify other interested groups. All documentation will be reviewed and approved by City staff before any demolition or site permit is granted for the affected historical resources.</p>	SU

Impact	Level of Significance Before Mitigation	Mitigation and Improvement Measures	Level of Significance After Mitigation
<p><i>Legend:</i> NI = No Impact; LTS = Less than significant or negligible impact, no mitigation required; S = Significant; LTSM = Significant but mitigable to less than significant impact; SU = Significant and unavoidable adverse impact, no feasible mitigation; N/A = Not Applicable</p>			
C-CR-1: The proposed Project, in combination with related projects, would not materially alter, in an adverse manner, the physical characteristics of historical resources that justify their eligibility for inclusion in the California Register of Historical Resources, resulting in a cumulative impact.	LTS	No mitigation measures are required.	N/A
Section 4.2, Noise and Vibration			
NO-1: Construction of the proposed Project would generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the City of Glendale Noise Ordinance or applicable standards of other agencies.	S	<p>Mitigation Measure M-NO-1: Construction Noise and Vibration Control</p> <p>Prior to issuance of demolition permits, the Glendale (City) Department of Building and Safety, or designee, shall verify that all construction plans include notes stipulating the following:</p> <ul style="list-style-type: none"> Standard building construction requirements shall consist of wall construction with a minimum rating of STC-41 as described above and windows and glass doors throughout the building at sensitive rooms shall meet a minimum STC rating of STC-33. Grading and construction contractors shall use equipment that generates lower vibration levels, such as rubber-tired equipment rather than metal-tracked equipment. Construction haul truck and materials delivery traffic shall avoid residential areas whenever feasible. The construction contractor shall place noise- and vibration-generating construction equipment and locate construction staging areas away from sensitive uses whenever feasible. The construction contractor shall use on-site electrical sources to power equipment rather than diesel generators where feasible. All residential units located within 500 feet of the construction site shall be sent a notice regarding the construction schedule. A sign legible at a distance of 50 feet shall also be posted at the construction site. All notices and the signs shall indicate the dates and durations of construction activities, as well as provide a telephone number for the "noise disturbance coordinator." Heavy equipment similar to that of bulldozers shall not be used within 5 feet of any existing neighboring structure. 	LTSM
NO-2: Construction of the proposed Project would generate excessive groundborne vibration or groundborne noise levels.	S	See Mitigation Measure M-NO-1: Construction Noise and Vibration Control, above.	LTSM

Impact	Level of Significance Before Mitigation	Mitigation and Improvement Measures	Level of Significance After Mitigation
<i>Legend:</i> NI = No Impact; LTS = Less than significant or negligible impact, no mitigation required; S = Significant; LTSM = Significant but mitigable to less than significant impact; SU = Significant and unavoidable adverse impact, no feasible mitigation; N/A = Not Applicable			
NO-3: Operation of the proposed project would generate a substantial permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan, or applicable standards of other agencies.	LTS	No mitigation measures are required.	N/A
C-NO-1: Construction noise and vibration as a result of the proposed Project, combined with construction noise and vibration from cumulative projects in the vicinity, would cause a substantial temporary increase in ambient noise levels. Operation of the proposed Project, combined with operation noise from cumulative projects in the vicinity, would not cause a substantial permanent increase in ambient noise levels in the Project vicinity.	LTS	No mitigation measures are required.	N/A

1.5 Summary of Project Alternatives

Three alternatives to the proposed Project are evaluated in this EIR:

- No Project Alternative
- Reduced Density (Relocation on Site) Alternative
- Reduced Density (Existing Location) Alternative

These alternatives are summarized below and described in detail in Chapter 6, Alternatives.

1.5.1 *No Project Alternative*

CEQA Guidelines Section 15126.6(e) requires that, among a reasonable range of feasible Project alternatives, a “no project” alternative be evaluated. CEQA Guidelines Section 15126.6(e)(2) requires that the no project alternative analysis “discuss the existing conditions as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and policies and consistent with the available infrastructure and community services.”

The No Project Alternative assumes that the Project site would retain the existing single-family dwellings and garage, which would not constitute a change from existing conditions, and that the existing land use controls on the project site would continue to govern site development and would not be changed. The No Project Alternative would not result in the development of the 31-unit, rental housing building.

1.5.2 *Reduced Density (Relocation on Site) Alternative*

The Reduced Density (Relocation on Site) Alternative would move the existing historic resource located at 1642 South Central Avenue to another location on the Project site. Similar to the Project it would require the demolition of 1608 Gardena Avenue and the existing garage. This Alternative would reduce the Project size from 31 units to 15 residential units, including ~~11~~14 market-rate and ~~4~~1 very low-income units, and a subterranean garage with eight parking spaces. The new development would be located on the southern portion of the site.

The Reduced Density (Relocation on Site) Alternative would largely preserve the on-site location, design, materials, workmanship, feeling, and character-defining features of the historic building at 1642 South Central Avenue. This Alternative would change the property’s on-site setting by introducing new construction on the parcel, however there is requirement under CEQA to maintain all aspects of integrity as defined by the National Park Service. In addition, the broader setting of the property has been deeply compromised from the original single-family residential character. Therefore, it would eliminate the significant impact related to historic resources.

1.5.3 *Reduced Density (Existing Location) Alternative*

The Reduced Density (Existing Location) Alternative would keep the 1642 South Central Avenue duplex in its existing location on the project site, demolish 1608 Gardena Avenue and the existing garage, and build 11 residential units on the remaining site area. The new construction would include 11 residential units, including ~~eight~~ten market-rate and ~~3~~1 very low-income units, and a subterranean garage with eight parking spaces would be constructed on the southern portion of the site in a variety of layouts and sizes.

The Reduced Density (Existing Location) Alternative would keep the 1642 South Central Avenue residential building in its existing location, demolish 1608 Gardena Avenue and the existing garage, and build 11 new residential units on the remaining site area instead of 31 units. The 11 residential units would include 8-10 market-rate and 3-1 very low-income units. Similar to the Project, this Alternative would include a single level subterranean garage with eight parking spaces. The Alternative would be constructed on the southern portion of the site.

The Reduced Density (Existing Location) Alternative would largely preserve the on-site location, design, materials, workmanship, feeling, and character-defining features of the historic building at 1642 South Central Avenue. This Alternative would change the property's on-site setting by introducing new construction on the parcel, however there is no requirement under CEQA all aspects of integrity be retained and (see Section 4.1.1.5). In addition, the broader setting of the property has been deeply compromised from the original single-family residential character. This alternative would eliminate significant impacts relating to the demolition of the historic resource.

1.5.4 *Environmentally Superior Alternative*

Pursuant to CEQA Guidelines Section 15126.6(e)(2), if the no project alternative is the environmentally superior alternative, then an EIR is required to identify another environmentally superior alternative from among the alternatives evaluated. The environmentally superior alternative is the alternative that best avoids or lessens any significant effects of the Project, even if the alternative would impede to some degree the attainment of the project objectives. The Project would have a significant impact related to historical architectural resources that cannot be mitigated to a less-than-significant level.

The Reduced Density (Relocation on Site) Alternative would be the environmentally superior alternative because this Alternative would eliminate the significant and unavoidable historical architectural resources impacts associated with demolition of 1642 South Central Avenue by avoiding demolition of the residence and would meet more project objectives compared to the Reduced Density (Existing Location) as it would allow for more affordable and market rate residential units and help the City achieve its regional affordability goals.

1.5.5 *Areas of Known Controversy and Issues to be Resolved*

CEQA Guidelines Section 15123(b)(2) indicates that an EIR summary should identify areas of controversy known to the lead agency including issues raised by agencies and the public. This Draft EIR has taken into consideration the comments received from the public in response to the Notice of Preparation of an Environmental Impact Report. Based on the scoping process, the potential area of controversy known to the City is the potential adverse impact to Glendale historic resources. These concerns have been addressed in Section 4.1, Historic Architectural Resources, in the EIR.

1.6 Purpose of this Environmental Impact Report

This EIR has been prepared by the City of Glendale (City), the Lead Agency for the Project, in compliance with the provisions of CEQA (California Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.). The lead agency is the public agency that has the principal responsibility for carrying out or approving a project.

Pursuant to CEQA Guidelines Section 15161, this is a project-level EIR (an EIR that examines the physical environmental impacts of a specific development project). As determined and guided by findings of the initial study for the Project (presented in Appendix B), this EIR evaluates the potential for the

Project to cause significant impacts under a limited number of environmental topics: cultural resources (historic architectural resources) and noise and vibration. The initial study determined that the remaining environmental topics would have less-than-significant impacts with mitigation, less-than-significant impacts, or no impacts, or would not be applicable; therefore, they were not carried forward for analysis in this EIR. As defined in CEQA Guidelines Section 15382, a “significant effect on the environment” is:

... a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

As stated in CEQA Guidelines Section 15121(a), an EIR is an informational document intended to inform public agency decision-makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. CEQA requires that public agencies not approve projects until all feasible means available have been employed to substantially lessen the significant environmental effects of such projects.

Before any discretionary project approvals may be granted for the project, the City must certify the EIR as adequate, accurate, and objective. EIR adequacy is defined in CEQA Guidelines Section 15151, Standards for Adequacy of an EIR, which states:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

City decision-makers will use the certified EIR, along with other information and public processes, to determine whether to approve, modify, or disapprove the project, and to require any feasible mitigation measures as conditions of project approval.

1.7 Organization of this EIR

This EIR is organized into six chapters, as described below.

Chapter 1: Introduction

Provides a summary of the Project and describes the type, purpose, and function of the EIR; the environmental review process and comments received on the Notice of Preparation of an Environmental Impact Report (NOP); and the organization of the EIR.

Chapter 2: Project Description

Presents details about the Project and the approvals required for implementation.

Chapter 3: Environmental Impact Analysis

Each topic section includes a description of existing conditions with respect to the particular environmental topic (environmental setting); the regulatory framework; the approach to analysis; identification and evaluation of project-specific and cumulative impacts; and mitigation measures, when appropriate. The initial study determined that the remaining environmental topics would have less-than-significant impacts with mitigation, less-than-significant impacts, or no impacts, or would not be applicable; therefore, they were not carried forward for analysis in this EIR.

Chapter 4: Project Alternative

Presents and analyzes a range of alternatives to the Project. Three alternatives are described and evaluated: No Project Alternative, which is required by CEQA, a Reduced Density (Relocation On-Site), and a Reduced Density (Existing Location). This chapter also identifies the environmentally superior alternative, and discusses alternatives that were considered for analysis but rejected and gives the reasons for their rejection.

Chapter 5: Cumulative Impact Analysis

Addresses potential cumulative impacts from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Chapter 6: Other CEQA Considerations

Addresses potential growth-inducing impacts of the Project and identifies significant effects that cannot be avoided if the Project is implemented, as well as significant irreversible impacts of the Project, and areas of known controversy.

Chapter 7: References

Chapter 8: List of Preparers and Organizations and Persons Contacted or Consulted

Identifies the EIR authors and the agencies, organizations, and individuals consulted during preparation of the EIR. It also lists the Project applicant and any consultants working on their behalf.

List of Appendices:

- Appendix A: Notice of Preparation of an Environmental Impact Report, June 10, 2021
- Appendix B: Initial Study
- Appendix C: Historic Resources Assessment, prepared by SWCA, August 2021
- Appendix D: Noise and Vibration Study, prepared by LSA, June 2020
- Appendix E: Sanborn Fire Insurance Maps, 1919 and 1925

1.8 Environmental Review Requirements

CEQA Guidelines Sections 15080 to 15097 set forth the EIR process, which includes multiple phases involving notification and input from responsible agencies and the public. The main steps in this process are described below.

1.8.1 *Notice of Preparation of an Environmental Impact Report*

On June 10, 2021, the City published an NOP (shown in Appendix A), announcing its intent to solicit public comments on the scope of the environmental analysis and to prepare and distribute an EIR on the 1642 South Central Avenue Project. The City mailed the NOP to the State Clearinghouse and relevant state and regional agencies; occupants of adjacent properties; property owners and occupants within 300 feet of the Project site; and other potentially interested parties, including neighborhood organizations and others that have requested such notice.

1.8.1.1 INITIAL STUDY

Following issuance of the NOP, an initial study was prepared to determine the extent of project-specific and cumulative impacts in certain resource topic areas would require additional analysis in the EIR, and which topic areas would not require analysis or less extensive analysis because the Project would have no impact, less-than-significant impacts, or less-than-significant impacts with mitigation included. These topic areas where additional analysis was not required include:

- Aesthetics (all topics)
- Agricultural and Forest Resources (all topics)
- Air Quality (all topics)
- Biological Resources (all topics)
- Cultural Resources (archaeological resources and human remains)
- Energy (all topics)
- Geology and Soils (all topics)
- Greenhouse Gas Emissions (all topics)
- Hydrology and Water Quality (all topics)
- Hazards and Hazardous Materials (all topics)
- Land Use and Planning (all topics)
- Mineral Resources (all topics)
- Noise (aviation-related topics)
- Population and Housing (all topics)
- Public Services (all topics)
- Recreation (all topics)
- Transportation (all topics)
- Tribal Cultural Resources (all topics)
- Utilities and Service Systems (all topics)
- Wildfire (all topics)

Please refer to the initial study (Appendix B) for a discussion and the impact analysis of the Project with respect to these resource topics.

1.8.1.2 AREAS WHERE ADDITIONAL ANALYSIS REQUIRED

Based on the analysis completed in the initial study, the Project could result in potentially significant impacts in the following topic areas:

- Cultural Resources (historic architectural resources only)
- Noise (all topics except aviation-related ones)

These topics are analyzed in Chapter 4 of this EIR. The NOP comments related to the proposed Project's physical environmental impacts were considered in preparing this analysis and are addressed under the relevant environmental topics in this chapter.

1.8.2 *Public Review of and Comments on the Notice of Preparation*

Publication of the NOP initiated a 30-day public review and comment period that ended on July 12, 2021. During the NOP public scoping period, the City received a total of two comments: one from the Native American Heritage Commission and one from the Glendale Historic Society. The City has considered the comments made by the public in preparing this Draft EIR. The NOP and comments received during the public review and comment period are contained in Appendix A.

1.8.3 *Draft Environmental Impact Report*

Following completion of the Initial Study this Draft EIR was prepared in accordance with CEQA and the CEQA Guidelines. It provides an analysis of the project-specific physical environmental impacts of construction and operation of the Project, and the Project's contribution to the environmental impacts from cumulative projects in the vicinity, the City as a whole, or larger geographic areas, as applicable.

The Draft EIR is available for viewing or downloading at the Planning Department website, <https://www.glendaleca.gov/government/departments/community-development/planning/current-projects/environmental-review>. Due to the COVID-19 pandemic, in-person viewing opportunities at the Planning Department office are available only by appointment.

1.8.4 *How to Comment on the Draft Environmental Impact Report*

This Draft EIR was published on March 24, 2022 and will be available for a 30-day comment period. Members of the public are invited to submit written comments on the adequacy of the document, that is, whether this Draft EIR, including the initial study, identifies and analyzes the possible environmental impacts and identifies appropriate mitigation measures.

Written comments should be submitted to:

Attention: Dennis Joe, Senior Planner

City of Glendale

Community Development Department, Planning Division

633 East Broadway, Room 103

Glendale, California 91206

Email: djoe@glendaleca.gov

Comments must be received by 5:00 p.m. on April 22, 2022. Commenters are not required to provide personal identifying information. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the Planning Department's website or in other public documents.

1.8.5 *Final Environmental Impact Report*

Following the close of the Draft EIR public review and comment period, the Planning Department will prepare and publish a Final EIR. The Final EIR will contain a Responses to Comments, which will include comments on the Draft EIR and the City's responses to those comments. The Final EIR will be considered by the Historic Preservation Commission in a publicly-noticed meeting, and then certified as a Final EIR, if deemed adequate.

The Historic Preservation Commission will consider the information in the Final EIR in their deliberations on whether to approve, modify, or deny the Project or aspects of the Project. If the Historic

Preservation Commission approves the Project, their approval action must include findings that identify significant project-related impacts that would result from the Project; discuss mitigation measures or alternatives that have been adopted to reduce significant impacts to less-than-significant levels; and explain reasons for rejecting mitigation measures or alternatives if any are infeasible for legal, social, economic, technological, or other reasons.

The Historic Preservation Commission must also adopt a mitigation monitoring and reporting program (MMRP) as part of the adoption of the CEQA findings and project approvals. The MMRP identifies the measures included in the Project or imposed by the decision-makers as conditions of approval, the entities responsible for carrying out the measures, and the timing of implementation. If significant unavoidable impacts would remain after all feasible mitigation measures are implemented, the approving body, if it elects to approve the Project, must adopt a statement of overriding considerations that makes factual findings and determinations concerning how the Project benefits would outweigh the significant environmental impacts.

2.0 PROJECT DESCRIPTION

2.1 Project Objectives

The objectives for the proposed Project are as follows:

- 1) Contribute to the health of the City through an economically viable infill project that would provide an increase in residential units to help meet housing demand in the City and better meet the Regional Housing Needs Assessment (RHNA) requirements for the region.
- 2) Construct a new multi-family residential building with new architectural designs and energy-efficient building systems that promote energy conservation that furthers the City's policy goals expressed in the Greener Glendale Plan.
- 3) Provide new residential opportunities that offer multi-modal opportunities taking advantage of the Project's proximity to Larry Zarian Transportation Center.
- 4) Enhance the general welfare of the public by offering affordable housing opportunities and help meet the affordable housing goals and needs outlined in the City's Housing Element.
- 5) Develop new residential opportunities close to the existing retail amenities within South Glendale.

2.2 Project Location and Surrounding Uses

The approximately 9,958-square-foot (0.23-acre), rectangular Project site occupies APN 5640-029-014 in the Tropico neighborhood in the south area of the City of Glendale (Figure 2.1). The project site is generally bounded by South Central Avenue to the north, Gardena Avenue to the west, and El Bonito Avenue to the south (Figure 2.2).

The Project site is occupied by two Craftsman-style single-family residential buildings and a detached garage building. The address of the northern residential building is 1642 South Central Avenue, and the southern building is 1608 Gardena Avenue. These existing buildings occupy a total of 2,251 square feet.

2.2.1 *Land Use and Zoning*

The project site is currently zoned SFMU (Commercial/Residential Mixed Use) and is located within the South Glendale Community Plan boundaries (Figure 2.3). Glendale Municipal Code Section 30.14.030, Mixed Use District General Development Standards, establishes building height limits on the project site as 75 feet and 6 stories.

The Project site is surrounded primarily by residential, commercial, and industrial development. The Peak Auto Body automobile repair shop is immediately adjacent to the east. Other SFMU (Commercial/Residential Mixed Use)-zoned properties are located to the west, south, and east, and IMU-R (Industrial/Commercial-Residential Mixed Use)-zoned properties are located to the north across South Central Avenue. The adjacent properties are developed with industrial uses to the north and west, the Larry Zarian Transportation Center to the west, single-family residences to the south. The project site is located approximately 315 feet east of an existing rail corridor that carries both passenger trains (Amtrak and Metrolink) and freight trains (Union Pacific Railroad, formerly known as Southern Pacific Lines).

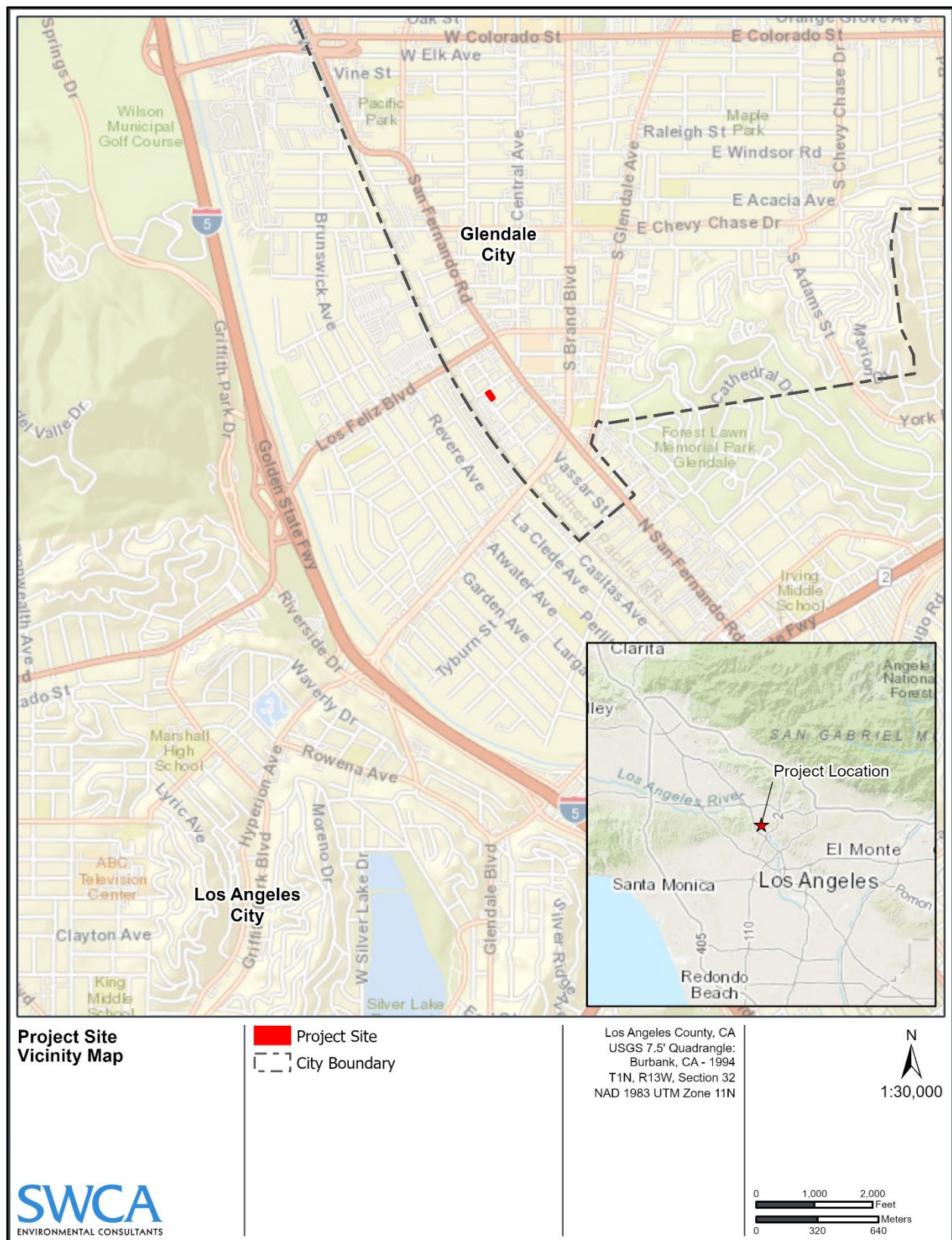


Figure 2.1. Project Site Vicinity Map.



Figure 2.2. Project Site Location.

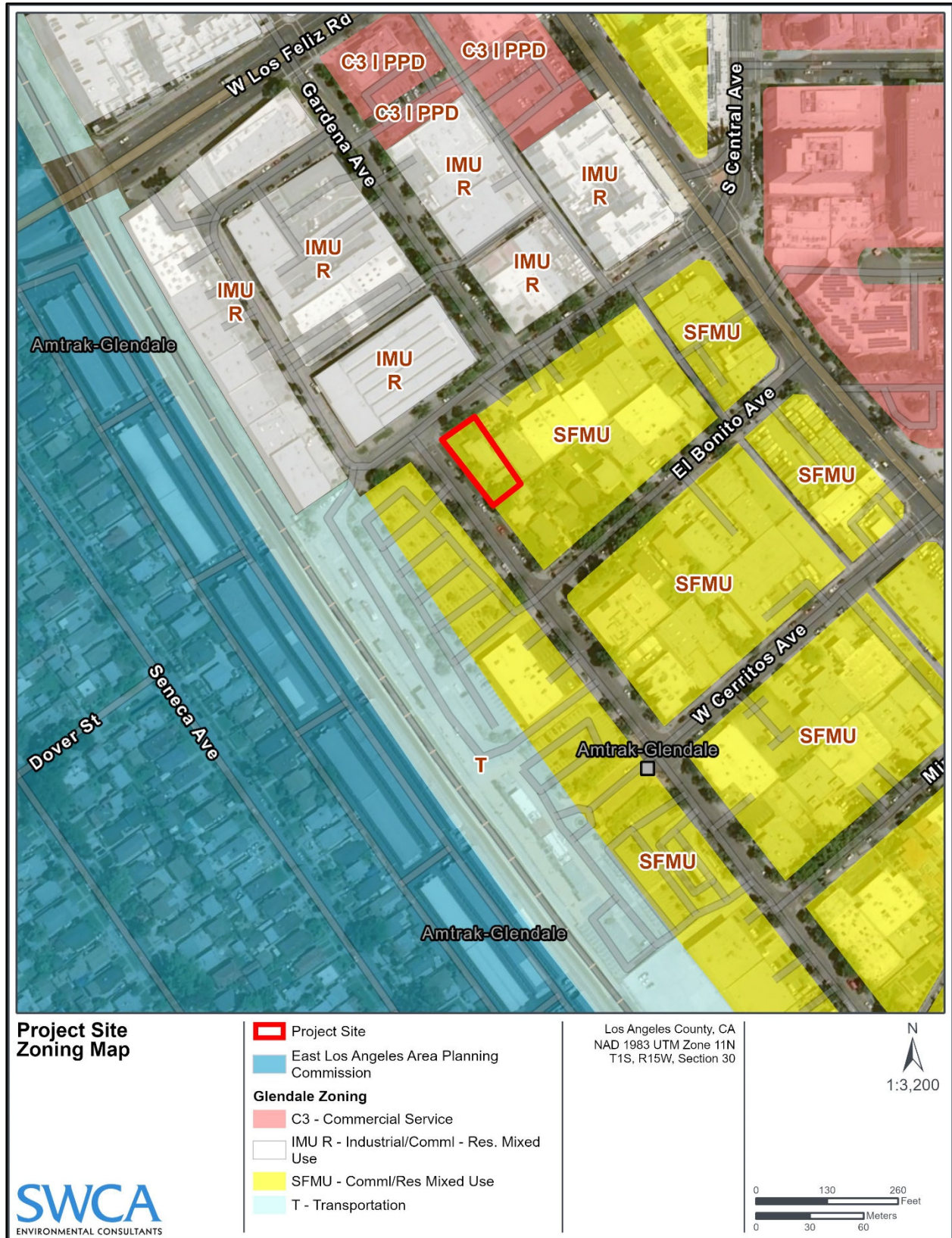


Figure 2.3. Project Site Zoning Map.

2.3 Description of Proposed Project

The Project proposes to demolish the two existing residential dwellings and accessory building on the Project site and construct a new 40,240-square-foot, five-story building with 31 units of rental housing and a one-level subterranean garage. The units would consist of 4 two-bedroom units and 27 one-bedroom units. The applicant is requesting approval of a Density Bonus that would provide three units set aside for very-low-income residents. The new building would contain approximately 3,173 square feet of common open space, including a lobby, gymnasium for residents, and community rooms (Figure 2.4). The project is subject to the City's Inclusionary Zoning Ordinance that requires 15% of the total units to be affordable. As proposed, the 13% of the units would be affordable therefore payment of an in lieu fee of the remaining 2% will be required.

There would be 1,431 square feet of landscaped area lining Gardena Avenue and South Central Avenue and in an interior courtyard surrounded by the residential units (Figure 2.5 and Figure 2.6). The roof would be accessible to residents and contain a 2,700-square-foot roof deck with amenities.

The subterranean garage would occupy 8,790 square feet and contain 16 vehicle parking spaces, one of which would be an Americans with Disabilities Act accessible space. Vehicles would enter and exit the garage from South Central Avenue.

2.3.1 Construction Schedule

The Project would be constructed in one development phase lasting 18 months, with full build-out expected to occur in 2023. The preliminary construction schedule assumes 2022 as the construction start and 2023 as the end of construction.

Construction-related activities would typically occur Monday through Friday, between 7 a.m. and 7 p.m., although some work is anticipated to occur on Saturdays between 7 a.m. and 7 p.m. The hours of construction would need to comply with the Glendale Municipal Code Ordinance 8.36.080. Construction activities are not permitted during the nighttime and on Sundays or holidays pursuant to Glendale Municipal Code Chapter 3.08.

2.3.2 Demolition, Excavation, and Soils Disturbance

The Project would result in the generation of approximately 5,500 cubic yards of demolition debris and would involve substantial amount of soils disturbance and excavation, specifically for construction of the subterranean parking garage and building foundations. The entirety of the 9,958-square-foot project site would be modified as a result of the Project. The depths of excavation would range up to 17 feet below the existing grade, with a total of approximately 5,500 net cubic yards of excavated soils generated during the approximately 18-month construction period.

2.3.3 Anticipated Project Approvals

A list of anticipated approval actions for the proposed Project is presented below; this list is preliminary and is subject to change. These approvals may be considered by City decision-makers in conjunction with the required environmental review, but they may not be granted until the required environmental review has been completed and certified.

City of Glendale (Lead Agency):

- Certification of the Final EIR
- Density Bonus Request
- Design Review
- Demolition Clearance
- Building Permit

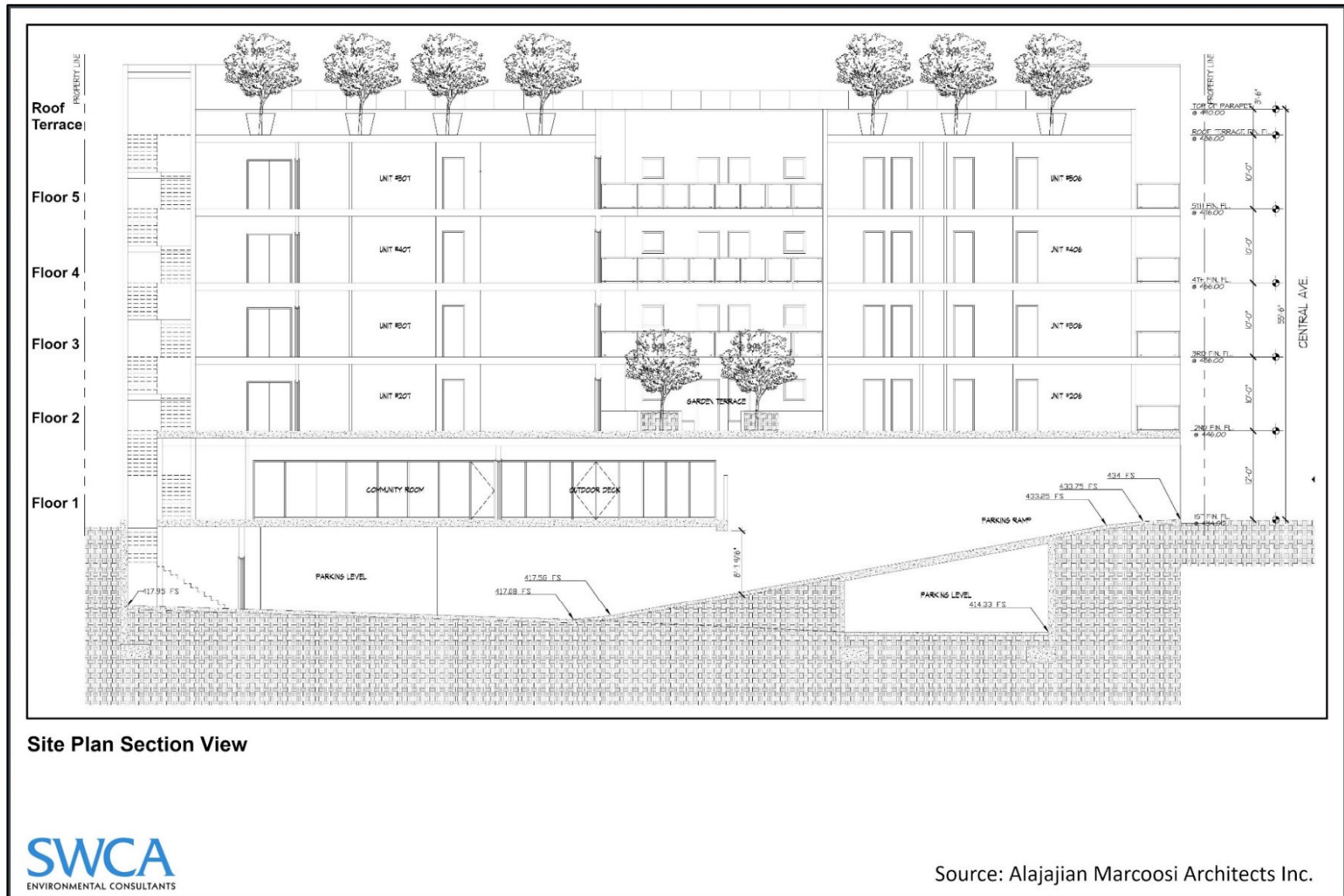


Figure 2.4. Site Plan Section View.



Figure 2.5. Visual Simulation of Project; View from North/East.



Figure 2.6. Visual Simulation of Project; View from South/West.

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3.0 ENVIRONMENTAL IMPACT ANALYSIS

3.1 Cultural Resources

Section 3.1, Cultural Resources, assesses Project impacts on historical resources, as defined by the CEQA Guidelines Section 15064.5. Other cultural resources topics (i.e., archeological resources and human remains) and Tribal Cultural Resources are discussed in Sections E and R, respectively, of the initial study (Appendix B).

CEQA Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as follows:

- (1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

The assessment of a project’s impacts on historical resources is a two-step analysis: first, the project site is analyzed to determine if it contains a “historical resource(s)” as defined under CEQA; second, if the site is found to contain historical resources, an analysis is carried out to determine whether the project could cause a substantial adverse change to the resource. A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (Public Resources Code Section 21084.1).

The City of Glendale (City) received one comment on the NOP related to historic preservation (see EIR Chapter 1, Introduction). Section 3.1, Historic Architectural Resources, is based on the Historic Resources Assessment (HRA) prepared for the proposed Project by a historic architectural resource consultant (Appendix C).

3.1.1 Regulatory Framework

This subsection describes the federal, state, and local laws and regulations that pertain to the identification and regulation of historic architectural resources.

3.1.1.1 FEDERAL REGULATIONS AND GUIDELINES

National Register of Historic Places

The National Historic Preservation Act of 1966 established the National Register of Historic Places (NRHP) as “an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment” (36 Code of Federal Regulations [CFR] 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. In general, a resource must be 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

The quality of significance in American history, architecture, archaeology and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- Criterion A (Events): It is associated with events that have made a significant contribution to the broad patterns of our history;
- Criterion B (Persons): It is associated with the lives of persons who are significant in our past;
- Criterion C (Design/Construction): It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and/or
- Criterion D (Information Potential): It has yielded, or may be likely to yield, information important in prehistory or history.¹

Although there are exceptions, certain kinds of resources are not usually considered for listing in the National Register. These include religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Integrity

In addition to qualifying for listing under at least one of the National Register criteria, a property must possess sufficient integrity to be considered eligible for listing in the National Register. According to the National Register Bulletin: How to Apply the National Register Criteria for Evaluation, integrity is

¹ Code of Federal Regulations, Title 36, Chapter 1, Part 60, Section 60.4.

defined as “the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.”²

The National Register Bulletin defines seven characteristics of integrity, as follows:

- Location is the place where the historic property was constructed.
- Design is the combination of elements that create the form, plans, space, structure, and style of the property.
- Setting is the physical environment of the historic property inclusive of the landscape and spatial relationships of the buildings.
- Materials refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history.
- Feeling is the property’s expression of the aesthetic or historic sense of a particular period of time.
- Association is the direct link between an important historic event or person and an historic property.

The Secretary of the Interior’s Standards for Rehabilitation

The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (the Secretary’s Standards) were published in 1995 and codified as 36 CFR 68.^{3,4} Neither technical nor prescriptive, these standards are intended to promote responsible preservation practices that help protect irreplaceable cultural resources. The Secretary’s Standards for Rehabilitation consist of 10 basic principles created to help preserve the distinctive character of a historic building and its site while allowing for reasonable changes to meet new needs. The preamble to the Secretary’s Standards states that they “are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.” The standards for rehabilitation of a historic resource are as follows:

- **Standard 1:** A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
- **Standard 2:** The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

² National Park Service, National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation (Washington, D.C.: National Park Service, 2002).

³ U.S. Department of the Interior, National Park Service (Kay D. Weeks and Anne E. Grimmer), The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstruction of Historic Buildings, 1995, updated 2017. Available at: <https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf>. Accessed August 2021. National Park Service Technical Preservation Services, Four Approaches to the Treatment of Historic Properties. Available at: <https://www.nps.gov/tps/standards/four-treatments.htm>. Accessed August 2021.

⁴ Treatments are defined as follows: “Preservation” acknowledges a resource as a document of its history over time and emphasizes stabilization, maintenance, and repair of existing historic fabric. “Rehabilitation” is the most widely used standard; while also incorporating the retention of features that convey historic character, “Rehabilitation” also accommodates alterations and additions to facilitate continuing or new uses. “Restoration” involves the retention and replacement from a specific period of significance. “Reconstruction,” the least-used treatment, provides a basis for re-creating a missing resource.

- **Standard 3:** Each property shall 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 architectural elements from other buildings, shall not be undertaken.
- **Standard 4:** Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- **Standard 5:** Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
- **Standard 6:** Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- **Standard 7:** Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- **Standard 8:** Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- **Standard 9:** New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- **Standard 10:** New additions and adjacent or related new construction shall 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.

3.1.1.2 STATE REGULATIONS AND GUIDELINES

Definition of Historical Resources under CEQA

CEQA Guidelines section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources.
- (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to

be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources.

- (4) The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, state, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the California Register.

California Register of Historical Resources

Created in 1992 and implemented in 1998, the California Register of Historical Resources (CRHR) is “an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.”⁵ Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs may be nominated for inclusion in the CRHR.

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may still be eligible for listing in the CRHR.

3.1.1.3 LOCAL REGULATIONS AND GUIDELINES

City of Glendale Municipal Code – Designation of Historic Resources

Chapter 15.20.050 of the City of Glendale Municipal Code states that upon recommendation of the historic preservation commission, City Council shall consider and make findings for additions of designated historic properties to the Glendale Register of Historic Resources. According to the Municipal Code Chapter 15.20.020, a “Historic Resource” is any site, building, structure, area or place, man-made or natural, which is historically or archaeologically significant in the cultural, architectural, archaeological, engineering, scientific, economic, agricultural, educational, social, political or military heritage of the City of Glendale, the state of California, or the United States and retains sufficient historic integrity to convey its significance.

The designation of any proposed resource in the City as a historic resource shall be granted only if City Council first finds that the proposed historic resource meets one or more of the following criteria:

⁵ Public Resources Code Sections 21083.2 and 21084.1.

- A. The resource is identified with important events in national, state, or city history, or exemplifies significant contributions to the broad cultural, political, economic, social, tribal, or historic heritage of the nation, state, or city, and retains historic integrity;
- B. resource is associated with a person, persons, or groups who significantly contributed to the history of the nation, state, region, or city, and retains historic integrity;
- C. The resource embodies the distinctive and exemplary characteristics of an architectural style, architectural type, period, or method of construction; or represents a notable work of a master designer, builder or architect whose genius influenced his or her profession; or possesses high artistic values, and retains historic integrity;
- D. The resource has yielded, or has the potential to yield, information important to archaeological pre-history or history of the nation, state, region, or city, and retains historic integrity. (Ord. 5949 Section 6, 2020; Ord. 5784 Section 7, 2012; Ord. 5347 Section 7, 2003; Ord. 5110 Section 12, 1996; prior code Sections 21-02).

Glendale Historic District Overlay Zones

Chapter 30.25.020 of the City of Glendale Municipal Code defines a historic district as a geographically definable area possessing a concentration, linkage or continuity, constituting more than 60 percent of the total, of historic or scenic properties, or thematically-related grouping of properties. Properties must contribute to each other and be unified aesthetically by plan or historical physical development.

A geographic area may be designated as a historic district overlay zone by the City Council upon the recommendation of the historic preservation commission and planning commission if the district:

- A. Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural or natural history;
- B. Is identified with persons or events significant in local, state or national history;
- C. Embodies distinctive characteristics of a style, type, period, method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
- D. Represents the work of notable builders, designers, or architects;
- E. Has a unique location or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the City;
- F. Embodies a collection of elements of architectural design, detail, materials or craftsmanship that represent a significant structural or architectural achievement or innovation;
- G. Reflects significant geographical patterns, including those associated with different eras of settlement and growth, transportation modes, or distinctive examples of park or community planning;
- H. Conveys a sense of historic and architectural cohesiveness through its design, setting, materials, workmanship, or association; or
- I. Has been designated a historic district in the National Register of Historic Places or the California Register of Historical Resources. (Ord. 5399 Attach. A, 2004)⁶

⁶ City of Glendale Municipal Code, Chapters 30.25.020, Available at: <http://www.qcode.us/codes/glendale/>. Accessed August 2021.

At this time the City Council has adopted nine historic districts and other districts are currently under review and consideration.⁷

3.1.2 *Environmental Setting*

The Project site is in the Tropico neighborhood within the City of Glendale and County of Los Angeles, California (Figures 3.1.1 through 3.1.6). The property consists of an approximately 0.23-acre rectangular parcel on the south side of S. Central Avenue, east of Gardena Avenue. The parcel consists of Lot 12 in Block 4 in Tract No. 910.

Situated on the property are three buildings: at the front of the Project site is 1642 South Central Avenue, a one-story Craftsman-style dwelling originally constructed in 1913 and subsequently converted to a duplex sometime between 1919 and 1925 (Figures 3.1.1 through 3.1.3); to the south is 1608 Gardena, a one-story Craftsman-style dwelling constructed in 1920 (Figures 3.1.4 through 3.1.6); and behind that building is a one-story garage constructed in 1923.



Figure 3.1.1. Northwest (primary) façade of 1642 South Central Avenue, view facing southeast (SWCA, June 2021).

⁷ City of Glendale, Historic Districts, Available at <https://www.glendaleca.gov/government/departments/community-development/planning/historic-preservation/historic-districts>. Accessed February 2022.



Figure 3.1.2. Southeast end of southwest façade of 1642 South Central Avenue, view facing northeast (SWCA, June 2021).



Figure 3.1.3. Overview of southeast (rear) façade of 1642 South Central Avenue, view facing north (SWCA, June 2021).



Figure 3.1.4. Southwest (primary) façade of 1608 Gardena, view facing northeast (SWCA, August 2021).



Figure 3.1.5. Northeast (rear) façade of 1608 Gardena with the 1953 addition, view facing west (SWCA, August 2021).



Figure 3.1.6. Northwest façade of 1608 Gardena with the 1953 addition at the north end, view facing east (SWCA, August 2021).

3.1.2.1 HISTORICAL BACKGROUND

The first building constructed on the Project site was a single-family residence built in 1911. It was destroyed by fire two years later in 1913. Later that same year the extant front building (1642 South Central Avenue) was constructed. As reported in a 1913 edition of the *Southwest Builder & Manufacturer*, the single family residential building located at 1642 South Central Avenue was constructed in 1913. The contractor was reported to be William J. Gretten. A detached garage was added in 1913 (not extant).

The property appears to have changed hands by 1920 to Mr. John R. Struchen.⁸ As evidenced by the 1919 and 1925 editions of the Sanborn *Fire Insurance Maps of Glendale, California*, sometime between 1919 and 1925 the residence at 1642 South Central Avenue was converted from single-family to a duplex.

On September 13, 1920, the City of Glendale issued permit no. 1701 to John R. Struchen to build a new three-bedroom residential building at 1608 Gardena Avenue. The contractor was listed simply as McClain.

Three years later, on October 22, 1923, the City issued permit no. 9514 to Mr. Struchen to add an addition to 1642 South Central Avenue. The contractor's name of the permit is illegible. That same year (1923) the *Southwest Builder & Manufacturer* reported that Mr. Struchen built a garage on the property.⁹

⁸ City of Glendale, Building Permit No. 1701, September 13, 1920.

⁹ The Glendale Historical Society, "California Department of Parks and Recreation 523 Series Forms: 1642 S. Central and 1608 Gardena" (Glendale, CA: March 2019), 2.

3.1.2.2 HISTORIC AND NEIGHBORHOOD CONTEXT

Historic contexts are defined as “those patterns or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) is made clear.” A context may be organized by theme, geographic area, or chronology; regardless of the frame of reference, a historic context is associated with a defined area and an identified period of significance. Historic contexts are linked to physical artifacts through the concept of property types and are crucial to the evaluation of historic significance. A property’s historic significance must be explained against its associated context. The following discussion of historic context has been developed to help evaluate the significance of the Project site.

South Glendale Historic Context

The following presents an historical overview of the area surrounding the Project site; this material is excerpted from the *City of Glendale, South Glendale Historic Context Statement*, completed by Historic Resources Group (HRG), on behalf of the City of Glendale Planning Division in 2014.

The City of Glendale is located at the eastern end of the San Fernando Valley in Los Angeles County, at the southern base of the Verdugo Mountains. It is bordered to the northwest by the Tujunga neighborhood of Los Angeles, to the northeast by La Cañada Flintridge and the unincorporated area of La Crescenta, to the west by Burbank, to the east by Pasadena, and to the south and southeast by the City of Los Angeles. City boundaries are roughly delineated by the 210, 2, 134, and 5 freeways.

The South Glendale Community Plan Area comprises all of the neighborhoods south of the 134 freeway. It is composed of the original commercial and industrial centers of the City, along with single- and multi-family residential neighborhoods. Glendale was founded in 1887, amid the regional real estate and population boom of the era; the City of Glendale was incorporated in 1906. Incorporation triggered exponential growth, and the new city’s population grew from 1,186 in 1906 to 13,576 in 1920. By the following year, the population reached 25,720 due to the annexation of several adjoining unincorporated areas, as well as the nearby township of Tropico. The South Glendale Community Plan area encompasses the entire 1906 city boundary along with areas annexed by 1918.

A booming Southern California population, the city’s close proximity to downtown Los Angeles, improved public transportation followed by automobile-related development made Glendale an attractive place for suburban development. As a result, many new subdivisions were laid out, with the city expanding outward from its original downtown core. The construction boom lasted for most of the 1920s, ending soon after the stock market crash of 1929. In the flats of South Glendale, the residential neighborhoods represent some of the earliest development in Glendale; hillside developments followed in the 1920s and during the post-World War II era.

Zoning changes have resulted in a great deal of infill construction of apartment buildings in areas that were formerly low density, single-family neighborhoods. As a result, intact neighborhoods of low-density, single-family development are rare in South Glendale, and integrity of setting is often compromised. The residential neighborhoods are largely characterized by small clusters of single- and multi-family residences from the early 20th century surrounded by, and interspersed with, later development.

South Glendale includes one of the main retail hubs in the Los Angeles metropolitan area, featuring the Glendale Galleria, a major regional mall, The Americana at Brand,

a flagship mixed-use development, and the Brand Boulevard of Cars corridor of auto dealerships. Glendale is also home to a major regional concentration of medical and healthcare facilities, as well as to creative campuses of the Walt Disney Company and DreamWorks Animation (whose headquarters are located outside the South Glendale Community Plan area).

Today, South Glendale is the most densely developed part of the city. Its population has the highest levels of economic and cultural diversity, and its buildings display the widest range of types and uses. The most complex of the four Community Plan areas, South Glendale is also the site of the City's highest development pressures, inevitably leading to increased threats to historic resources. Many South Glendale neighborhoods lost their historic character between the 1960s and the 1990s, ultimately becoming home to many of the city's large multi-family developments. This trend was diminished through several down zonings at the close of the 20th century, though some portions of South Glendale are slated for increased density in the coming Community Plan.¹⁰

3.1.2.3 ARCHITECTURAL CONTEXT

Craftsman (Early 1900s – 1920s)

The following presents a historical overview of the Craftsman style of architecture in South Glendale; this material is excerpted from the *City of Glendale South Glendale Historic Context Statement*, prepared by HRG on behalf of the City of Glendale in September 2014.

Craftsman architecture grew out of the late-19th century English Arts and Crafts movement. A reaction against industrialization and the excesses of the Victorian era, the movement stressed simplicity of design, handcraftsmanship, and the relationship of the building to the climate and landscape. Craftsman architecture developed in the first decade of the 20th century as an indigenous California version of the American Arts and Crafts movement, incorporating Southern California's unique qualities. Constructed primarily of stained wood, with wide overhanging eaves, balconies, and terraces extending the living space outdoors, the style embodied the goals of the Arts and Crafts movement.

The Craftsman bungalow dates from the early 1900s through the 1920s. The bungalow's simplicity of form, informal character, direct response to site, and extensive use of natural materials, particularly wood and stone, was a regional interpretation of the reforms espoused by the Arts and Crafts movement's founder, William Morris. Craftsman bungalows generally have rectangular or irregular plans and are one to one-and-a-half stories tall. They have wood clapboard or shingle exteriors and a pronounced horizontal emphasis, with broad front porches, often composed with stone, clinker brick, or plastered porch piers. Other character-defining features include low-pitched front-facing gable roofs, and overhanging eaves with exposed rafter tails.

As opposed to smaller developer-built or prefabricated bungalows, two-story Craftsman houses were often commissioned for wealthy residents and designed specifically with the homeowner's needs and the physical site in mind. They generally feature a low-pitched gable roof, wide overhanging eaves with exposed rafter tails, and windows grouped in horizontal bands. A high-style Craftsman house is distinguished by the quality of the

¹⁰ Historic Resources Group (HRG), *City of Glendale, South Glendale Historic Context Statement*, Prepared for the City of Glendale Planning Division, September 30, 2014.

materials and complexity of design and may feature elaborate, custom-designed woodwork, stained glass, and other fixtures.

By World War I, the Craftsman style declined in popularity and was replaced by Period Revival styles. The Craftsman bungalow continued to be built into the 1920s, but was often painted in lighter colors, stripped of its dark wood interiors, or blended with characteristics of various Revival styles.

Character-Defining Features of Craftsman Style

Character-defining features (CDFs) are the visual and physical qualities that give a building its distinctive identity and that relate it to an area or period of significance. These features may include the overall building shape, its materials, craftsmanship, decorative details and features, and aspects of its site and environment, and range in importance from high to low. The following are character-defining features of Craftsman-style buildings:

- Horizontal massing
- Low-pitched gable roof with rolled or composition shingle roofing
- Wide overhanging eaves with exposed rafter tails, outriggers, or knee braces
- Exterior walls clad in wood shingle, shake, or clapboard siding
- Projecting partial-width, full-width, or wrap-around front porch
- Heavy porch piers, often of river stone or masonry
- Wood sash casement or double-hung windows, often grouped in multiples
- Wide front doors, often with a beveled light
- Wide, plain window and door surrounds, often with extended lintels
- Extensive use of natural materials (wood, brick, or river stone)
- Detached garage at rear of property

3.1.3 Impacts Analysis

3.1.3.1 SIGNIFICANCE CRITERION

The City determines the significance of impacts in this analysis consistent with the environmental checklist in Appendix G of the State CEQA Guidelines. Implementation of the Project would have a significant effect related to historic architectural resources if the project would:

- **Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines.**

The CEQA Guidelines (Section 15064.5(b)) establish the criteria for assessing a significant environmental impact on historical resources. The Guidelines state, “[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.” The CEQA Guidelines define “substantial adverse change” as “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” (Section 15064.5(b)(1)).

3.1.3.2 APPROACH TO ANALYSIS

This analysis was conducted and completed in accordance with the practices described in the Secretary of the Interior’s Standards and Guidelines for Historic Preservation, including standards for identifying, evaluating, and documenting resources. Applicable national, state, and local level criteria were considered, as well as the context-driven methods and framework used by the 2014 *South Glendale*

Historic Context Statement (2014 Context) and the 2019 *South Glendale Historic Resources Survey* (2019 Survey).

South Glendale Historic Context Statement Evaluation Criteria

Period of Significance

A property's period of significance is determined by analyzing the date or range of dates during which it acquired its historic significance. The residential building located at 1642 South Central Avenue was built in 1913 in the town of Tropic. It is identified as a historic resource since it is a rare surviving example of residential architecture from the period before the town was annexed into the City of Glendale (1918), and for the quality of its Craftsman-style design.

The house and garage at 1608 Gardena Avenue were built in 1920 and 1923, respectively. These two buildings were built in the City of Glendale after the 1918 annexation of Tropic, and are modest examples of Craftsman-style design, lacking in the abundance of design features that make 1642 South Central Avenue a significant example of the style.

Based on the construction of the residential building at 1642 South Central Avenue, the period of significance for the property is therefore determined to be 1913.

Assessment of Integrity

In addition to a finding of historic significance, in order to be eligible for listing on the NRHP, a property must retain integrity. Integrity is defined in National Register Bulletin no. 15 as the "ability of a property to convey its significance." The National Park Service recognizes seven aspects or qualities of integrity: location, design, setting, materials, workmanship, feeling, and association (see definitions in Subsection 3.1.1.1 "Federal Regulations and Guidelines"). To retain integrity, a property must possess several, if not all, of these seven qualities. Under the CRHR a property may lack integrity but still be found eligible for listing. In addition to the NRHP guidance, the Glendale Register outlines integrity criteria for properties within the City (discussed below).

LOCATION

The residential building at 1642 South Central has not been moved and therefore retains its integrity of location.

DESIGN

The residential building at 1642 South Central Avenue retains high integrity of design. It has no known alterations to the northwest (primary) façade. On secondary façades, alterations consist of the small addition at the southeast (rear) façade (1923), installation of four replacement vinyl sliding windows within original openings (2009), and the removal of the upper portion of the chimney (date unknown). These alterations are reversible and limited to secondary façades.

SETTING

The residential building located at 1642 South Central Avenue retains its integrity of setting in terms of the immediate property boundary. The historically-significant 1913 house shares the lot with the 1920/23 house and garage at 1608 Gardena Avenue, which are not historically significant in their own right. The overall site configuration dating to mid-1920s, therefore, remains the same. However, the original 1913 setting was altered by the later construction, which

led to the removal of an outbuilding shown on the 1919 Sanborn map near the rear property line. Over time, the broader setting of the site in the context of the immediate surroundings has changed, with the introduction of small industrial buildings, taller multifamily residential buildings, and the Larry Zarian Transit Center parking lots, which together significantly transformed the neighborhood's original single family residential character.

MATERIALS

The residential building located at 1642 South Central Avenue retains high integrity of materials. Large amounts of original wood, stone, and concrete work, in addition to most window sashes, are original and present at all building facades, and are largely unaltered.

WORKMANSHIP

The residential building located at 1642 South Central Avenue retains high integrity of workmanship. The existence of, and quality of, the wood, stone, and concrete work associated with Craftsman-era residential construction is present at all building facades, and are largely unaltered.

FEELING

The residential building at 1642 South Central Avenue retains high integrity of feeling. The original design features and materials continue to reflect the building's construction era, when most neighborhoods in Tropico and Glendale consisted of Craftsman-style homes.

ASSOCIATION

The residential building at 1642 South Central Avenue retains its association with the early residential development of town of Tropico and, after the town's annexation in 1918, Glendale. Through the retention of significant aspects of its original design, materials, and workmanship, as well as its location within the original Tropico boundary, this association with the area's early history remains palpable.

The residential building at 1642 South Central Avenue retains a high level of integrity of location, design, materials, workmanship, feeling, and association. It retains sufficient integrity to convey its historic significance despite numerous changes to the historic character of the wider neighborhood. The building's setting, therefore becomes a less critical aspect of integrity because the elements that connect it to its origin in Tropico and its Craftsman-style design – the things that make it eligible for listing in the Glendale Register of Historic Resources - remain intact.

3.1.3.3 NRHP, CRHR, AND CITY OF GLENDALE REGISTER OF HISTORIC RESOURCES ELIGIBILITY

1642 South Central Avenue Architectural Description

The one-story residential building at 1642 South Central Avenue is generally rectangular in plan (Figures 3.1.1 through 3.1.3). It is clad in wood shingles and has stone piers and wood posts supports for the front porch. Fenestration consists primarily of original wood-framed casement and double-hung windows with some replacement vinyl-framed sliding windows within original openings. Windows are generally finished in unadorned wide flat board trim, without corner details, and have sloped sills. The dwelling is capped by gable roof with exposed rafter tails and beams. It is finished with composition shingles.

The following is an excerpt from the 2019 DPR, prepared by the Glendale Historical Society in March 2019. The 2019 DPR referred to 1642 South Central Avenue as “Building A.” The architectural description begins with the northwest (primary) façade and proceeds counterclockwise to the southwest, southeast, and northeast façades.

Building A is a single story with two, nested front-facing, low sloped gabled roofs.

[The northwest (primary) façade] has a partial width entrance porch that notably wraps around the side of the building for a full bay. The porch has large-scale, tapered arroyo stone piers that are distinctively “pierced” by overlapping, extended porch railings. The battered piers and porch base are random-set arroyo stone with concrete caps. Set on the caps, paired, outsize porch posts on each side support a decorative open, kingpost truss, which is punctuated by faceted, extended purlins and a low-sloping roof. The overall effect is a delicate balance of wood joinery and careful proportions, imbued with clear structural stability. An exaggerated-width front door with an inset panel, which is characteristic of the style, is set off-center, and is balanced by multi-light sidelights. The concrete steps have quarter-radiused ends but are interrupted by the decorative masonry of the battered, arroyo stone porch piers. There is an arroyo stone end wall chimney on the north wall that was dismantled to the roofline (date unknown). The other front bay has a three-part window, containing a central picture window with casement side windows. The windows and all doors have wide surrounds, with wider head casings, which are also representative of the style. Exterior walls are painted, random-width, straight edge wood shingles. An alternating, narrow and wide slat vent embellishes the wide attic vent. The low-sloped roof has exposed rafter tails, deep eaves, wide fascia boards and extended purlins. The porch is partially obscured by a shade, but features three posts at the outside corner. The roof extends to shelter the side porch which continues as a pergola at the side elevation. At the corner porch piers, banister handrails appear to “cross” inside the piers.

The south[west] side has three bays. Concrete steps with radiused ends lead to a pair of French doors with partial height, single light sidelights. The pergola extends to shelter the side entrance. Paired, double hung windows form the second bay. The third bay is stepped-out and has a front-facing gable above a tripartite window with small lights at the tops of the windows (typical of Arts & Crafts style windows). The gable features extended purlins and wide-narrow alternating attic vent slats, all of which mimic the main façade treatments.

The rear [southeast] of Building A has a three-part window, and a simple rear door with concrete steps and a pipe railing. A small, corrugated fiberglass extension from the rear stoop is protected by a plain overhang clad in the same material. The rear gable attic vent has identical decorative treatment as those features on the front and side.

The north[east] side of Building A notably has an arroyo stone, end wall chimney. It was dismantled to the roofline (date unknown), which is a common post-1992 earthquake alteration for unreinforced masonry chimneys and does not substantially affect the property’s integrity.

A very small, vernacular addition (200 square feet) at the northeast corner has a front facing gabled roof, a central door and sidelights. It may be a separate unit and wraps in an L shape into the side yard. It is clad in painted shingles that were not installed as professionally as the shingles on the original portion of Building A. The low sloping

front-facing gable has inexpertly applied shingles at the apex. The addition was completed in 1923 and associated with the conversion of the house to a duplex.

1608 Gardena Avenue Architectural Description

The one-story residence is generally rectangular in plan (Figures 3.1.4 through 3.1.6). It is clad in wood clapboard and has wood post supports for the front porch. Fenestration consists primarily of original wood-framed casement and double-hung windows with some replacement vinyl-framed sliding windows within original openings. Windows are generally finished in unadorned wide flat board trim, without corner details, and have sloped sills. The dwelling is capped by a gable roof with exposed rafter tails and beams. It is finished with composition shingles. The architectural description begins with the southwest (primary) façade and proceeds counterclockwise to the southeast, northeast, and northwest façades.

The southwest (primary) façade is asymmetrical. The eastern half of the façade features a covered porch with a gable roof supported by slim, paired, wood posts, which support an exposed, decorative queen truss, with extended purlins. The porch features a concrete deck and is accessed by a single concrete step. Within the porch is the main entrance, which consists of a wood-framed wood door with a metal screen door. West of the porch, the western half of the façade features a tripartite combination window composed of a central fixed sash window, flanked on each side by narrow casement windows. The entire façade is capped by a gable roof. Beneath the peak of the gable is an attic vent.

The southeast façade is asymmetrical. It features a sliding vinyl window in a wood frame with ornamental security bars at the south end, followed by two wood hung windows trimmed together in a wood frame at center, and a combination window at the north end. The combination window is composed of a narrow jalousie window and a multi-lite window of unknown type (glass and hardware are missing/covered) trimmed together. The entire façade is capped by a side gable roof with overhanging eaves and exposed rafter tails. At the north corner of the façade is a small addition clad in horizontal plywood siding and capped by a flat roof that sits right beneath the rafter tails of the gable roof.

The northeast (rear) façade is asymmetrical. The western two-thirds of the façade are dominated by a bump-out clad in the same siding as the rest of the dwelling and capped by a gable roof that sits approximately 2 feet shorter than the main gable roof capping the dwelling. Sitting at center of the north-facing facet of the bump-out is a vinyl sliding window in a wood frame. An attic vent sits above the window, at the peak of the gable. The east- and west-facing facets of the bump-out are blind. East of the bump-out and taking up the east third of the façade is the north-facing facet of the addition from the east façade discussed above. The north-facing facet of the addition is blind.

The northwest façade is asymmetrical. Centered on the façade are two hung wood windows trimmed together in a wood frame, flanked to the north by a small vinyl sliding window. At the south end of the façade is a narrow vinyl sliding window in a wood frame. The entire façade is capped by a side gable roof with overhanging eaves and exposed rafter tails.

Garage Architectural Description

The garage is rectangular in plan and is clad in both wood clapboard and vertical board and batten siding. It is capped by a gable roof with wide overhanging eaves. The architectural description begins with the southwest (primary) façade and proceeds counterclockwise to the southeast, northeast, and northwest façades.

The southwest (primary) façade is asymmetrical. The eastern half of the façade features double plywood vehicular doors with metal hinges. The western half of the façade is partially open with interspersed

vertical wood posts on the top half, and board and batten siding on the bottom half. The façade is capped by a gable roof. Beneath the peak of the gable is an attic vent.

The southeast façade is symmetrical and clad in board and batten wood siding. Near center is a wood-framed door-sized opening. The remainder of the façade is blind. The entire façade is capped by a side gable roof with overhanging eaves and exposed rafter tails.

The northeast (rear) façade is clad in unpainted vertical board and batten siding. The façade is blind and capped by a gable roof.

The northwest façade is primarily clad in horizontal plywood siding; approximately two feet of the south corner of the façade is clad in vertical board and batten siding. The west façade is blind. The entire façade is capped by a side gable roof with overhanging eaves and exposed rafter tails.

Character-Defining Features

Character-defining features of the residential building located at 1642 South Central Glendale include:

- Horizontal massing;
- Wood shingle exterior wall cladding;
- Wrap around porch with battered stone piers topped by square wood posts;
- Trellis and concrete porch at the side entry
- River stone chimney (partial);
- Concrete steps and stone piers;
- Wood-framed one-over-one double-hung and two-lite casement windows;
- Wide front door with divided side lites;
- 12-lite French doors;
- Low-pitched gable roof with exposed rafter tails, beams, and wide overhanging eaves;
- Decorative gable vents;
- Decorative beam ends at the gables;
- Heavy outrigger beams below the front façade window and at the porch piers;
- Chamfered wall at the front entry; and
- Scored-concrete porch floor.

As analyzed in the 2021 Historic Resources Assessment, attached as Appendix C, the residence at 1608 Gardena Avenue (constructed in 1920) and the garage (c. 1923) were determined not eligible under City of Glendale Criterion 1 and Criterion 3 and are not individually eligible for listing in the Glendale Register of Historic Resources. They do not exhibit any specific historical associations or significant design or construction techniques. They were constructed after the property was annexed into the City of Glendale (1918), and after the Period of Significance for the property (1913), which period is associated with town of Tropic. Based on the prior historic resource assessments and current 2021 assessment, neither 1608 Gardena nor its associated garage are considered a historical resource for the purposes of review under CEQA. This Cultural Resources impact analysis therefore concentrates on the residential building at 1642 South Central Avenue.

Alterations

Buildings on the Project site have been alteration since its initial construction in 1913 and 1920. Known alterations to 1642 South Central Avenue include the conversion from single-family to duplex (sometime between 1919 and 1925), the construction of a small addition at the southeast (rear) façade (1923), the installation of four replacement vinyl-framed sliding windows within original openings (2009), and the removal of the upper portion of the chimney (date unknown).

Known alterations to 1608 Gardena Avenue include the bedroom addition to the northeast (rear) façade (1953), and on secondary façades the installation of four replacement vinyl-framed sliding windows within original or slightly altered openings (2009), the installation of a metal-framed jalousie window and infilling of a window within an original opening (date unknown), and the addition of a shed-like enclosure on the northeast (rear) façade (date unknown).

Known alterations to the garage include the possible recladding with clapboard (date unknown) and the infilling of a pair of vehicular doors.

The 1919 and 1925 editions of the Sanborn *Fire Insurance Maps of Glendale, California* maps provide a visual record of the property. The subsequent two Sanborn Maps (1950 and 1970) recorded no changes to the property.

Prior Historic Resource Evaluation

The Project site itself and individual buildings on the site are not listed individually in the NRHP, CRHR, or designated as a Glendale Historic Resource. The Project site is not located within a Historic District Overlay Zone.

The property was included in the 2019 *South Glendale Historic Resources Survey* (2019 Survey), which assigned 1642 South Central Avenue California Historical Resource Status Code 5S3, meaning it appears individually eligible for local designation through survey evaluation. The 2019 Survey determined the 1642 South Central Avenue is eligible because of its architecture as a Craftsman-style residence and because of its association as a circa 1913 residence within the township of Tropico.¹¹

In August 2018 Environmental Science Associates (ESA) prepared the *1642 S. Central Avenue Historic Resources Assessment* (2018 HRA), which determined the buildings on the property are not individually eligible for listing in the NRHP and CRHR under Criteria C/3 (Design/Construction) and for listing in the Glendale Register of Historic Resources under any criteria. The 2018 HRA determined 1642 South Central Avenue is not individually eligible for listing in the NRHP, the CRHR, and for designation as a Glendale Historic Resource under Criteria A/1/A (Event), B/2/B (Person), and D/4/D (Information Potential). Although the report states in one section that the property is individually eligible for listing in the NRHP and CRHR under Criteria C/3 (Design/Construction), that statement contradicts the rest of the findings presented in the report and appears to be an error. Further, the 2018 HRA determined 1642 South Central Avenue is not individually eligible for listing in the Glendale Register of Historic Resources under the now-deleted Criterion 5 (Early Heritage).¹²

In March 2019, The Glendale Historical Society prepared California Department of Parks and Recreation 523 Series forms (2019 DPR) in which the 2018 HRA was peer reviewed. The 2019 DPR concluded by

¹¹ Historic Resources Group, *South Glendale Historic Resources Survey*, prepared for the City of Glendale, March 2019.

¹² ESA, 1642 S. Central Avenue, Glendale, California Historic Resources Assessment, August 2018.

affirming the findings of the 2019 Survey that 1642 S. Central Avenue appears individually eligible as a Glendale Historic Resource.¹³

The California Historical Resources Information System (CHRIS) records search indicated that prior to the 2019 Survey the property had not been previously recorded and evaluated.

The Project site was included in the 2019 Survey, which assigned the residential building located at 1642 South Central Avenue a California Historical Resource Status Code 5S3, meaning it appears individually eligible for local designation through survey evaluation. The 2019 Survey determined the 1642 South Central Avenue is eligible for its architecture as a Craftsman-style residence and for its association as a circa 1910 residence within the City of Tropic.

Criteria A/1/1 (Events): The residential building at 1642 South Central Avenue is not individually eligible for listing in the NRHP and the CRHR but is individually eligible for listing in the Glendale Register of Historic Resources. The property does not have an important association with events or patterns that have made a significant contribution to the broad patterns of national, state, or local history. However, as previously identified by the 2019 Survey, the residential building at 1642 South Central Avenue is associated with Early Development and Town Settlement, 1872-1918, because it was constructed in 1913, before the township of Tropic was annexed into the City of Glendale in 1918. The secondary residence and garage at 1608 Gardena Avenue were constructed in 1920 and 1923, respectively (post-dating the City of Tropic). Therefore, the 1642 South Central Avenue is individually eligible for listing in the Glendale Register of Historic Resources under Criterion 1 and conversely the property as a whole is not individually eligible for listing in the NRHP and CRHR under Criteria A/1.

Criteria B/2/2 (Person): Research to date did not reveal the subject property to have an association with the lives of significant persons in our past. The numerous known owners and occupants associated with the property during the historic period (prior to 1971) do not appear to have made significant contributions to national, state, or local history. Therefore, the subject property is not individually eligible for listing in the NRHP, the CRHR, or the Glendale Register of Historic Resources under Criteria B/2/2.

Criteria C/3/3 (Design/Construction): Properties may be eligible for the National Register if they 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.¹⁴ The residential building at 1642 South Central Avenue, built in 1913, is not individually eligible for listing in the NRHP and the CRHR because its design and construction are not outstanding example of the Craftsman design and construction technique that would be considered distinctive, the work of a master, or possessing of high artistic value. However, it is individually eligible for listing in the Glendale Register of Historic Resources because it retains the majority of Craftsman CDFs, such as horizontal massing; wood shingle cladding; front porch with battered stone piers, with square wood posts; wood-framed casement and double-hung windows; and low-pitched gable roofs with exposed beams and rafter tails. Although the residential building was expanded in 1923, the addition is in keeping in its materials and design. Thus, the property is an intact and good, example of early Craftsman architecture.

Conversely, based the prior historic resource evaluations, 1920 residential building located at 1608 Gardena and its detached garage were constructed after 1918 and are not associated with the town of Tropic, and therefore they do not meet Criterion 1, and do not have the architectural character required

¹³ The Glendale Historical Society, "California Department of Parks and Recreation 523 Series Forms: 1642 S. Central and 1608 Gardena" (Glendale, CA: March 2019).

¹⁴ National Park Service, National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation (Washington, D.C.: National Park Service, 2002), 17.

for a post-1919 building to qualify under Criterion 3. Based on these factors, the 1609 Gardena residence and its detached garage are not individually eligible for listing in the Glendale Register of Historic Resources as they do not “embody distinctive characteristics of a type, period, or method of construction or represent the work of a master.”

Criteria D/4/4 (Information Potential): The property has not yielded, nor does it appear to possess potential to yield, information important in history or prehistory. Therefore, the subject property is not individually eligible under Criteria D/4 for listing in the NRHP or the CRHR.

Historic District Consideration

The project site is not within a designated historic district and no potential historic districts were identified in the vicinity of the Project site by the 2019 South Glendale Historic Resource Survey. A few properties in the area were similarly identified as individually eligible for listing in the Glendale Register of Historic Resources, but the overall neighborhood is too altered for consideration as a cohesive historic district.

Eligibility Conclusion

Based on the 2019 Survey, prior and current evaluations, the residential building at 1642 South Central Avenue is individually eligible for listing in the Glendale Register of Historic Resources under Criterion 1 for its association with Early Development and Town Settlement as a residence in the City of Tropic, and under Criterion 3 as a distinctive and exemplary example of the Craftsman style.

The residential building at 1608 Gardena Avenue (constructed in 1920) and garage (c. 1923) post-date the City of Tropic because they were constructed before 1918 when the property was annexed into the City of Glendale, and they therefore do not fall within the period of significance for the property which is associated with the City of Tropic. They are not eligible under Criterion 1 nor Criterion 3 as they do not exhibit any specific historical associations with the city, state or nation, do not have associations with persons to be important in national, state or local history, are not distinctive or exemplary specimens of their style.

The property as a whole (inclusive of all three buildings) and the residences individually are not eligible for listing in the NRHP and CRHR under Criteria A/1 and C/3 as no evidence was identified for statewide or nationwide level of significance. Likewise, neither the property as a whole nor the individual buildings are eligible for listing in the NRHP, CRHR, or the Glendale Register of Historic Resources under Criteria B/2/2 because research did not reveal it to have an association with significant persons, nor are they likely to yield important information in history or prehistory (Criteria D/4/4). In addition, none of the buildings are within a historic district or would be likely to contribute to a potential historic district.

As 1642 South Central Avenue is determined to be individually eligible for listing in the Glendale Register of Historic Resources, the property is considered a historical resource for the purposes of review under CEQA.

Impact CR-1: The proposed project would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. (*Significant and Unavoidable*)

Based on the analysis contained in this EIR and supporting studies, the residential building located at 1642 South Central Avenue is individually eligible for listing in the Glendale Register of Historic Resources under Criterion 1 (Events) for its association with Early Development and Town Settlement as a residence in the City of Tropic; it is also individually eligible for listing in the Glendale Register of

Historic Resources under Criterion 3 as a distinctive and exemplary example of the Craftsman style. As such, the property is considered a “historical resource” for the purposes of CEQA.

The Project proposes to demolish all the buildings on site and redevelop the whole site with new four-story, 31-unit residential housing project. The character-defining features, listed under Architectural Context above, are the distinctive qualities and characteristics of 1642 South Central Avenue that convey the building’s historic and architectural significance and justify its eligibility for listing in the Glendale Register of Historic Resources. The proposed demolition of all onsite buildings would materially alter the physical characteristics of the 1642 South Central Avenue and would therefore cause a substantial adverse impact to an historical resource and result in a significant impact.

3.1.4 Mitigation Measures

Implementation of **Mitigation Measure M-CR-1: Documentation of Historical Resource**, would lessen the impact of the proposed demolition and new construction by documenting and presenting the house’s history and character-defining features architecture as a Craftsman-style residence and for its association as a 1913 residence within the City of Tropic. However, implementation of these mitigation measures would not reduce this impact to a less-than-significant level. Impacts would remain significant and unavoidable.

Mitigation Measure M-CR-1: Documentation of Historical Resource

Prior to issuance of a demolition permit, the Project applicant shall undertake Historic American Building/Historic American Landscape Survey (HABS/HALS) documentation of the building features. The documentation shall be undertaken by a professional who meets the Secretary of the Interior’s Professional Qualifications Standards for Architectural History, History, or Architecture (as appropriate) to prepare written and photographic documentation of 1642 South Central Avenue. The specific scope of the documentation shall be reviewed and approved by City of Glendale staff (City staff) but shall include the following elements:

Measured Drawings – A set of measured drawings shall be prepared that depict the existing size, scale, and dimension of the historic resource. City staff will accept the original architectural drawings or an as-built set of architectural drawings (e.g., plans, sections, elevations). City staff will assist the consultant in determining the appropriate level of measured drawings.

Historic American Buildings/Historic American Landscape Survey-Level

Photographs – Either Historic American Buildings/Historic American Landscape Survey (HABS/HALS) standard large-format or digital photography shall be used. The scope of the digital photographs shall be reviewed by City staff for concurrence, and all digital photography shall be conducted according to the latest National Park Service (NPS) standards. The photography shall be undertaken by a qualified professional with demonstrated experience in HABS/HALS photography. Photograph views for the data set shall include contextual views; views of each side of the building and interior views, including any original interior features, where possible; oblique views of the building; and detail views of character-defining features.

All views shall be referenced on a photographic key. This photographic key shall be on a map of the property and shall show the photograph number with an arrow to indicate the direction of the view. Historic photographs shall also be collected, reproduced, and included in the data set.

The Project applicant shall transmit such documentation to the Glendale Public Library, the Glendale Historical Society, the Community Development Department, and the South Central Coastal Information Center. The HABS/HALS documentation scope will determine the requested documentation type for the Project site and the Project applicant will conduct outreach to identify other interested groups. All documentation will be reviewed and approved by City staff before any demolition or site permit is granted for the affected historical resource.

Because the identified mitigation measures would not reduce the impact to a less-than-significant level, alternatives have been identified. Chapter 4, Alternatives, presents a range of alternatives that would meet most of the Project's basic and additional objectives and could avoid or substantially lessen significant effects of demolition under the proposed project.

3.1.5 Cumulative Impacts

Impact C-CR-1: The proposed Project, in combination with cumulative projects, would not materially alter, in an adverse manner, the physical characteristics of historical resources that justify their eligibility for inclusion in the California Register of Historical Resources, resulting in a cumulative impact. (*Less than Significant*)

Related projects are identified in Table 3.1. There are no related projects in the immediate vicinity of the site; all other projects are more than a block away. None of the listed related projects include the demolition of a historical resource. Additionally, the Project site is not within a Glendale Historic District. The impacts of related projects on identified historical resources in the vicinity of the Project site would not combine with impacts of the Project because none of the cumulative projects would impact historical resources. The significance of 1642 South Central Avenue is not premised on it possessing an intact and cohesive visual or functional relationship with nearby properties. Likewise, and reciprocally, the significance of nearby offsite historical resources is not premised on their having an intact and cohesive visual or functional relationship with the Project site. As such, the impact of the Project on the significance of the 1642 South Central Avenue historical resource is independent of the cumulative impacts of nearby related projects on the significance of nearby historical resources. Such impacts would not combine to result in a significant cumulative impact.

For these reasons, the impact of the Project on historical resources would not result in a significant cumulative impact on historical resources. No mitigation measures are required.

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3.2 Noise and Vibration

This Noise and Vibration section describes the existing noise environment in the Project vicinity; evaluates the potential for construction-related and operational noise and vibration impacts associated with implementation of the project to adversely affect sensitive land uses; and identifies mitigation measures to avoid or reduce potential adverse impacts.

The analysis is based on long-term noise measurements at the Project site and review of applicable federal, state, and local noise-related regulations and standards. Noise calculations were prepared to quantitatively assess the noise increases that would be attributable to the Project; this information forms the basis of much of the assessment of noise impacts discussed in this section. A Noise and Vibration Study was prepared for the Project and is shown in Appendix D of this EIR.

3.2.1 Regulatory Framework

3.2.1.1 FEDERAL REGULATIONS AND GUIDELINES

This section identifies applicable federal regulations and guidelines related to noise and vibration.

U.S. Federal Transit Administration

The U.S. Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment Manual*¹⁵ establishes general methodology guidelines and impact criteria for assessment of construction noise impacts. It is not a regulation but does function as one of the few federal sources that suggest both a methodology and guidelines for assessing noise impacts from construction activities.

Table 3.2.1 describes the general noise impact criteria for construction impacts from the Project. If the FTA criteria are exceeded, adverse noise impacts could occur.

Table 3.2.1. FTA General Assessment Construction Noise Impact Criteria

Land Use	Maximum 1-Hour dBA L _{eq}	
	Day ^A	Night ^B
Residential	90	80
Commercial	100	100
Industrial	100	100

Notes:

dBA = A-weighted decibels; L_{eq} = average or constant sound level.

^A Day = 7 a.m. to 10 p.m.

^B Night = 10 p.m. to 7 a.m.

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, Table 7-2, p. 179.

Although not a regulation, the FTA's *Transit Noise and Vibration Impact Assessment Manual* also provides guidance on the evaluation of building damage and human response to different levels of construction-related groundborne vibration. It functions as one of the few federal sources that provide guidance on the evaluation and assessment procedures and impact criteria for groundborne vibration induced by construction equipment. Table 3.2.2 summarizes the FTA vibration guidelines used to assess

¹⁵ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

the potential for damage to structures, based on vibration PPV levels, with the potential for damage based on building category types (i.e., the fragility or strength of a building structure).

Table 3.2.2. FTA Vibration Threshold Guidelines for Potential Damage to Structures

Building Category	Peak Particle Velocity (inches/second)
I. Reinforced-concrete, steel, or timber buildings (no plaster)	0.50
II. Engineered concrete and masonry buildings (no plaster)	0.30
III. Non-engineered timber and masonry buildings	0.20
IV. Buildings that are extremely susceptible to vibration damage	0.12

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, Table 7-5, p. 186.

To avoid temporary annoyances for building occupants or interference with vibration-sensitive equipment inside special-use buildings during construction, the FTA recommends using the vibration criteria from the guidance manual for groundborne vibration assessments. Table 3.2.3 summarizes the FTA's general assessment criteria used to evaluate potential interference to building operations by different levels of construction-generated groundborne vibration and groundborne noise.

Table 3.2.3. Indoor FTA Groundborne Vibration Impact Criteria

Land Use Category	Impact Levels (VdB relative to 1 micro-inch/second)		
	Frequent Events ^A	Occasional Events ^B	Infrequent Events ^C
Category 1: Buildings where vibration would interfere with interior operations	65 ^D	65 ^D	65 ^D
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Notes:

VdB = Human response to vibration often is described as the root-mean-square (RMS) velocity level and is denoted in the decibel scale, or VdB. The typical background level in residential areas is about 50 VdB, and most people cannot detect levels below about 65 VdB, and generally do not consider levels below 70 VdB, or approximately 0.1 PPV, to be an annoyance.¹⁶

^A Frequent: More than 70 vibration events of the same source per day.

^B Occasional: Between 30 and 70 vibration events of the same source per day.

^C Infrequent: Less than 30 vibration events of the same source per day.

^D This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define the acceptable vibration levels.

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, Tables 6-3 and 6-4, p. 126.

3.2.1.2 STATE REGULATIONS AND GUIDELINES

This section identifies applicable state regulations and guidelines related to noise and vibration.

¹⁶ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, pp. 117-120, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed May 5, 2021.

California Noise Insulation Standards

The 2019 California Building Code (California Code of Regulations title 24, part 2) requires that walls and floor/ceiling assemblies separating dwelling units from each other, or from public or service areas, have a sound transmission class (STC) of at least 50, meaning they can reduce noise by a minimum of 50 dB.¹⁷ Building Code Section 1206.4, Allowable Interior Noise Levels, also specifies a maximum interior noise limit of 45 dBA (L_{dn} or Community Noise Equivalent Level [CNEL]) in habitable rooms, and requires that common interior walls and floor/ceiling assemblies meet a minimum STC rating of 50 for airborne noise. These requirements are collectively known as the California Noise Insulation Standards and are enforced by the City of Glendale Department of Building and Safety.

3.2.1.3 LOCAL REGULATIONS AND GUIDELINES

This section identifies applicable local regulations and guidelines related to noise and vibration. The Project would be entirely within the City of Glendale. Noise in the City is regulated by the City's General Plan and Municipal Code.

Glendale General Plan

The Noise Element of the General Plan identifies sources of noise in the City and provides objectives and policies that ensure that noise from various sources would not create an unacceptable noise environment. Goals and policies are outlined in the document to achieve and maintain land uses that are compatible with environmental noise levels. Based on these standards, exterior noise levels of 60 dBA CNEL and lower are “normally acceptable” for single-family residential uses, while exterior noise levels of 65 dBA CNEL and lower are “normally acceptable” for multi-family residential uses. “Normally acceptable” is defined as the highest noise level that should be considered for the construction of new buildings that incorporate conventional construction techniques, but without any special noise insulation requirements. The City uses the Noise/Land Use Compatibility Table shown below in Table 3.2.4 for evaluating land use noise compatibility for proposed developments.

Table 3.2.4. City of Glendale Interior and Exterior Noise Standards

Categories	Land Use Categories	Noise Standards	
		Interior CNEL	Exterior CNEL
Residential	Single-family	45 ^A	65 ^B
	Multi-family	45 ^A	65 ^C
	Residential within Mixed Use	45 ^A	–
Commercial	Hotel, Motel, Transient Lodging	45 ^A	0.4
Institutional	Hospital, School, Classroom, Church, Library	45	–
Open Space	Parks ^D	–	65

Notes: CNEL = Community Noise Equivalent Level

^A Interior environment excludes bathrooms, toilets, closets, and corridors.

^B Applies to the outdoor environment limited to the private yard of single-family residences (normally rear yard).

^C Applies to the patio area where there is an expectation of privacy (i.e., not a patio area which also serves as, or is adjacent to, the primary entrance to the unit).

^D Only applies to parks where peace and quiet are determined to be of prime importance, such as hillside open space areas open to the public. Generally, would not apply to urban parks or active-use parks.

Source: City of Glendale Noise Element, Table 2 (2007).

¹⁷ State Building Code Section 1206.3.

City of Glendale Noise Ordinance

The Glendale Municipal Code includes an adopted Noise Ordinance, Chapter 8.36 Noise Control, Articles I and II, which identifies noise standards for amplified noise sources, specific noise restrictions, noise insulation standards, and construction noise limits. Noise limits are regulated through the assessment of the offending noise sources, which influence the existing ambient noise environment.

As shown in Table 3.2.5, pursuant to Section 8.36.040 of the Municipal Code, the maximum allowable noise level for commercial zoned properties is 65 dBA during day and nighttime hours, seven days a week. Section 8.36.050 clarifies if the actual ambient is less than the presumed ambient, the actual ambient shall control and any noise in excess of the actual ambient plus 5 dbA, shall be a violation. Where the actual ambient is equal to or more than the presumed ambient, the actual ambient shall control and any noise may not exceed the actual ambient by more than 5 dbA, and in no event may the actual ambient exceed the presumed ambient by more than 5 dbA.

Table 3.2.5. City of Glendale Municipal Code Exterior and Interior Noise Standards

Land Use Type	Location	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Cemetery and Residential (Single-Family and Duplex)	Exterior	55	45
Residential (Multi-family, hotels, motels and transient lodgings)	Exterior	60	60
Central Business District and Commercial	Exterior	65	65
Industrial	Exterior	70	70
Residential	Interior	55	45

Notes:

dBA = A-weighted decibels

Leq = equivalent continuous sound level

Source: City of Glendale Municipal Code 8.36.040 Presumed noise standards.

With regard to construction activities, Section 8.36.080 of the Municipal Code states it is unlawful for any person within a residential zone, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects within the City between the hours of 7:00 p.m. on one day and 7:00 a.m. of the next day or from 7:00 p.m. on Saturday to 7:00 a.m. on Monday or from 7:00 p.m. preceding a holiday, as designated in Chapter 3.08 of the Code, to 7:00 a.m. following such holiday unless a permit has been obtained beforehand from the building official.

Section 8.36.210 of the Municipal Code prohibits operation of any device that creates a vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet from the source if on a public space or public right of way.

3.2.2 Environmental Setting

This subsection introduces the key concepts and terms that are used in the evaluation of noise and describes the existing noise environment of the Project area.

3.2.2.1 MEASUREMENT OF SOUND

Sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound. The decibel (dB) scale is used to quantify sound intensity. Noise is sometimes defined as

unwanted sound, and the terms “noise” and “sound” are used more or less interchangeably in this analysis. The human ear responds to a very wide range of sound intensities. The dB scale used to describe sound is a logarithmic rating system which accounts for the large differences in audible sound intensities. When addressing the effects of noise on people, it is necessary to consider the frequency response of the human ear, or those frequencies that people hear the best. Noise-measuring instruments are therefore often designed to “weight” noises based on the way people hear. The frequency weighting most often used to evaluate environmental noise is “A weighting” because it best reflects how humans perceive noise. Measurements from instruments using this system, and associated noise levels, are reported in “A weighted decibels,” or dBA. Using this scale, a change in noise level of 3 dBA is perceived as barely perceptible, 5 dBA is perceived as readily perceptible, and 10 dBA is perceived as a doubling or halving of noise loudness.¹⁸ Therefore, a 70-dB sound level will sound about twice as loud as a 60-dB sound level. People generally cannot detect differences of 1 to 2 dB in a complex acoustical environment. A 5-dBA change is also required before any noticeable change in community response is expected.¹⁹

On this scale, a doubling of sound-generating activity (i.e., a doubling of the sound energy) causes a 3-dB increase in average sound produced by that source, not a doubling of the perceived loudness of the sound (which requires a 10-dB increase). For example, if existing traffic on a road is causing a 60-dB sound level at a nearby location, a doubling of the number of vehicles on this same road would cause the sound level at this same location to increase to 63 dB, i.e., a noise level change that is barely perceptible to most people.

For any noise source, several factors affect the efficiency of noise transmission traveling from the source, which in turn affects the potential noise impact at offsite locations. Important factors include distance from the source, frequency of the noise, absorbency and roughness of the intervening ground (or water) surface, the presence or absence of obstructions and their absorbency or reflectivity, and the duration of the noise. Noise transmission is further discussed under “Attenuation of Noise.” Table 3.2.6 presents typical noise levels of some familiar noise sources and activities.

Table 3.2.6. Representative Environmental Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Fly-over at 100 feet		
	100	
Gas Lawnmower at 3 feet		
	90	
Diesel Truck going 50 mph at 50 feet		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noise Urban Area during Daytime		
Gas Lawnmower at 100 feet	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office

¹⁸ California Department of Transportation (Caltrans), Division of Environmental Analysis, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013, pp. 2-43 to 2-46 and Table 2-10, <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>, accessed May 5, 2021.

¹⁹ Charles M. Salter Associates, Inc., Acoustics – Architecture, Engineering, the Environment, 1998, p. 63.

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Quiet Urban Area during Daytime	50	Dishwasher in Next Room
Quiet Urban Area during Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime	30	Library
Quiet Rural Area during Nighttime	20	Bedroom at Night, Concert Hall (background)
	10	Broadcast/Recording Studio
	0	

Source: California Department of Transportation, Division of Environmental Analysis, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013, p. 2-20.

Although a measured A-weighted noise level will adequately indicate the level of environmental noise at any instant in time, noise levels in populated communities typically vary by time. Several noise descriptors have been developed to characterize community noise by the total acoustical energy content of the noise over defined periods of time or by characterizing the loudest noise levels over a given time interval. Table 3.2.7 describes other noise metrics and terms used in this analysis.

Table 3.2.7. Definitions of Acoustical Terms

Term	Definition
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time; usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Decibel (dB)	A unit of measurement that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter deemphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. (All sound levels in this report are A-weighted, unless reported otherwise.)
Equivalent Continuous Noise Level, L_{eq}	The equivalent sound level is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. An L_{eq} is a single number representing the level of a constant sound containing the same amount of sound energy as the varying sound levels over a specific period. Thus, the L_{eq} is the "energy average" noise level for the measurement time interval.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dBA to sound levels occurring in the evening from 7:00 PM to 10:00 PM and after the addition of 10 dBA to sound levels occurring in the night between 10:00 PM and 7:00 AM.
Day/Night Noise Level, Ldn	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dBA to sound levels occurring in the night between 10:00 PM and 7:00 AM.

Attenuation of Noise

Noise levels attenuate (decrease) with distance from the source. Transportation noise sources tend to be arranged linearly, such that roadway traffic attenuates at a rate of 3 to 4.5 dBA per doubling of distance from the source. Point sources of noise, including stationary, fixed, and idle mobile sources, like idling vehicles or construction equipment, can attenuate at a rate of 6 to 7.5 dBA per doubling of distance from the source. The 1.5-dBA variation in attenuation rates for these two noise sources can result from ground-absorption effects, which occur as sound travels over soft surfaces such as soft earth or vegetation versus hard ground such as pavement or very hard-packed earth.^{20, 21} Meaningful reductions or attenuation of noise levels can also be accomplished by “shielding” a noise source or providing a barrier, which may be in the form of an intervening structure or terrain, between the source and receptor.²²

With respect to the transmission of exterior noise to interior environments, noise attenuation effectiveness depends on exterior wall insulation, a window’s sound transmission class rating, and whether windows are closed or open. Sound transmission class ratings indicate how well wall, ceiling, floor, door, and window assemblies attenuate airborne sound. Generally, the higher the sound transmission class rating, the more sound is attenuated.²³

Effects of Noise On People

Exposure to prolonged high noise levels has been found to have effects on human health, including physiological and psychological effects to humans.²⁴ Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA.²⁵ Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear, even with short-term exposure. This level of noise is called the threshold of feeling.

As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear (the threshold of pain). A sound level of 160 to 165 dBA will result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and is generally more concentrated in urban areas than in outlying, less developed areas.

3.2.2.2 MEASUREMENT OF GROUND BORNE VIBRATION

Equipment that creates blows or impacts on the ground surface produces vibrational waves, called groundborne vibration, that radiate along the surface of the earth and downward into the earth, potentially resulting in effects that range from annoyance to structural damage. As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate by a

²⁰ Caltrans, Division of Environmental Analysis, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013, pp. 2-27 to 2-28, <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>, accessed November 6, 2020.

²¹ U.S. Housing and Urban Development, The Noise Guidebook, 1985, p. 24, <https://www.hudexchange.info/onecpd/assets/File/Noise-Guidebook-Chapter-4.pdf>, accessed November 6, 2020.

²² Federal Highway Administration, Roadway Construction Noise Model User’s Guide, January 2006, Appendix A, http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf, accessed November 6, 2020.

²³ There is not a straightforward linear relationship between increasing STC and a reduction in exterior-to-interior noise because the amount of reduction varies considerably with the frequency range of noise.

²⁴ World Health Organization, Guidelines for Community Noise, Chapter 3, pp. 24-26, April 1999, <http://apps.who.int/iris/bitstream/10665/66217/1/a68672.pdf>, accessed May 5, 2021.

²⁵ Appendix D.

few ten-thousandths to a few thousandths of an inch. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. Vibration levels decrease with increasing distance. The maximum rate or velocity of particle movement is the commonly accepted descriptor of the vibration “strength.” This is referred to as the peak particle velocity (PPV) and is typically measured in inches per second.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. When vibration encounters a building, the transfer of vibration from ground to the building foundation (referred to as “ground-to-foundation coupling”) will usually reduce the overall vibration level; however, under certain circumstances, the ground-to-foundation coupling may also amplify the vibration level due to structural resonances of the floors and walls. High levels of vibration can damage fragile buildings or interfere with the operation of sensitive equipment. Depending on the age of the structure and type of vibration (transient, continuous, or frequent intermittent sources), vibration levels as low as 0.5 to 2.0 inches per second PPV (in/sec PPV) can damage a structure.

Human response to vibration is difficult to quantify. Vibration can be felt or heard well below a level that would result in damage to a structure. Except for long-term occupational exposure, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. People may tolerate infrequent, short-duration vibration levels, but human annoyance to vibration becomes more pronounced if the vibration is continuous or occurs frequently. Human response to vibration often is described as the root-mean-square (RMS) velocity level and is denoted in the decibel scale, or VdB. The typical background level in residential areas is about 50 VdB, and most people cannot detect levels below about 65 VdB, and generally do not consider levels below 70 VdB, or approximately 0.1 PPV, to be an annoyance.²⁶ However, the duration of a vibration event has an effect on human response, as does its frequency. Generally, as the duration of a vibration event increases, the potential for adverse human response increases, particularly if the vibration event disturbs sleep. In addition, while people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration.

3.2.3 Existing Conditions

3.2.3.1 NOISE SOURCES

This section describes the existing noise environment in the Project site vicinity. Noise monitoring was used to quantify existing noise levels at the Project site. In the City, vehicle traffic is the primary source of noise. Other significant local noise sources include train pass-bys and station operations, airport noise, industrial noise, and mechanical equipment noise.

The Project site is located approximately 400 feet east of an existing rail corridor that carries both passenger trains (Amtrak and Metrolink) and freight trains (Union Pacific Railroad, formerly known as Southern Pacific Lines). Noise associated with rail operations includes locomotive engines, wheel-to-rail and switch noise, horn sounding, station approach and disembark bell sounding, emergency signaling devices, and stationary bells located at the at-grade crossings at Chevy Chase Drive, West Broadway, and Doran Street.²⁷ The historic Glendale Southern Pacific Railroad Depot, also referred to as the Larry Zarian Transportation Center, is located across Gardena Avenue from the Project site. It serves as a stop

²⁶ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, pp. 117-120, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed May 5, 2021.

²⁷ South Glendale Community Plan: Final Program Environmental Impact Report, June 2018. <https://www.glendaleca.gov/government/departments/community-development/planning/community-plans/sgcp-eir>.

for Metrolink commuter and Amtrak passenger trains on the corridor, except for certain express rail services. Passenger rail movements occur every day and multiple times per hour between 5:00 A.M. and 11:00 P.M. through the Larry Zarian Transportation Center. Current passenger train operations have been reduced due to the current COVID-19 pandemic conditions and are estimated to be approximately half of typical operations.²⁸ This reduction in activity is accounted for in the impacts analysis discussion in this section. Furthermore, the rail corridor may include the future operations of the proposed California High-Speed Rail Project. These operations, while not captured in the existing noise measurements, are also accounted for in the impacts analysis.

3.2.3.2 SURROUNDING LAND USES AND SENSITIVE RECEPTORS

The Project site is surrounded primarily by residential, commercial, and industrial development. The areas adjacent to the Project site include the following uses:

- **North:** Existing industrial warehouse uses opposite South Central Avenue, 65 feet away
- **East:** Existing Peak Auto Body repair shop, immediately adjacent (within 5-10 feet)
- **South:** Existing single-family homes, 60 feet away
- **West:** Existing parking lot associated with the Larry Zarian Transportation Center opposite Gardena Avenue, 55 feet away

Land uses are considered noise “sensitive receptors” where low noise levels are necessary to preserve their intended goals such as relaxation, education, health, and general state of well-being. Noise-sensitive receptors include residents, hospitals, convalescent homes, schools, churches, hotels, and motels.²⁹ The nearest sensitive receptors are single-family homes approximately 60 feet to the south.

3.2.3.3 EXISTING NOISE LEVEL MEASUREMENTS

To assess existing noise levels, two long-term noise measurements were conducted at the Project site (Figure 3.2.1). The long-term noise measurements were recorded from June 9 through June 10, 2020. The long-term noise measurements captured data in order to calculate the hourly L_{eq} and CNEL at each location, which incorporate the nighttime hours. Sources that dominate the existing noise environment include traffic on adjacent roadways, train traffic on the existing rail line to the east, parking lot activities, and operations from the commercial and industrial uses. Table 3.2.8 summarizes the long-term noise level measurements taken at the Project site.

Table 3.2.8. Summary of Long-Term Noise Level Measurements

Site #	Location	Daytime Noise Levels ^A (dBA Leq)	Evening Noise Level ^B (dBA Leq)	Nighttime Noise Levels ^C (dBA Leq)	Average Daily Noise Level (dBA CNEL)
LT-1	Western edge of the Project site on Gardena Avenue.	62.1–70.7	59.2–63.0	48.4–63.4	67.0
LT-2	Northeast corner of the Project site, across on S. Glendale Avenue.	61.4–68.4	57.7–63.9	48.0–64.7	66.3

Notes: dBA = A-weighted decibels, L_{eq} =equivalent continuous sound level, CNEL = Community Noise Equivalent Level

^A Daytime Noise Levels = noise levels during the hours of 7:00 a.m. to 7:00 p.m.

^B Evening Noise Levels = noise levels during the hours of 7:00 p.m. to 10:00 p.m.

^C Nighttime Noise Levels = noise levels during the hours of 10:00 p.m. to 7:00 a.m.

Source: 1642 S. Central Avenue Project –Noise and Vibration Study, LA, June 2020. See EIR Appendix C.

²⁸ Metrolink, Coronavirus Updates, June 8, 2021. https://metrolinktrains.com/coronavirus-updates/#June_8.

²⁹ Governor’s Office of Planning and Research, State of California 2017 General Plan Guidelines, 2017, p. 136, http://www.opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf, accessed May 5, 2021.

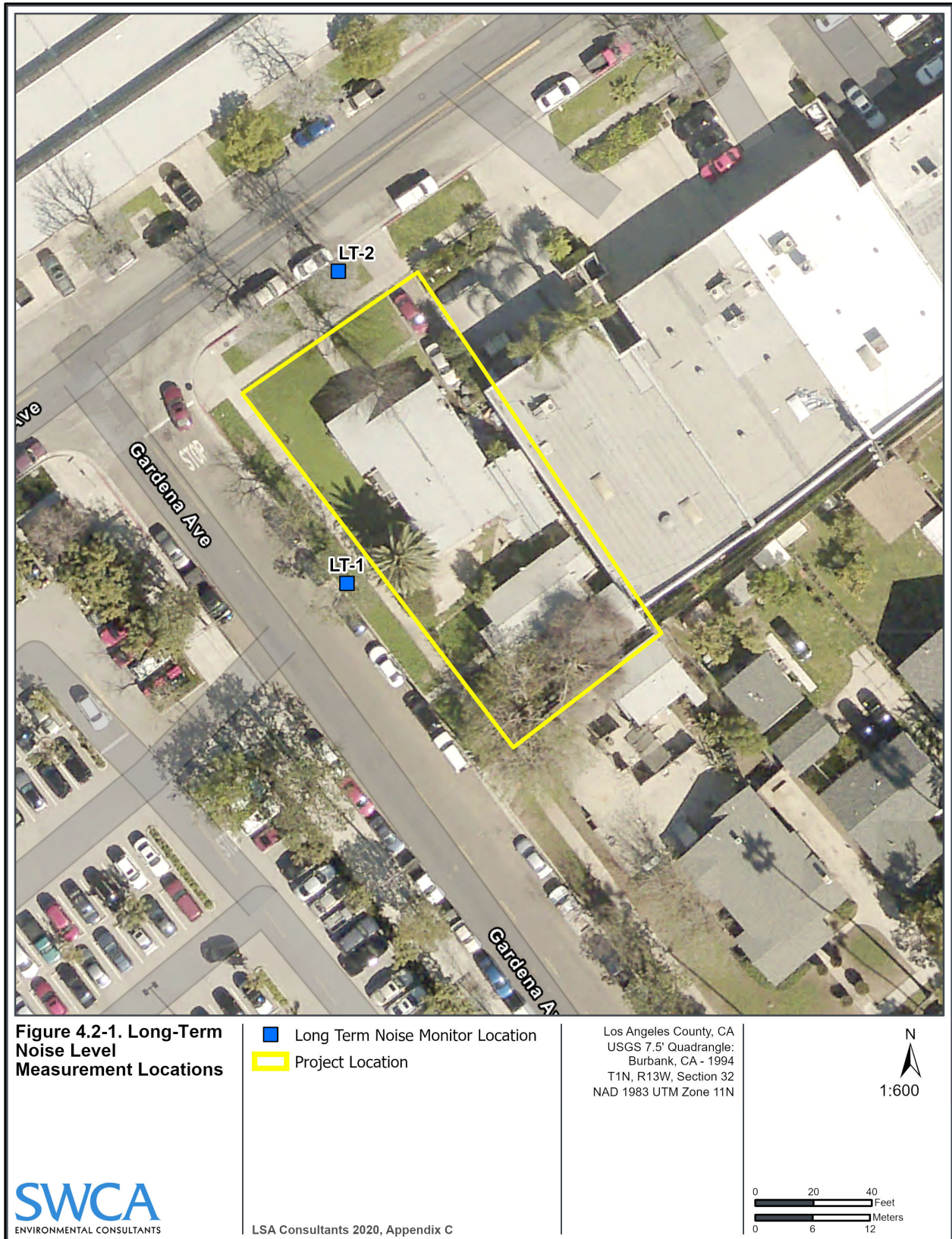


Figure 3.2.1 Long-term Noise Level Measurement Locations.

3.2.4 ***Impact Analysis***

3.2.4.1 **SIGNIFICANCE CRITERIA**

The Project would have a significant effect related to noise and vibration if implementation of the proposed Project would result in any of the following:

- Expose persons to or generate 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; or
- Generate excessive groundborne vibration or groundborne noise levels.
- Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

3.2.4.2 **APPROACH TO ANALYSIS**

This analysis evaluates the noise and vibration impacts associated with construction and operation of the Project. Two types of noise and vibration impacts were considered: short-term, temporary impacts resulting from construction, and impacts due to long-term operational changes in the noise environment.

Given that the Municipal Code exempts construction activities and that no standard criteria for assessing construction noise impacts are provided, the guidelines in the FTA Transit Noise and Vibration Impact Assessment Manual (2018) are used in this analysis to assess construction noise impacts.

Impact NO-1: Construction of the proposed project would generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the City of Glendale Noise Ordinance or applicable standards of other agencies. (*Less than Significant with Mitigation*)

Short-Term Construction Noise Impacts

The Project would be constructed in one development phase approximately 18 months in duration. Short-term noise impacts would be associated with demolition of the existing structures, excavation, grading, and construction of the Project. Construction-related short-term noise levels would be higher than existing ambient noise levels in the vicinity of the Project site but would no longer occur once construction of the Project is completed.

Two types of short-term noise impacts could occur during construction of the Project. The first type is related to noise generated by trucks transporting construction equipment and materials to the Project site and by vehicles carrying construction workers commuting to the Project site. These transportation activities would incrementally raise noise levels on roads leading to the site. It is expected that larger trucks used in equipment delivery would generate higher noise impacts than vehicles associated with worker commutes. The single-event noise from equipment trucks passing at a distance of 50 feet from a sensitive noise receptor would reach a maximum level of 84 dBA L_{max}. However, the pieces of heavy equipment for grading and construction activities would be moved on-site just one time and would remain on-site for the duration of each construction phase. This one-time trip, when heavy construction equipment is moved on and off site, would not add to the daily traffic noise in the Project vicinity. The total number of daily vehicle trips would be minimal when compared to existing traffic volumes on the affected streets, and the long-term noise level change associated with these trips would not be perceptible. Therefore, noise generated by equipment transport and construction-related worker commutes would be short term and these activities would not result in a significant off-site noise impact.

The second type of potential short-term noise impact is related to noise generated during demolition, site preparation, grading, building construction, and paving. Construction is completed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and therefore the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

The site preparation and grading phase, which includes excavation and grading of the site, tends to generate the highest noise levels because earthmoving equipment is the noisiest construction equipment (see Table 3.2.9). Additionally, this phase would be the longest of the phases expected to occur near the Project site boundary. The three loudest pieces of equipment used during the site preparation and grading phase would likely be an excavator, grader, and dozer, as no pile driving is proposed. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Table 3.2.9. Representative Construction Equipment Noise Levels – Peak Hourly Use

Equipment	Peak Hourly L_{eq} at 50 feet (dBA) ^A	Peak Hourly L_{eq} at 100 feet (dBA) ^A
Impact Equipment		
Excavators with Hoe Ram	85	84
Impact Pile Driver	101	95
Non-Impact Equipment		
Air Compressors	80	74
Bore/Drill Rigs	85	79
Cement and Mortar Mixers	80	79
Concrete/Industrial Saws	90	84
Concrete Truck	82	76
Concrete Boom Pump	82	76
Cranes	85	79
Excavators	85	79
Generator Sets	82	76
Graders	85	79
Pavers	85	79
Plate Compactors	83	77
Pressure Washers	85	79
Pumps	81	75
Rollers	85	79
Rough Terrain Forklifts	85	79
Rubber-Tired Dozers	85	79
Scrapers	85	79
Skid Steer Loaders	80	74
Tie Back Drill	85	79
Tower Crane	85	79

Equipment	Peak Hourly L_{eq} at 50 feet (dBA) ^A	Peak Hourly L_{eq} at 100 feet (dBA) ^A
Tractors/Loaders/Backhoes	84	78
Welders	73	68

Notes:

^A Based on highest anticipated noise level, assuming 100 percent use during any 1-hour period.

dBA = A-weighted decibels

L_{eq} = equivalent continuous sound level

Source: Federal Highway Administration, FHWA Highway Construction Noise Handbook, August 2006, Table 9.1, p. 91.

Consistent with FTA guidance, the composite noise level of the two loudest pieces of equipment proposed to be used during construction, the concrete saw and excavator, as required by the FTA criteria, would be 85.5 dBA L_{eq} at a distance of 50 feet from the construction area. As stated above, the nearest sensitive receptors are 60 feet to the south.

It is expected that the average noise levels during the construction of the Project at the nearest noise-sensitive use, the existing single-family homes to the south, would be 76.5 dBA L_{eq} based on an average distance of 140 feet from the center of construction activities. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the Project area under existing conditions, the noise impacts would no longer occur once Project construction is completed and construction-related noise impacts would remain below the 90 dBA L_{eq} 1-hour construction noise level criteria established by the FTA for residential uses.

3.2.5 Mitigation Measures

Compliance with the City's Noise Ordinance would ensure that construction noise does not disturb the residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). Although construction noise would be higher than the ambient noise in the Project vicinity, construction noise would cease to occur once Project construction is completed. Implementation of Mitigation Measure M-NO-1: Construction Noise and Vibration Control would ensure that noise impacts related to construction would be less than significant with mitigation.

Mitigation Measure M-NO-1, described below, requires implementation of noise control measures in accordance with a noise control plan approved by the City of Glendale for all construction activities.

Mitigation Measure M-NO-1: Construction Noise and Vibration Control

Prior to issuance of demolition permits, the Glendale (City) Department of Building and Safety, or designee, shall verify that all construction plans include notes stipulating the following:

- Standard building construction requirements shall consist of wall construction with a minimum rating of STC-41 as described above and windows and glass doors throughout the building at sensitive rooms shall meet a minimum STC rating of STC-33.
- Grading and construction contractors shall use equipment that generates lower vibration levels, such as rubber-tired equipment rather than metal-tracked equipment.
- Construction haul truck and materials delivery traffic shall avoid residential areas whenever feasible.

- The construction contractor shall place noise- and vibration-generating construction equipment and locate construction staging areas away from sensitive uses whenever feasible.
- The construction contractor shall use on-site electrical sources to power equipment rather than diesel generators where feasible.
- All residential units located within 500 feet of the construction site shall be sent a notice regarding the construction schedule. A sign legible at a distance of 50 feet shall also be posted at the construction site. All notices and the signs shall indicate the dates and durations of construction activities, as well as provide a telephone number for the “noise disturbance coordinator”.
- Heavy equipment similar to that of bulldozers shall not be used within 5 feet of any existing neighboring structure.

Mitigation Measure M-NO-1 would reduce the Project’s temporary increases in ambient noise levels from construction to the maximum extent feasible and because the exceedance of daytime construction thresholds would be limited in time, the potential for construction of the Project to generate a substantial temporary increase in ambient noise levels in excess of standards established in the City of Glendale Noise Ordinance would be less than significant with mitigation.

Impact NO-2: Construction of the proposed Project would generate excessive groundborne vibration or groundborne noise levels. (*Less than Significant with Mitigation*)

Construction Vibration Impacts

Vibration in buildings caused by construction activities may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures hanging on walls. Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range of vibration frequencies (i.e., 60 to 200 Hertz), when the structure and the construction activity are connected by foundations or utilities, such as sewer and water pipes, or when the airborne noise path is blocked, such as during tunneling activities. Construction activities related to the Project, including excavation activities where the highest levels of vibration are anticipated, would not include vibration of foundations or utilities that are connected to existing structures, and would not include tunneling operations.

To provide a comparison of vibration levels expected for a project of this size, a small bulldozer, as shown in Table 3.2.10 would generate approximately 0.003 PPV inches/sec or 58 VdB of groundborne vibration when measured at 25 feet, based on the Transit Noise and Vibration Impact Assessment.³⁰

As shown in Table 3.2.5, it would take a minimum of 0.3 in/sec in PPV to have the potential to result in building damage to structures constructed of concrete and masonry buildings and 0.2 in/sec PPV to cause any potential building damage to non-engineered timber and masonry buildings. Table 3.2.10 further shows the PPV values and vibration levels (in terms of VdB) from other construction vibration sources at 25 feet from construction vibration sources for comparison purposes.

³⁰ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

Table 3.2.10. Vibration Source Levels for Construction Equipment

Equipment	PPV _{ref} at 25 ft (in/sec) ^A	Lv (VdB) ^B
Impact Pile Driver (typical)	0.644	104
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Notes:

^A PV_{ref} – reference Peak Particle Velocity. PPV is appropriate for evaluating potential damage to buildings.^B RMS VdB re 1 µin/sec.

ft = feet, in/sec = inches per second

µin/sec = microinches per second

Lv = velocity in decibels

RMS = root-mean-square

VdB = vibration velocity in decibel

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

The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the Project boundary (assuming the construction equipment would be used at or near the Project boundary) because vibration damage impacts occur at the buildings.

It is assumed that all activities associated with demolition of the existing buildings and construction of the new buildings within 5 feet of any existing nearby buildings would be carried out using hand tools and any large equipment such as a dump truck to carry debris away would remain more than 5 feet from the existing buildings.

It is expected that vibration levels generated by small bulldozers and other similar equipment that would be as close as 5 feet would approach 0.034 in/sec in PPV. At a distance of 65 feet at the existing single-family uses to the south, vibration levels would approach 0.001 in/sec in PPV. It is expected that with the incorporation of standard construction best practices, such as the use of hand tools as equipment for demolition work within 5 feet of existing structures, building damage would not occur.

The closest sensitive uses to the Project site, which are subject to annoyance due to vibration, are the single-family homes to the south approximately 60 feet from construction activity. To assess the potential vibration levels related to annoyance, the estimated vibration impacts are propagated for distance. Based on the following formula for vibration transmission, a vibration level at 50 feet is 9 VdB lower than at 25 feet, a vibration level at 100 feet is 18 VdB lower than at 25 feet, and a vibration level at 400 feet is 36 VdB lower than at 25 feet.

Utilizing the information in Table 3.2.10, above, the operation of typical construction equipment would generate groundborne vibration levels of up to 46 VdB. Based on the standards provided in Table 3.2.6, this level of groundborne vibration is well below the threshold of distinctly perceptible, which is approximately 72 VdB for frequent events at uses where people sleep, and would not exceed the FTA vibration threshold for human annoyance at the nearest sensitive use. Additionally, the Project would incorporate Mitigation Measure M-NO-1: Construction Noise and Vibration Control, which includes construction vibration reduction measures. Therefore, construction impacts related to groundborne vibration would be less than significant with mitigation incorporated.

Impact NO-3: Operation of the proposed Project would generate a substantial permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan, or applicable standards of other agencies. (*Less than Significant*)

Operational Noise Impacts: Onsite Stationary Sources

The Project would install heating, ventilation, and air conditioning (HVAC) systems for the building. The greatest noise impact related to HVAC operations would occur at the existing single-family homes located south of the Project. The site plan identifies 28 HVAC units that would vary in distance from 70 feet to 190 feet from the closest single-family home façade. To be conservative, it was assumed that all units would be in operation simultaneously at the average distance to the receptor of 130 feet.

Technical data available from several manufacturers (e.g., Trane) show that there are residential air conditioners with noise levels with an approximate range from 42.3 to 60.3 dBA Leq when measured at a distance of 5 feet. The representative data was incorporated into the analysis.

Additionally, the Project would include screening walls around the HVAC system which would provide an additional noise reduction. With the noise reduction associated with distance and additional reduction from screening walls, HVAC noise levels will be below the existing quietest nighttime ambient noise levels of 48.4 dBA Leq. Therefore, no mitigation is required and the impacts related to operation of onsite stationary sources would be less than significant.

Operational Noise Impacts: Other Onsite Sources

Based on monitoring results shown in Table 3.2.3, noise levels at the Project site currently approach 67 dBA CNEL. In order to account for the decrease in activity associated with the current COVID-19 pandemic, for purposes of this analysis it is estimated that the primary sources of noise in the Project vicinity, including the rail line to the west and associated parking lot activities, are currently about 50 percent of typical operations. With a doubling of operations, it is expected that noise levels would be 3 dBA higher, resulting in a level of 70 dBA CNEL.

As described in Table 3.2.7, exterior noise standards are only applicable to private areas for which there is an expectation of privacy, such as patios. While the Project does not have any such areas, for reporting purposes the rooftop deck would be considered a gathering space that may benefit from lower noise levels. The proposed 6-foot-high glass barrier around the perimeter of the roof deck would reduce noise levels by approximately 7 dBA CNEL, to a level of 64 dBA CNEL. While measures to reduce exterior noise levels are not required, the Project must demonstrate compliance with the interior noise standard of 45 dBA CNEL. The Project's adhere to the minimum rating of windows and doors would ensure that noise impacts related to interior noise levels would be less than significant. Therefore, no mitigation is required, and the impacts related to operation of other onsite sources would be less than significant.

3.2.6 Cumulative Impacts

Cumulative noise or vibration impacts associated with construction or operation of the Project would occur if there are other projects located in the Project vicinity that could be constructed at the same time, or that could substantially extend the duration of construction noise or vibration received at any nearby sensitive receptors. The geographic area of concern for evaluation of cumulative noise impacts is the area within approximately 0.25 mile of the Project site because, in order for noise effects to combine with the Project-generated noise and result in a cumulative impact, the noise sources need to be in close proximity to each other. There are no cumulative projects within that radius of the Project site. The nearest cumulative project is located one mile from the project site.

The Project site would be potentially impacted by the future California High Speed Rail (CAHSR) construction and operations. It would be within the Burbank to Los Angeles project section of the CAHSR project. The results of the noise model presented in the Burbank to Los Angeles Project Section EIR/EIS³¹ indicate that noise levels experienced at the Project site due to CAHSR operations would approach 64 dBA CNEL. The combination of the existing sources of noise with the future CAHSR operations would result in an exterior noise level of 71 dBA CNEL at the Project site. However, the CAHSR system is estimated to open in 2033.³² Therefore, the Project would not combine with construction noise or vibration from future CAHSR construction and operations because construction of the Project would be completed prior to the initiation of CAHSR construction.

Section 8.36.080 (Construction on buildings, structures and projects) of the Glendale Municipal Code limits construction activities to between the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday and also prohibits construction activities on Sundays and federal holidays unless a permit is obtained. Further, the City exempts noise generated from construction from the established City noise standards. Compliance with Section 8.36.080 is required by the Glendale Municipal Code for any projects associated with the South Glendale Community Plan and other cumulative development. Implementation of the Glendale Municipal Code and mitigation measures Mitigation Measure NO-1 would mitigate the exposure of persons to or the generation of noise levels in excess of standards established by the City. Therefore, the cumulative impact of the Project would also be less than significant.

³¹ California High Speed Rail Authority, "Project Sections: Burbank to Los Angeles," 2021. Available at: <https://hsr.ca.gov/programs/environmental-planning/project-section-environmental-documents-tier-2/burbank-to-los-angeles-project-section-draft-environmental-impact-report-environmental-impact-statement/>. Accessed on August 11, 2021.

³² California High Speed Rail Authority, Burbank to Los Angeles Project Section EIR/EIS, Chapter 3, Available at: https://hsr.ca.gov/wp-content/uploads/docs/programs/burbank_los_angeles/BLA_Sec3-01_Introduction_DEIREIS.pdf

4.0 ALTERNATIVES

4.1 Introduction

Chapter 4, Alternatives, presents an analysis of alternatives to the 1642 South Central Avenue Project, as required by the CEQA. Four alternatives are evaluated: A No Project Alternative, Relocation Alternative, a Reduced Density (Relocation on Site) Alternative, and a Reduced Density (Existing Location) Alternative. This chapter explains the alternatives selection methodology, describes the alternatives selected for analysis, and compares the impacts of the Project with those of the alternatives and the ability of the alternatives to meet the Project objectives. The chapter concludes with a discussion of the environmentally superior alternative selected.

4.2 Alternatives Selection

The methodology used to select alternatives to the Project for detailed CEQA analysis focused on developing a range of potentially feasible alternatives that could avoid or substantially lessen the significant impacts identified in Chapter 3, Environmental Impact Analysis, while still meeting most of the Project's basic objectives. The EIR identifies only one significant and unavoidable impact: the demolition of a historic architectural resource, the 1642 South Central Avenue residence and all its character-defining features (see Section 3.1, Historic Architectural Resources). As a result, project alternatives have been designed to would avoid or substantially lessen this impact while still meeting most of the Project's basic objectives. The other alternative analyzed, the No Project Alternative, is required by CEQA.

4.3 Requirements for Alternatives Analysis

CEQA Guidelines Section 15126.6(a) states that an EIR must describe and evaluate a reasonable range of alternatives to a project that would feasibly attain most of its basic objectives but avoid or substantially lessen any identified significant environmental effects of the project. The EIR must include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. An EIR is not required to consider every conceivable alternative to a proposed project. Rather, it must consider a reasonable range of potentially feasible alternatives to foster informed decision-making and public participation.

The Public Resources Code, the CEQA Guidelines, and case law have found that range of factors and influences. CEQA Guidelines Section 15364 defines "feasibility" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." CEQA Guidelines Section 15126.6(f)(1) states that the factors that may be taken into account when addressing the feasibility of alternatives include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (if the site is not already owned by the proponent). CEQA Guidelines Section 15126.6(f)(3) states that an EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. This section identifies an alternative considered by the Lead Agency, but rejected as infeasible, and provides a brief explanation of the reasons for its exclusion. As noted above, alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant

environmental effects (CEQA Guidelines, Section 15126.6(c)). The final determination of feasibility will be made by City decision-makers based on substantial evidence in the record, which includes, but is not limited to, information presented in the EIR, comments received on the Draft EIR, and responses to those comments.

In addition, the range of alternatives considered in an EIR must include a no project alternative (CEQA Guidelines Section 15126.6(e)(1)) and an environmentally superior alternative (CEQA Guidelines Section 15126.6(e)(2)). The CEQA Guidelines provides the following direction about no project alternatives:

- The no project alternative analysis shall “discuss the existing conditions...as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and policies and consistent with the available infrastructure and community services.” (CEQA Guidelines Section 15126.6(e)(2))
- In an EIR on “a development project on identifiable property, the ‘no project’ alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this ‘no project’ consequence should be discussed.” Thus, “...where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project’s non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.” (CEQA Guidelines Section 15126.6(e)(3)(B))

The environmentally superior alternative is the alternative that best avoids or lessens any significant impacts of a proposed project, even if the alternative would impede to some degree attainment of the project objectives or would be more costly (CEQA Guidelines Section 15126.6(b)). If it is determined that the “no project” alternative would be the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other project alternatives (CEQA Guidelines Section 15126.6(e)(2)).

- An EIR must also identify and briefly discuss any alternatives that were considered by the lead agency but rejected as infeasible during the scoping process (CEQA Guidelines Section 15126.6(c)). In identifying alternatives, primary consideration is given to alternatives that would reduce significant impacts while still meeting most of the basic project objectives. Alternatives typically rejected from further consideration are those that would have impacts identical to or more severe than the proposed project or those that would not meet most of the basic project objectives.

4.4 Project Objectives

CEQA Guidelines Section 15124 states that the description of the project shall contain the following information but should not supply extensive detail beyond that needed for evaluation and review of the environmental impact. Among the basic informational requirements is a statement of objectives sought for the project. CEQA Guidelines Section 15124(b) clarifies the need for this requirement as follows:

“...A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project and may discuss project benefits.”

As stated in the CEQA Guidelines, alternatives to a project selected for analysis in an EIR must substantially lessen or avoid any of the significant environmental impacts associated with the proposed project while still meeting most of the project's basic objectives. The applicant has identified the following objectives for the proposed project:

- 1) Contribute to the health of the City through an economically viable infill project that would provide an increase in residential units to help meet housing demand in the City and better meet the Regional Housing Needs Assessment (RHNA) requirements for the region.
- 2) Construct a new multi-family residential building with new architectural designs and energy-efficient building systems that promote energy conservation that furthers the City's policy goals expressed in the Greener Glendale Plan
- 3) Provide new residential opportunities that offer multi-modal opportunities taking advantage of the Project's proximity to Larry Zarian Transportation Center.
- 4) Enhance the general welfare of the public by offering affordable housing opportunities and help meet the affordable housing goals and needs outlined in the City's Housing Element.
- 5) Develop new residential opportunities close to the existing retail amenities within South Glendale.

4.5 Summary of Significant Impacts

As stated in the CEQA Guidelines, project alternatives must avoid or substantially lessen significant impacts of the proposed project.

4.5.1 Significant and Unavoidable Impacts

As discussed in Section 3.1, Historic Architectural Resources, CEQA Guidelines Section 15064.5(b) establishes the criteria for assessing a significant environmental impact on historical resources. It states, "[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." The section defines "substantial adverse change in the significance of an historical resource" as a "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." The significance of an historic architectural resource is considered to be "materially impaired" when a project demolishes or materially alters the physical characteristics that justify inclusion of the resource in the California Register of Historic Resources, or that justify inclusion of the resource in a local register, or that justify its eligibility for inclusion in the California Register of Historic Resources as determined by the lead agency for the purposes of CEQA (CEQA Guidelines Section 15064.5(b)(2)). The Project would result in a significant and unavoidable impact on an historic architectural resource after implementation of Mitigation Measure M-CR-1: Documentation of Historical Resources.

4.6 Selection and Analysis of Alternatives

4.6.1 No Project Alternative

4.6.1.1 DESCRIPTION

Under the No Project Alternative, the residential buildings located at 1642 South Central Avenue and at 1608 Gardena as well as the existing garage would be retained in their current configuration, and would not be disturbed; no construction would occur on site and the current residential uses would continue. No

new residential or commercial uses would be added. Therefore, the existing physical features on the Project site, including the character-defining features of the historical resource, would not change and no modifications, repairs, or restoration would be made to the existing historical resource.

4.6.1.2 IMPACTS OF THE NO PROJECT ALTERNATIVE

The analysis of the No Project Alternative is based on the assumption that the Project would not be approved and would result in a “no build” alternative wherein the existing environmental setting is maintained.

If the No Project Alternative were to proceed, no changes would be implemented, and none of the impacts associated with the Project would occur. However, incremental changes would be expected to occur in the vicinity of the Project site as nearby projects are approved, constructed, and occupied. With no change to existing site conditions under the No Project Alternative, land use activity on the Project site would not contribute to significant cumulative impacts beyond existing levels. There would be no construction or operational impacts related to noise compared to the Project.

Since the No Project Alternative would retain all the character-defining features of the subject property and not demolish or make any modifications to the historical resource, it would not cause material impairment to that resource. Compared to the Project, which would demolish all buildings on site and result in material impairment to the historical resource, the No Project Alternative would not result in any project-level impacts and would not contribute to any impacts related to historic architectural resources.

4.6.1.3 ABILITY TO MEET PROJECT OBJECTIVES

Under the No Project Alternative, the proposed 40,240-square-foot, five-story multi-family five-story residential building containing 31 units of rental housing, including three very-low income units, and a one-level subterranean garage would not be constructed. Therefore, the No Project Alternative would not meet the Project objectives as set forth in Section 1.2 herein above.

4.6.2 *Reduced Density (Relocation on Site) Alternative*

4.6.2.1 DESCRIPTION

The Reduced Density (Relocation on Site) Alternative would relocate the 1642 South Central Avenue residential building within the Project site, demolish 1608 Gardena Avenue and the existing garage, and construct a reduced number of residential units on the remaining site area. The 1642 South Central Avenue residential building would be shifted to the north within the existing project site, with a 10-foot setback from South Central Avenue. This relocation would leave a remaining buildable area of 4,433 square feet (0.1017 acre) on the Project site to accommodate a reduced density project of fifteen (15) residential units, including ~~11~~14 market-rate and ~~4~~1 very low-income units instead of 31 units. The Reduced Density (Relocation On Site) Alternative would provide eight (8) subterranean parking spaces.

This Alternative would generate the same type of construction impacts as the Project, however due to 50% reduced project size those impacts would be of shorter duration. The on-site relocation and restoration of the historic building would involve various restoration activities which would be treated as categorically exempt under CEQA so long as maintenance, repair, restoration, rehabilitation, preservation, conservation or reconstruction of the historical resource is done in a manner consistent with the Secretary of Interior’s standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (CEQA Guidelines section 15331).

4.6.2.2 IMPACTS OF THE REDUCED DENSITY (RELOCATION ON SITE) ALTERNATIVE

The Reduced Density (Relocation on Site) Alternative would result in fewer environmental impacts at the Project site, compared to the Project because of the project is less than half the size of the Project (15 versus 31 units), and would be of shorter construction duration. The Reduced Density (Relocation on Site) Alternative would also be consistent with the SFMU (Commercial/Residential Mixed Use) and Mixed-Use District General Development Standards. The 15-unit building with a one-level subterranean garage would have a smaller building footprint than 31-unit Project but would still result in short-term impacts to air quality, greenhouse gas emissions, geology/soils, water quality, and traffic. Similar to the Project, these short-term construction impacts from this Alternative would be less than significant and typical of small land development projects where compliance with existing codes and other regulatory standards ensure these types of impacts are below impact thresholds. The Reduced Density (Relocation On Site) Alternative would result in a similar construction noise during grading and site preparation as the Project. Compliance with the City's Noise Ordinance and implementation of Mitigation Measure M-NO-1: Construction Noise and Vibration Control would ensure that construction noise stays below applicable thresholds and does not disturb the nearby residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). Impacts related to construction noise would remain less than significant with mitigation.

The Reduced Density (Relocation On Site) Alternative would preserve the on-site location, design, materials, workmanship, feeling, and character-defining features of the historical resource within the Tropico neighborhood. While the historic resource would be preserved, as with the Project the Reduced Density (Relocation On Site) Alternative would modify the setting of the historic resource.

4.6.2.3 ABILITY TO MEET PROJECT OBJECTIVES

The Reduced Density Alternative would be able to meet all of the Project objectives set forth in Section 1.2 herein above.

4.6.3 *Reduced Density (Existing Location) Alternative*

4.6.3.1 DESCRIPTION

The Reduced Density (Existing Location) Alternative would retain the historic residence located at 1642 South Central Avenue in its existing location on the Project site, and demolish the residence at 1608 Gardena Avenue and the existing garage. The remaining buildable area, consisting of approximately 3,383 square feet (0.007 acre) could accommodate 11 residential units, including 8-10 market-rate and 3-1 very low-income units. The Reduced Density (Existing Location) Alternative would provide 8 parking spaces for the residential units in a subterranean garage below the new building.

Similar to the Project, the Reduced Density (Existing Location) Alternative would require construction of similar improvements, including grading and construction of the footings, connections for utilities, however the construction activities would be of shorter duration. This Alternative would also require restoration and preservation of the historic resource, and protection from any adverse impacts from construction of the new building. As a consequence, mitigation measures requiring construction monitoring would be required, as would the post-construction restoration and rehabilitation of the historic home pursuant to Secretary of Interior Standards.

- **IMPACTS OF THE REDUCED DENSITY (EXISTING LOCATION) ALTERNATIVE**

The Reduced Density (Existing Location) Alternative would involve constructing 11 instead of 31 new multifamily residential units on site with one-level of subterranean parking. Due to the approximately 1/3 size of this Alternative compared to the Project and shorter duration of construction, this Alternative would result in reduced environmental impacts compared to the Project. This Alternative would also be consistent with the SFMU (Commercial/Residential Mixed Use) and Mixed Use District General Development Standards. The 11-unit building with a one-level subterranean garage would have a smaller building footprint compared to the Project but would still result in short-term impacts to air quality, greenhouse gas emissions, geology/soils, water quality, and traffic. These short-term construction impacts would be less than significant and typical of small land development projects, but construction of the alternative would be of shorter duration than the Project due to the reduced size and would result in less exposure to construction noise during grading and site preparation. Compliance with the City's Noise Ordinance and implementation of Mitigation Measure M-NO-1: Construction Noise and Vibration Control would ensure that construction noise stays below applicable thresholds and does not disturb the nearby residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). Impacts related to construction noise would remain less than significant with mitigation.

The Reduced Density (Existing Location) Alternative would preserve the existing location, design, materials, workmanship, feeling, and character-defining features of the historical resource within the Tropico neighborhood. The preservation of location of the historic resource at its existing location on site would eliminate the Project's significant impact from demolition of the resource. The Reduced Density (Existing Location) Alternative would permit 1642 South Central Avenue would remain be a good example of a Craftsman style house and would remain eligible for listing on the Glendale Register of Historic Resources under Criterion 3.

4.6.3.2 ABILITY TO MEET PROJECT OBJECTIVES

If the Reduced Density (Existing Location) Alternative is determined to be feasible, then it would meet all of the Project objectives set forth in Section 1.2 herein above. However, it would not fulfill the project objectives to the same extent as the Project because fewer new units would be built and it would not maximize the potential residential units on the Project site.

4.6.4 *Alternative Considered but Rejected*

4.6.4.1 RELOCATION ALTERNATIVE

The Relocation Alternative would relocate the existing historic building at 1642 South Central Avenue from its present location to an alternative site. The Relocation Alternative would involve demolishing the remaining buildings on site (1608 Gardena Avenue and the existing garage) and constructing the same new multi-family 31 unit five-story development as the Project. The Relocation Alternative would therefore require the same construction activities, would result in the same impacts as the Project, and would requires the same mitigation.

This alternative was considered but rejected, as it is infeasible and would not achieve a reduction of significant impacts. The Relocation Alternative would preserve the character-defining features of the historic Craftsman-style residential building; however, relocation would change the location and setting of the historic resource by moving the house from the Tropico neighborhood. This alternative is infeasible as neither the project applicant nor the City owns or controls a relocation site or any other property near the Project site to which the duplex could be relocated. The ability and cost of acquiring a suitable

alternative site cannot be determined. For these reasons, the Relocation Alternative was deemed an infeasible alternative for the Project.

4.7 Environmentally Superior Alternative

Pursuant to CEQA Guidelines Section 15126.6(e)(2), if the no project alternative is the environmentally superior alternative, then an EIR is required to identify another environmentally superior alternative from among the alternatives evaluated if the Project has significant impacts that cannot be mitigated to a less-than-significant level. The environmentally superior alternative is the alternative that best avoids or lessens any significant effects of the Project, even if the alternative would impede to some degree the attainment of the project objectives. The No Project Alternative is considered the overall environmentally superior alternative because it would represent a continuation of existing conditions on the Project site and would not result in any significant impacts associated with implementation of the Project. The No Project Alternative, however, would not meet any of the project objectives.

Therefore, the Reduced Density (Relocation on Site) Alternative would be the environmentally superior alternative among the other alternatives evaluated. The Reduced Density (Relocation on Site) Alternative would eliminate the significant and unavoidable historical architectural resources impacts associated with demolition of 1642 South Central Avenue. This alternative would also meet more of the Project objectives of adding affordable housing and meeting the City's affordable housing goals, although not to the same extent as the Project since fewer new units would be built.

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5.0 CUMULATIVE IMPACT ANALYSIS

5.1 Related Projects and Cumulative Impacts

The CEQA Guidelines require that an EIR discuss cumulative impacts of a project. CEQA Guidelines Section 15355 defines cumulative impacts in the following way:

“Cumulative Impacts” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

5.1.1 Cumulative Impact Analysis

Table 5.1.1 presents a list of related projects located within a 1-mile radius of the Project site, which encompasses the historic boundary of the town of Tropic. There are two projects located within this radius as shown in Table 5.1.1 below.

Table 5.1.1. Related Projects

Project	Residential (square feet)	Office (square feet)	Industrial (square feet)	Retail (square feet)	Height	Status of August 2021
901-919 South Brand Boulevard	0	0	171,140	0	5 stories	Under environmental review
1226 Vista Ct.	1,476	0	0	0	1 story	Approved by DRB on June 25, 2020 – building permit under review

Notes: DRB = City of Glendale Design Review Board

Source: City of Glendale Community Development Department, Current Projects, August 2021.

Other active projects in the project vicinity consist of minor modifications to existing buildings and residences, such as accessory dwelling units, window replacements, installation of rooftop solar collection systems, and construction of decks. Given their minor scope, they were not included in the cumulative impacts analysis.

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6.0 OTHER CEQA CONSIDERATIONS

Chapter 6, Other CEQA Considerations, discusses growth-inducing impacts, significant unavoidable impacts, significant irreversible impacts, and areas of known controversy related to the Project.

6.1 Growth-Inducing Impacts

As required by Section 15126.2(d) of CEQA Guidelines, an EIR must consider the ways in which a Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth-inducing impacts can result from the elimination of obstacles to population growth, such as a major expansion of a wastewater treatment plant, or through economic growth that would, in turn, generate increased employment or demand for housing and public services. In general, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the following criteria:

- Removal of an impediment to growth (e.g., the establishment of an essential public service or the provision of new access to an area)
- Economic expansion or growth (e.g., construction of additional housing, changes in revenue base, employment expansion)
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning or general plan designation)
- Development or encroachment in an isolated or adjacent area of open space (being distinct from an “infill” type of project)

As stated in Section N, Population and Housing, of the initial study (Appendix B), the Project would add 31 housing units (a net increase of 29 housing units), accommodating approximately 78 new residents. The City is within the planning jurisdiction of the Southern California Association of Governments (SCAG,) which represents six counties (Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial). The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) estimates that the population within the SCAG region will grow by approximately 21 percent by 2040 to an estimated 22.1 million people; Glendale is projected to grow by approximately 11 percent to an estimated 214,000 by 2040.³³ The estimated population of the City of Glendale in 2019 was approximately 196,543 residents.³⁴ As a result, the Project would not exceed the growth projections outlined in the 2016 RTP/SCS. When compared to existing conditions, the Project would represent an incremental increase in the local population and would not result in a substantial or unplanned increase. No expansion of roads or other public infrastructure related to energy, water supply or wastewater/stormwater collection and conveyance system expansions, or public services would be needed to accommodate the Project-related population. Therefore, the Project would not induce unplanned population growth; rather, the Project would accommodate the need for housing within the City.

In summary, the increase in the number of residents on the Project site would not result in a substantial or unplanned increase in the population of the City. Furthermore, the Project would not result in the extension of infrastructure into undeveloped areas; the extension of infrastructure systems beyond what is

³³ Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016, <https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557>

³⁴ U.S. Census Bureau, Glendale, California, Population Estimates QuickFacts July 1, 2021, California, <https://www.census.gov/quickfacts/fact/table/glendalecitycalifornia/PST045219> February 7, 2021.

needed to serve Project-specific demand; construction of a residential Project in an area that is undeveloped or sparsely developed; or removal of obstacles to population growth (such as provision of major new public services to an area where those services are not currently available).

6.2 Significant Irreversible Environmental Changes

In accordance with Section 21100(b)(2)(B) of CEQA and Section 15126.2(c) of the CEQA Guidelines, an EIR must identify any significant irreversible environmental changes that could result from implementation of the Project. This may include uses of non-renewable resources during the initial and continued phases of a Project that may be irreversible, as a large commitment of resources makes removal or non-use thereafter unlikely, and secondary impacts that commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with a Project. According to the CEQA Guidelines, irretrievable commitments of resources should be evaluated to ensure that such current consumption is justified.

The Project site is currently an urban site developed with two residential buildings and a garage; under the Project, the site would be redeveloped with a 31-unit residential building. As such, no irreversible environmental changes, such as those that might result from construction of a large-scale mining project, hydroelectric dam, or other industrial project that specifically alters non-renewable resources, would result from development of the Project.

No significant irreversible environmental damage related to environmental accidents is anticipated to occur with implementation of the Project. Compliance with federal, state, and local regulations related to the handling, transport, and disposal of hazardous materials during demolition, construction, and operation of the Project, as well as the limited hazardous materials associated with the operation of the new residential uses, would reduce the potential for the Project to cause significant irreversible environmental damage. (See Section I, Hazards and Hazardous Materials, of the initial study in Appendix B.)

Consumption of nonrenewable resources includes increased energy consumption, conversion of agricultural lands to urban uses, and loss of access to mineral reserves. No agricultural lands would be converted and no access to mining reserves would be lost with construction of the Project. (See Sections L, Mineral Resources; F, Energy; and B, Agriculture and Forestry Resources, of the initial study in Appendix B.)

Resources consumed during construction would include lumber, concrete, gravel, asphalt, masonry, metals, and water. Similar to the existing uses on the Project site, the Project would irreversibly use water and solid waste landfill resources. However, the Project would not involve a large commitment of resources relative to existing conditions or supply, nor would it consume any of those resources wastefully. (See Section S, Utilities and Service Systems, of the initial study in Appendix B.)

Construction and operation of the Project would require the use of energy, including energy produced from nonrenewable fossil fuels. In California, energy consumption in buildings is regulated by Title 24 of the California Code of Regulations. Title 24 includes standards that regulate energy consumption for the heating, cooling, ventilation, and lighting of residential and nonresidential buildings. In the City, documentation demonstrating compliance with Title 24 standards is required to be submitted with a building permit application and is enforced by the Building and Safety Division. The Project is an infill development that would involve new construction on a developed site. The Project would be required to comply with the standards of Title 24 Building, Energy and Green Buildings Standards (California Building Code, Title 24, Parts 4, 6, and 11). Energy conservation design features to meet state and local goals for energy efficiency and renewable energy have been incorporated into the Project design to reduce

wasteful, inefficient, and unnecessary consumption of energy during construction and operation. Sustainable design strategies for the new building would include the use of high-performance glazing and a light-colored, single-ply, thermoplastic roof membrane over a well-insulated roof assembly to reduce heat gain during the summer. Other sustainable features would include energy-efficient light fixtures, lighting controls, and water-conserving plumbing fixtures. The building roof would be solar ready and able to support future installation of a photovoltaic system. The Project would not use energy in a wasteful, inefficient, or unnecessary manner. (See Sections E, Greenhouse Gas Emissions, and F, Energy, of the initial study in Appendix B.)

As discussed in the initial study under Section U, Utilities and Service Systems, the Project site is within an urban area that is served by water storage, treatment, and distribution facilities; combined wastewater and stormwater collection, storage, treatment, and disposal facilities; and solid waste collection and disposal service systems. The Project would use best-practice water conservation devices and techniques and would not involve the wasteful, inefficient, or unnecessary consumption of water resources. (See Sections E.13, Utilities and Service Systems, and E.17, Hydrology and Water Quality, of the initial study in Appendix B.)

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APPENDIX A

**Notice of Preparation of an Environmental Impact Report,
June 10, 2021**

APPENDIX B

Initial Study

APPENDIX C

**Historic Resources Assessment, prepared by SWCA,
August 2021**

APPENDIX D

**Noise and Vibration Study, prepared by LSA,
June 2020**

APPENDIX E

Sanborn Fire Insurance Maps – 1919 and 1925

