



2800 Casitas Avenue Project

Environmental Case No.: ENV-2016-2862-EIR

State Clearinghouse No. 2017021051

Project Location: 2750-2800 W. Casitas Avenue, Los Angeles, California 90039

Council District: 1 - Cedillo

Project Description: The 2800 Casitas Avenue Project (proposed Project), would involve the demolition of an existing 117,000-square-foot manufacturing/warehouse/production building on the approximately 5.7-acre (248,190 square-foot) Project Site. The Project would construct a new 487,872 square-foot mixed-use development, consisting of up to 419 multi-family residential units (including 35 units for Very Low Income households), up to 64,000 square feet of commercial space, and a seven-story parking structure. Commercial uses on-site would include a mix of ground-floor restaurant uses and office space, and a rooftop urban farm/greenhouse. The proposed residential units would be located in four buildings ranging from five to six stories with a maximum height of 85 feet above grade. A seven-story (85-foot high) parking garage on the northwest end of the Project Site would provide on-site parking spaces on floors one through six, and an urban farm/greenhouse on the seventh floor. Off-site improvements include the construction of a secondary access road.

This Partially Recirculated DEIR includes minor revisions to the proposed Site Plan and Elevations; updates to Section IV.E, Hazardous Materials/Risk of Upset to incorporate the Department of Toxic Substances Control's (DTSC) proposed draft risk attenuation factor for human health risk assessments, and adds the Hydrology/Water Quality Section (updated from the Initial Study) to address in greater detail the potential for flooding on the Project Site.

PREPARED FOR:

The City of Los Angeles
Department of City Planning

PREPARED BY:

Parker Environmental Consultants

APPLICANT:

2800 Casitas, LLC

April 2021

Table of Contents

I. Introduction/Summary

1. Introduction	1
2. Overview of the Environmental Review Process	1

II. Revised and Recirculated Portions of the DEIR

1. Introduction	4
Section II, Project Description	6
Section IV.E, Hazards and Hazardous Materials	45
Section IV.P, Hydrology/Water Quality	90

Tables

Table II-1 Summary of Proposed Land Uses.....	13
Table II-2 Summary of Proposed Development Program.....	14
Table II-3 Required and Proposed Open Space Calculations	36
Table II-4 Summary of Required and Proposed Vehicle Parking Spaces	37
Table II-5 Summary of Required and Proposed Bicycle Parking Spaces.....	38
Table II-6 Summary of Required and Proposed Building Setbacks.....	42

Figures

Figure II-4 Proposed Plot Plan [DELETED]	7
Figure II-4 Proposed Plot Plan [REVISED]	8
Figure II-5 Ground Floor Plan and Landscape Plan [DELETED].....	9
Figure II-5 Ground Floor Plan and Landscape Plan [REVISED]	10
Figure II-6 Typical Upper Level Floor Plan and Typical Upper Level Landscape Plan [DELETED]	11
Figure II-6 Typical Upper Level Floor Plan and Typical Upper Level Landscape Plan [REVISED]	12

Figure II-7 Building C and Building D Elevations – South [DELETED]	15
Figure II-7 Building C and Building D Elevations – South [REVISED]	16
Figure II-8 Building B Elevations – East and North [DELETED]	17
Figure II-8 Building B Elevations – East and North [REVISED]	18
Figure II-9 Courtyard Elevations – South, East and North [DELETED]	19
Figure II-9 Courtyard Elevations – South, East and North [REVISED]	20
Figure II-10 Podium Elevations – West and North [DELETED]	21
Figure II-10 Podium Elevations – West and North [REVISED]	22
Figure II-11 Podium Elevations – South [DELETED]	23
Figure II-11 Podium Elevations – South [REVISED]	24
Figure II-12 Site Sections of the Proposed Buildings [DELETED]	25
Figure II-12 Site Sections of the Proposed Buildings [REVISED]	26
Figure II-13 Illustrative Renderings [DELETED]	27
Figure II-13 Illustrative Renderings [REVISED]	28
Figure II-14 Open Space Plan [DELETED]	30
Figure II-14 Open Space Plan [REVISED]	31
Figure II-15 Landscape Exterior Elevations [DELETED]	32
Figure II-15 Landscape Exterior Elevations [REVISED]	33
Figure II-16 Landscape Courtyard Elevations [DELETED]	34
Figure II-16 Landscape Courtyard Elevations [REVISED]	35
Figure II-17 Secondary Emergency Access Options	40
Figure II-18 Proposed Haul Route	44
Figure IV.E-1 Taylor Yard Parcel Map	64
Figure IV.P.1 FEMA Flood Hazard Map	111
Figure IV.P-2 Los Angeles River 1% Annual Chance Exceedance (100-Year) Floodplain for Grid Index 8]	113
Figure IV.P-3 Los Angeles River 0.2% Annual Chance Exceedance (500-Year) Floodplain for Grid Index 8]	114

Appendices

- Appendix A** State of California, Department of Toxic Substances Control, Jessy Fierro, Senior Environmental Scientist, Comment Letter in Response to the Draft Environmental Impact Report For 2800 Casitas Avenue Project, April 16, 2020.
- Appendix B** Technical Memorandum, Human Health Risk Assessment of Soil Exposure and Vapor Intrusion to Indoor Air – 2750 - 2800 Casitas Avenue, Los Angeles, California, prepared by Environmental Health Decisions, November 18, 2020.
- Appendix C** Recommended Potential Vapor Mitigation Measures for Proposed Project at 2800 Casitas Avenue, Los Angeles, California, prepared by Brownfield Subslab, dated October 22, 2020.
- Appendix D** 2800 Casitas Flood Risk Technical Memorandum, prepared by KHR Associates, dated October 9, 2020.

I. Introduction/Summary

1. Introduction

The purpose of this Partially Recirculated Draft Environmental Impact Report (PR-DEIR) is to provide additional information and analysis to decisionmakers and the general public of changes to project plans and the potential hazard and hydrology environmental impacts resulting from the proposed development of the 2800 Casitas Avenue Project (Project). This additional information and analysis are based on further input from City Staff and comments received on the Draft EIR (DEIR) for the Project.

This PR-DEIR is limited to revisions to two sections of the DEIR: Section II, Project Description and Section IV.E, Hazards and Hazardous Materials¹, and the incorporation of a new chapter, Section IV.P, Hydrology/Water Quality, which was previously scoped out in the Initial Study. In response to feedback from the City of Los Angeles, Department of City Planning's Urban Design Studio, the Applicant proposed revisions to the proposed Site Plan and Building Elevations. In response to comments received by the Department of Toxic Substances Control (DTSC), the PR-DEIR provides revisions to Section IV.E, Hazardous Materials to apply DTSC's proposed draft risk attenuation factor for human health risk assessments. Also in response to comments on the DEIR, Section IV.P, Hydrology/Water Quality has been added to the PR-DEIR to address in greater detail the potential for flooding on the Project Site.

CEQA Guidelines Section 15088.5(c) states that if the revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified. The modifications to the Site Plan/Elevations and the revisions to the Hazardous Materials Section and Hydrology/Water Quality Section are limited in scope and would not affect or materially alter the environmental analyses associated with other EIR topics. Nothing in the PR-DEIR provides any evidence of a new or substantially increased significant impact with respect to other EIR topics. Therefore, no revisions to the other sections of the DEIR are required.

2. Overview of the Environmental Review Process

a) Notice of Preparation/Scoping Meeting

In compliance with Section 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was prepared by the Department of City Planning and distributed to the State Clearinghouse, Office of Planning and Research (OPR), responsible agencies, and other interested parties on February

¹ This Section was formerly referred to as Section IV. E, Hazardous Materials/Risk of Upset in the DEIR. The name of the Section changed in this PR-DEIR to be consistent with Appendix G of the State CEQA Guidelines.

16, 2017. The NOP and Notice of a Public Scoping Meeting was circulated for public review and comments for a 30-day period beginning on February 16, 2017 and ending on March 16, 2017. Appendix A to the DEIR contains a copy of the NOP and the CEQA Initial Study Environmental Checklist, respectively.

The public scoping meeting was held on March 1, 2017, to obtain the public's initial views about environmental issues that should be evaluated in the DEIR in connection with the proposed Project. Agency and public response letters to the NOP and Initial Study Checklist are contained in Appendix B to the DEIR.

b) Notice of Completion/Availability of the DEIR

On January 30, 2020, the Department of City Planning published and circulated the Notice of Completion and Availability (NOC/NOA) of the DEIR. The NOC/NOA was distributed to the State Clearinghouse, Office of Planning and Research, and mailed to responsible agencies, owners and occupants residing within a 500-foot radius of the Project Site, and other interested parties in accordance with the City's policies for publication of DEIRs. The DEIR was made available in electronic pdf format on the Department of City Planning's web site. Copies of the DEIR were also made available on CD Rom at the following City of Los Angeles Public Library Branches:

- 1) Silver Lake Branch Library, 2411 Glendale Boulevard
- 2) Atwater Village Branch Library, 3379 Glendale Boulevard
- 3) Cypress Park Branch Library, 1150 Cypress Avenue

The public review period began on January 30, 2020 and was noticed to end on March 16, 2020.

c) Notice of Extension

On February 14, 2020, the Department of City Planning, as lead agency, published and circulated a revised Notice of Extension to the public review period for the DEIR. No changes to the DEIR were made. The Department of City Planning extended the public review period in response to community requests and because the DEIRs provided to the libraries on CD-ROM were incompatible with the public computers that were available at each of the branch libraries. As a result, both hardcopies and thumb drives of the DEIR and DEIR Technical Appendices were provided to the branch libraries identified above, and the public review period was extended to March 30, 2020. The NOC/NOA Notice of Extension was sent to the State Clearinghouse, OPR, and mailed to responsible agencies, owners and occupants residing within a 500-foot radius of the Project Site, and other interested parties in accordance with the State CEQA Guidelines Section 15105 and the City's policies for publication of DEIRs.

d) Second Notice of Extension

On March 26, 2020, the Department of City Planning published and circulated a Second Extension to the NOC/NOA review period for the DEIR, extending the review period to April 13, 2020. The Second Notice of Extension was provided in response to the unanticipated closure of all non-essential businesses and governmental offices, including the City of Los Angeles Public Library branches due to the Covid-19 pandemic. On March 19, 2020, Mayor Garcetti issued the Safer at Home Public Order Under the City of Los Angeles Emergency Authority, ordering all businesses within the City of Los Angeles to cease operations that require in-person attendance by workers at a workplace, and ordering all persons living within the City of Los Angeles to remain in their homes.

II. Revised and Recirculated Portions of the DEIR

1. Introduction

In response to various comments on the proposed Project received from the City of Los Angeles (Lead Agency), and numerous public comment letters to the DEIR, several modifications have been made to the site plan and project design. The proposed changes do not impact the overall size or intensity of uses for the purposes of analysis in the DEIR, but instead are modifications to improve overall design and operation of the proposed Project.

In summary, Site Plan revisions involve moving the commercial and common use residential spaces from areas adjacent to the Los Angeles River and instead toward the proposed Project entry on Casitas Avenue, thereby consolidating the main restaurant/café, residential fitness center, and multi-purpose residential amenity spaces, including a new second floor outdoor terrace, in a single location near the leasing office on the north side of Building B and adding residential amenity space to the ground floor of Building A. A new ride-share pick-up/drop-off zone is also proposed at the entry of the proposed Project near Casitas Avenue on the south side of Building A. All back of house services for the Project (loading, trash, utilities) have, in turn, been relocated to the interior of the Project Site and away from the Project entry.

The main restaurant/café for the project has been relocated from the southwestern corner of Building B to the north entry of Building B fronting Casitas Avenue to activate the enhanced main entry, and will include outdoor seating. Since the proposed Project entry is also adjacent to the primary right-of-way entrance to the future Bowtie State Park, concentrating the commercial and common residential amenity spaces near the Casitas Avenue entry would thus enhance and activate the pedestrian experience for future residents and park visitors. This shift in the location of the restaurant is in response to comments about the proposed Project's design layout and operational concerns related to deliveries, trash and overall access related to the original location.

The proposed Project now incorporates limited on-site circulation specifically for trash, loading, deliveries, and ride-share services that did not previously exist. All trash, loading and deliveries previously located at the north side of Building A fronting Casitas Avenue are now focused on the interior of the site within Building A adjacent to the parking structure, away from public view and away from the main entry to the proposed Project.

In response to concerns about the massing of the buildings, the plans have been designed to limit building mass fronting the future Bowtie State Park, located adjacent to and east of the Project Site, to the extent feasible. The northerly portion of Building B, adjacent to the entry at Casitas Avenue, features a building step back of approximately seven feet from the edge of the building to further set the building mass back. Additionally, in response to concerns about the mass of the

buildings fronting the future park, Building B has been redesigned so that the corners of the building fronting the Bowtie State Park tier down from five stories down to three stories at each end, with new open space terraces at the corners.

Architecturally, the northerly façade of Building B has been articulated with balconies in lieu of the original flat façade. Public art opportunities such as a mural and/or art sculpture have been incorporated into the easterly elevation of Building B, as well as the westerly elevation of the parking structure where visible from State Route (SR2), also known as the 2 Freeway.

All of these refinements to the Project design in the plans are intended to create varied facades, eliminate blank surfaces, and reduce building mass, specifically for the portion of the project facing the future Bowtie State Park.

The following Section includes a reprint of Section II, Project Description, 4. Description of the Project and 5. Project Construction and Scheduling, with the additions and deletions shown in redline (double underline) and ~~strikeout~~ text to identify where modifications have been made to the Project Description. Where figures have been updated both the prior figures are shown (marked deleted) and the new figures are shown (marked revised).

II. Project Description

4. Description of the Project

a) Project Overview

The proposed Project includes the demolition of the existing 117,000-square-foot warehouse/production building on the approximately 5.7-acre (248,190 square feet) Project Site, and the construction of a mixed-use development that would consist of five buildings with a maximum height of 85 feet. The proposed Project would provide up to 419 multi-family residential units and up to 64,000 square feet of commercial space. The commercial space would include a mix of restaurant uses, office space, and a rooftop urban farm. The Project's residential and commercial uses would comprise up to 487,872 square feet of total floor area. A seven-story parking garage (Building G), adjacent to Building A, would provide approximately 720 parking spaces for the Project's residential and commercial uses (refer to Figure II-4, Proposed Plot Plan, below). The parking spaces would be provided in levels one through six, and an urban farm is proposed on the roof (seventh) level. Open space and recreational amenities would comprise approximately 58,176 square feet. A summary of the proposed Project with the proposed unit mix and floor area is provided in Table II-1, Summary of Proposed Land Uses. Figure II-4, Proposed Plot Plan [Revised], shows the general layout of the proposed Project. Figure II-5 [Revised] shows the floor plan and landscape plan for the ground floor. Figure II-6 [Revised] shows the typical floor plan and typical landscape plan for the upper levels.

(1) Residential Uses

The proposed Project would provide up to 419 multi-family residential apartment units, including a combination of studio, 1-bedroom, and 2-bedroom units. A summary of the Project is provided in Table II-1, below. Eleven percent of the base-density residential units (35 dwelling units) would be reserved as Very Low Income units.²

² Pursuant to Section 22.471.1, Very Low Income Units are defined as a household whose income does not exceed 50% of the Los Angeles area Standard Metropolitan Statistical Area (SMSA) median income as established by the U.S. Department of Housing and Urban Development (HUD) and is adjusted for family size.



Figure II-4
Proposed Plot Plan [REVISED]



Source: Rios Clementi Hale Studios, September 15, 2020.

Figure II-5
Ground Floor Plan and Landscape Plan [REVISED]



Source: Rios Clementi Hale Studios, June 22, 2018.

Figure II-6
Typical Upper Level Floor Plan and Typical Upper Level Landscape Plan [DELETED]

**Table II-1
Summary of Proposed Land Uses**

Land Uses	Dwelling Units	Floor Area (Square Feet)
<i>Residential</i>		
Studio Units	119 du	--
One-Bedroom Units	220 du	--
Two-Bedroom Units	80 du	--
Residential Subtotal	419 du	423,872 sf^a
<i>Commercial</i>		
General Office	--	19,000
Restaurant	--	3,000
Urban Farm	--	42,000
Commercial Subtotal	--	64,000 sf
TOTAL	419 du	487,872 sf
<i>Notes: du = dwelling unit; sf = square feet</i> ^a <i>Includes residential amenity space</i> <i>Source: Rios Clementi Hale Studios, September 29, 2016 September 15, 2020.</i>		

(2) Commercial Uses

The proposed Project includes up to 64,000 square feet of commercial uses, including 19,000 square feet of general office, 3,000 square feet of restaurant space (including a beer garden), and an approximate 42,000-square-foot urban farm. The proposed commercial office space is proposed to be located on the ground floor of Building A, which is planned as a mixed-use building with residential units above the first level. The restaurant spaces would be located on the ground floor of Buildings B, oriented towards the proposed Project's entryway fronting Casitas Avenue, and Building D, oriented towards the Los Angeles River. No commercial uses are proposed in Building C.

The proposed urban farm would occupy the seventh (roof) level of Building G and would include an enclosed greenhouse space for production of sustainable agriculture. The concept of the urban farm is to provide for sustainable agriculture production within infill development sites. The urban farm would provide locally sourced, non-GMO, pesticide-free vegetables and herbs for the local restaurant and retail produce markets. The urban farm would utilize ecologically sustainable methods in a 100-percent solar energy-powered, climate-controlled urban greenhouse.

A summary table describing the attributes and characteristics of the proposed Project is provided in Table II-2, Summary of Proposed Development Program, below.

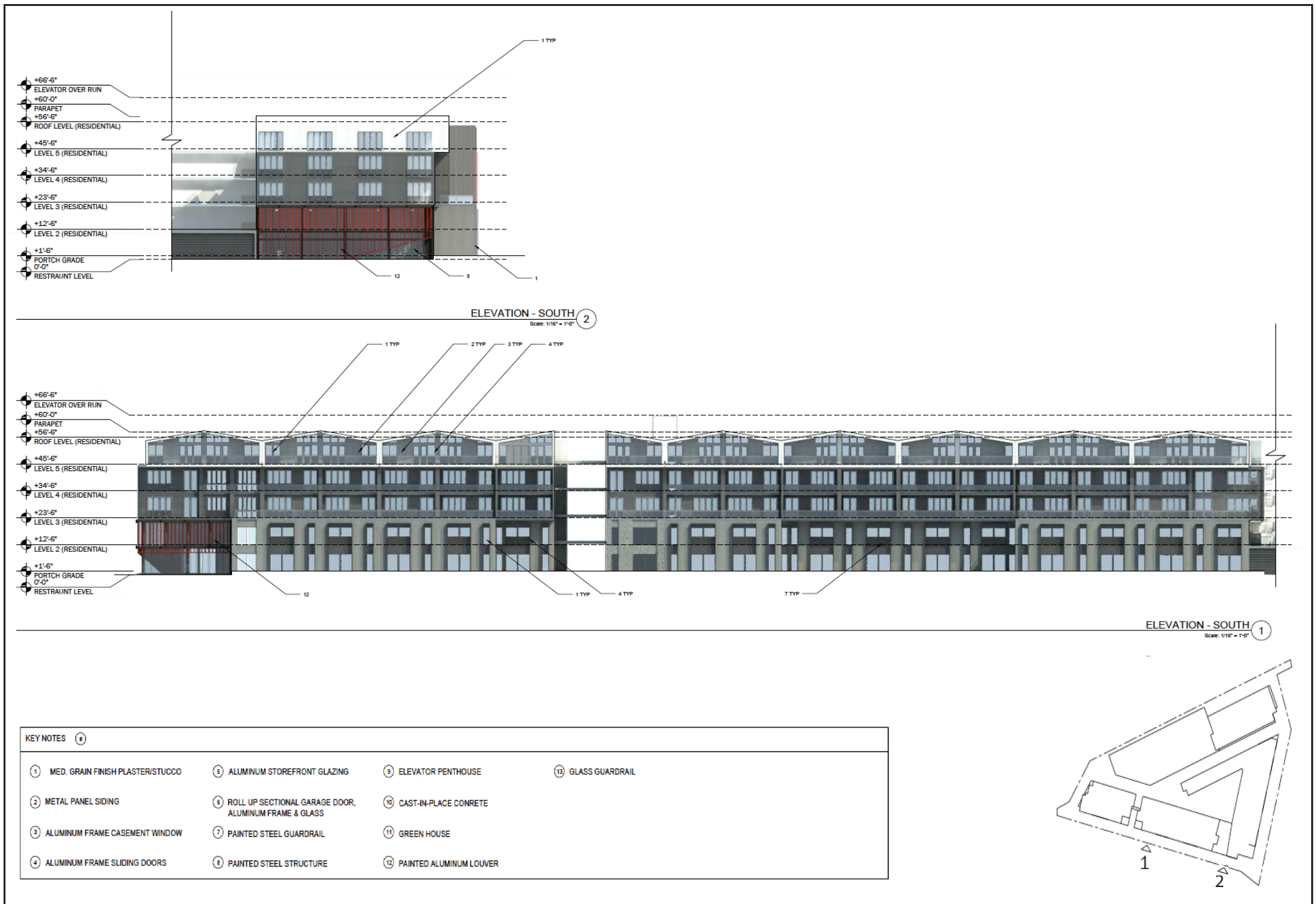
Table II-2
Summary of Proposed Development Program

Project Characteristics	Required/Allowed By Code	Proposed Project
Project Site Lot Area	--	248,190 (5.7 acres)
Proposed Floor Area	502,584 ^a	487,872 square feet
Floor Area Ratio (FAR)	2.02 (1.5 base FAR plus 35%)	2.0:1
Maximum Building Height	unlimited	85 feet
Open Space	43,900 square feet	58,176 square feet
Vehicle Parking Spaces	627 stalls	720 stalls
Bicycle Parking Spaces	476 spaces	476 spaces
^a Based on an allowable FAR of 1.5:1 and a 35% increase pursuant to the Density Bonus incentive allowed under LAMC Section 12.22.A.25.		

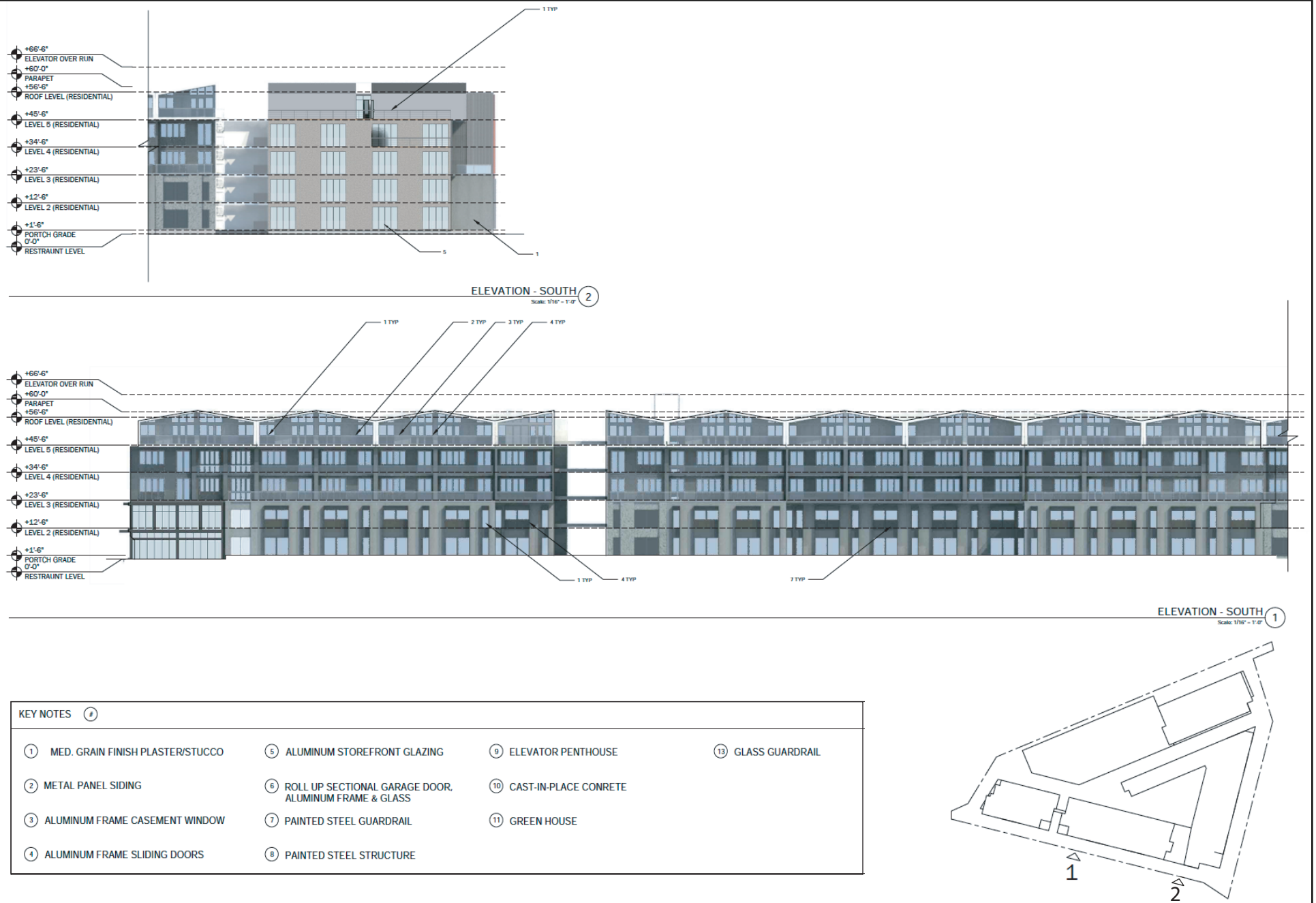
b) Building Design and Architecture

Architectural materials for the proposed buildings include medium grain finish plaster (stucco), concrete fiberboard panel siding, aluminum frame casement windows, aluminum frame sliding doors, aluminum storefront glazing, roll up sectional garage door, glass, painted steel guardrail and design features, and cast-in-place concrete.

Building elevations depicting the south façade of Buildings C and D are shown in Figure II-7 Building C and Building D Elevations [Revised] on page II-14. As shown in Figure II-7, Building C and Building D Elevations [Revised], Buildings C and D are proposed to be a maximum height of 60 feet above grade (with the elevator overrun at a height of 66.5 feet). Buildings C and D are connected with pedestrian walkways at Levels 2 through 5. East and north elevations for Building B are shown in Figure II-8, Building B elevations East and North [Revised] on page II-15. As shown in Figure II-8 [Revised], Building B is proposed to be a maximum height of 60 feet above grade (with the elevator overrun at a height of 66.5 feet). Figure II-9 on page II-16 depicts the courtyard elevations between Buildings B and C for the south-, east-, and north-facing facades. Podium elevations for Buildings A and G are shown in Figure II-10, Podium Elevations – West and North [Revised] on page II-17. As shown in Figure II-10 [Revised], the height of Building A is proposed to be 77 feet above grade to the top roof level, with a parapet height of 81 feet above grade and an elevator overrun extending to a height of 85 feet above grade. The top of the roof of the urban farm/greenhouse located on top of the 7-level garage building is 85 feet above grade. The south podium elevations are depicted in Figure II-11, Podium Elevations – South [Revised], on page II-20. Cross sectional elevations of the proposed buildings are shown in Figure II-12, Site Sections of the Proposed Buildings [Revised], on page II-20. Illustrative renderings depicting the views from the southeast corner of the Project Site (depicting Buildings B, C, and D) and the northeast corner of the Project Site (depicting Buildings A and B) are shown in Figure II-13, Illustrative Renderings [Revised] on page II-21.

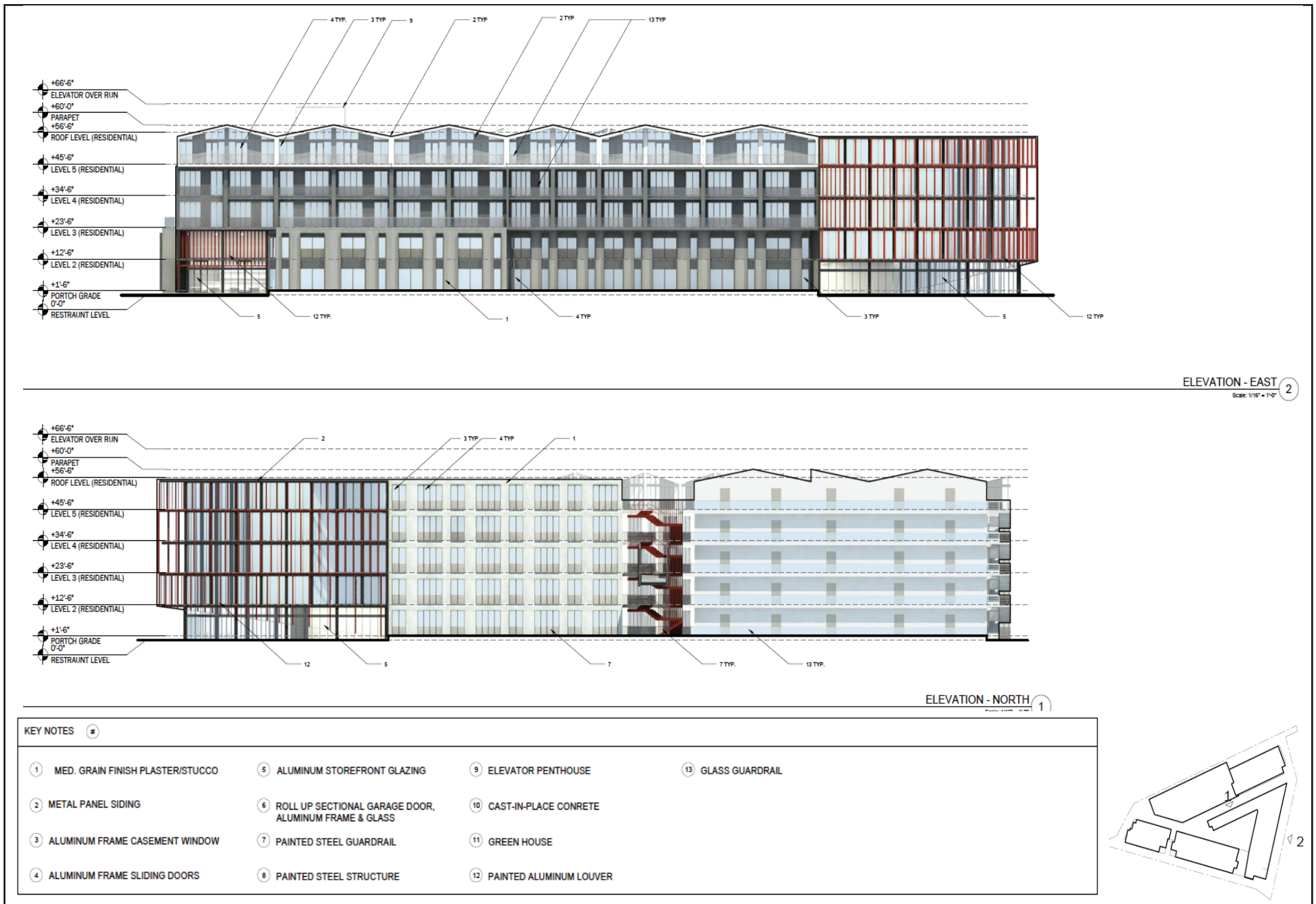


Source: Rios Clementi Hale Studios, June 22, 2018.

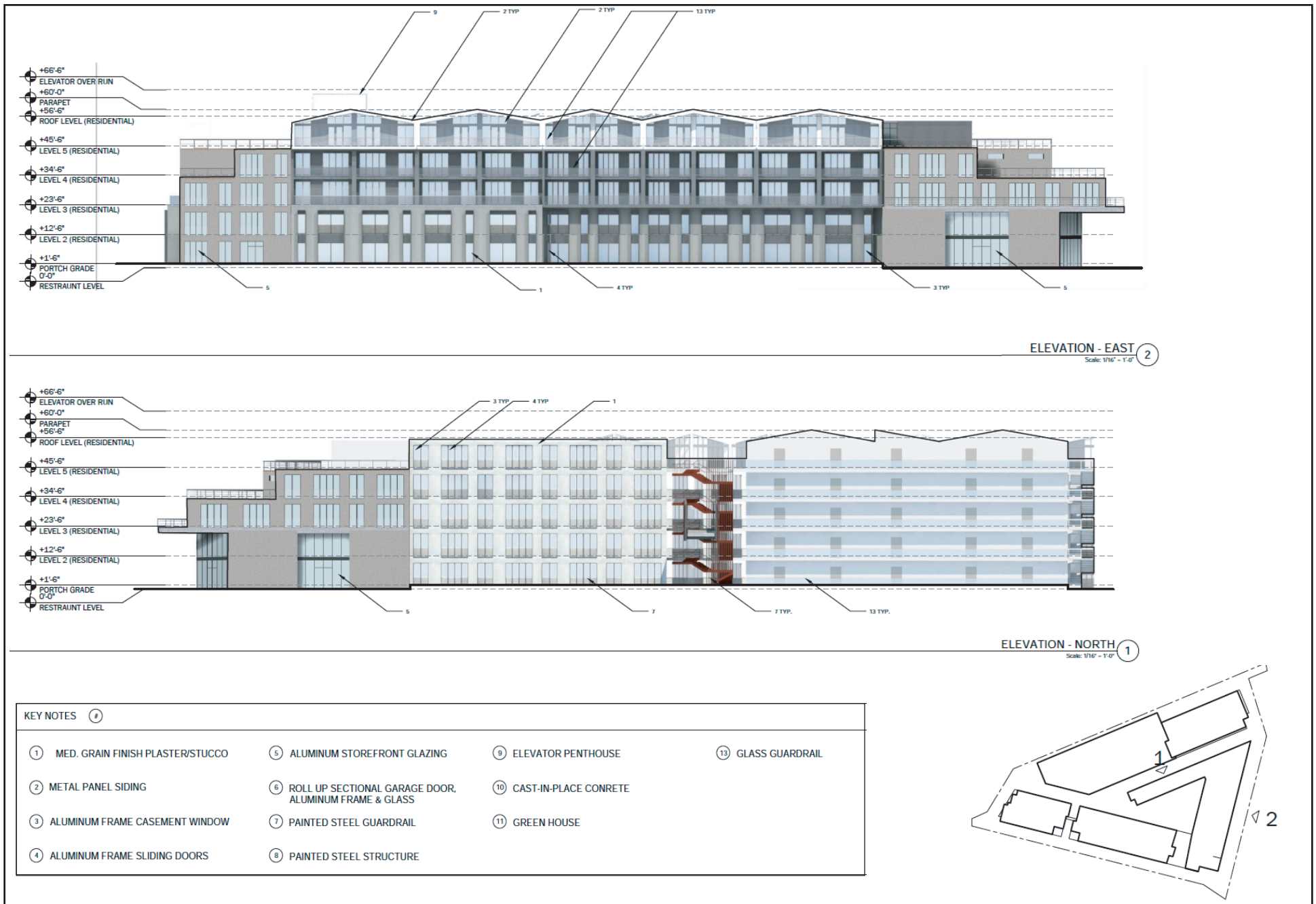


Source: Rios Clementi Hale Studios, September 15, 2020.

Figure II-7
Building C and Building D Elevations - South [REVISED]

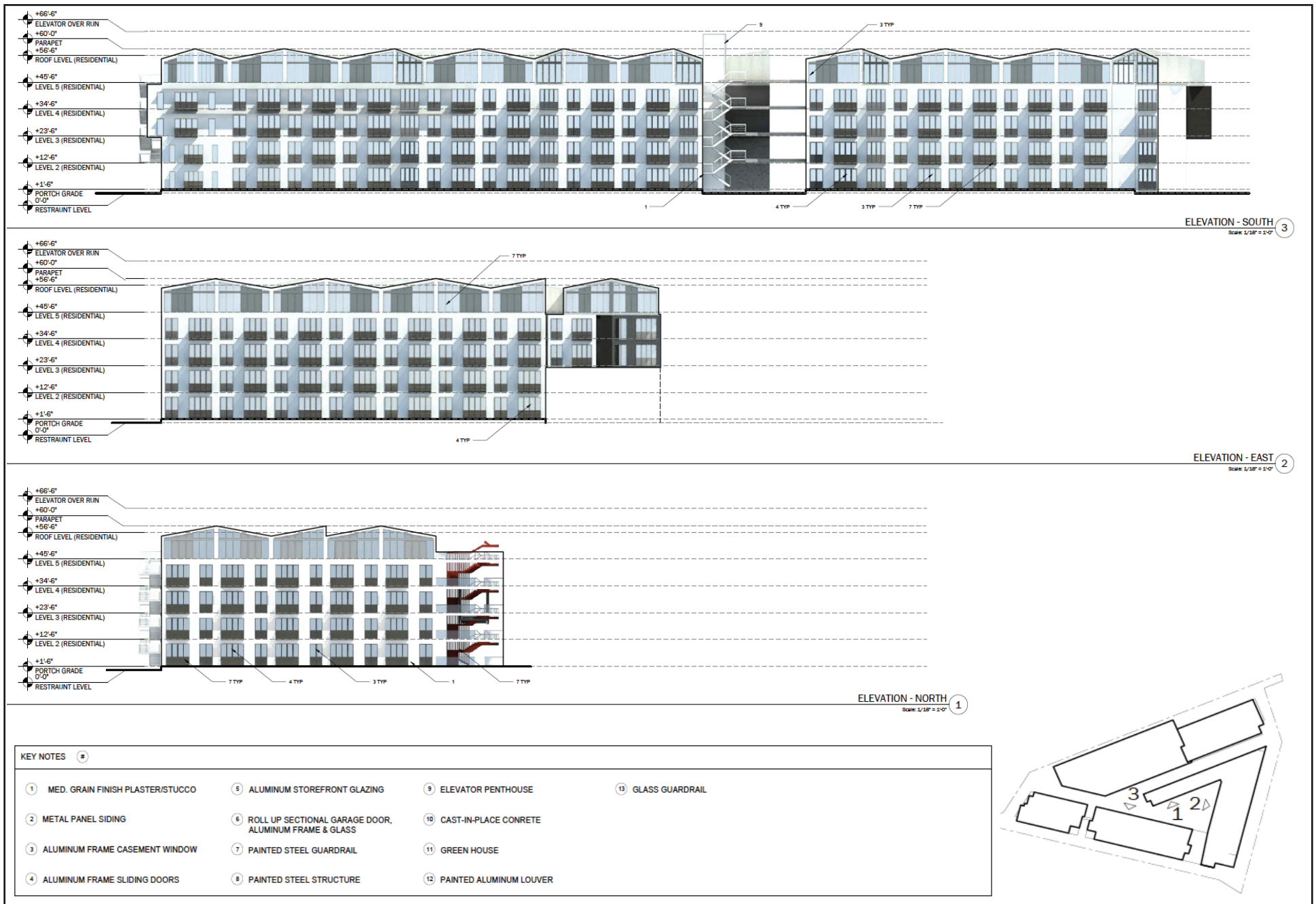


Source: Rios Clementi Hale Studios, June 22, 2018.

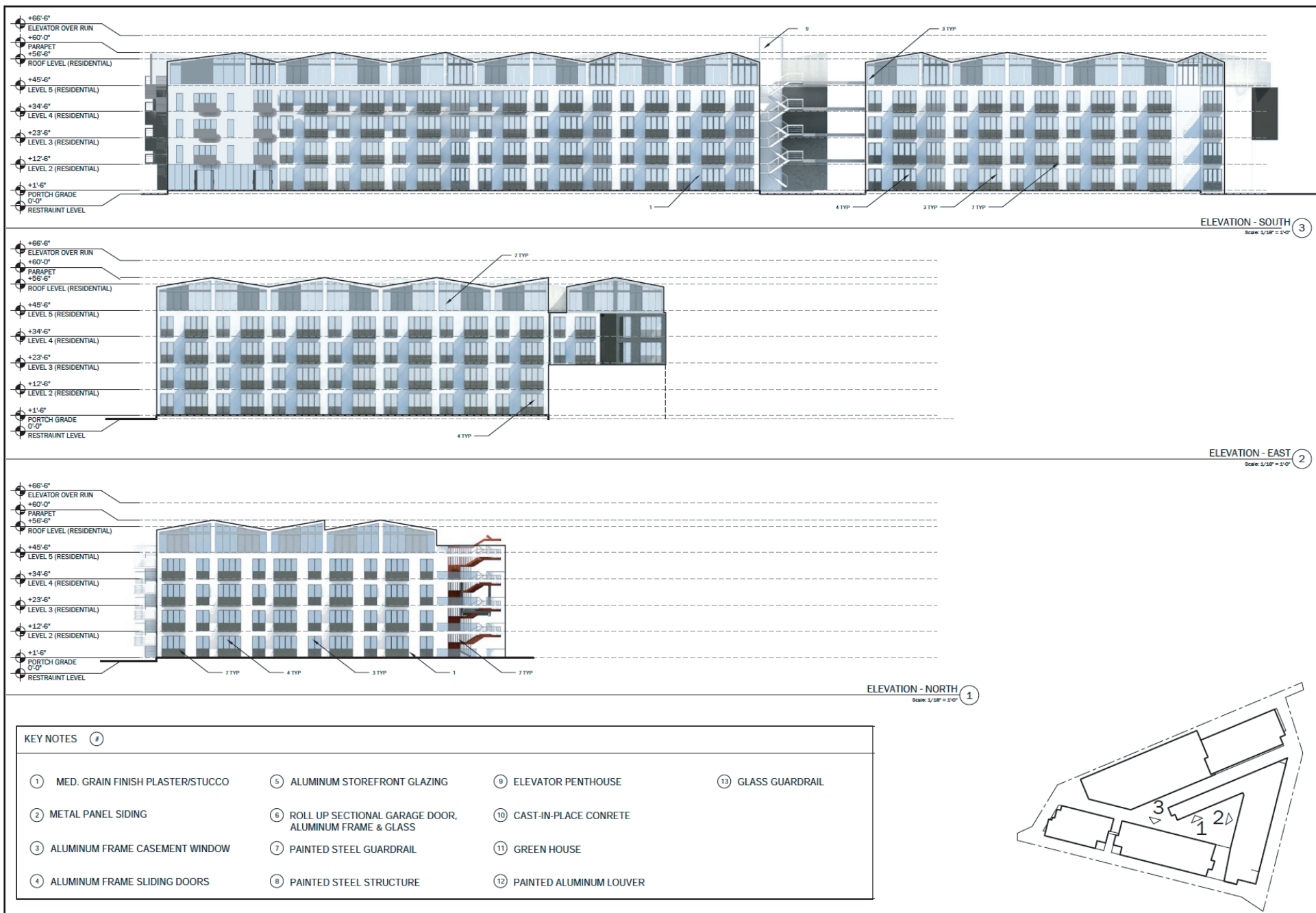


Source: Rios Clementi Hale Studios, September 15, 2020.

Figure II-8
Building B Elevations - East and North [REVISED]

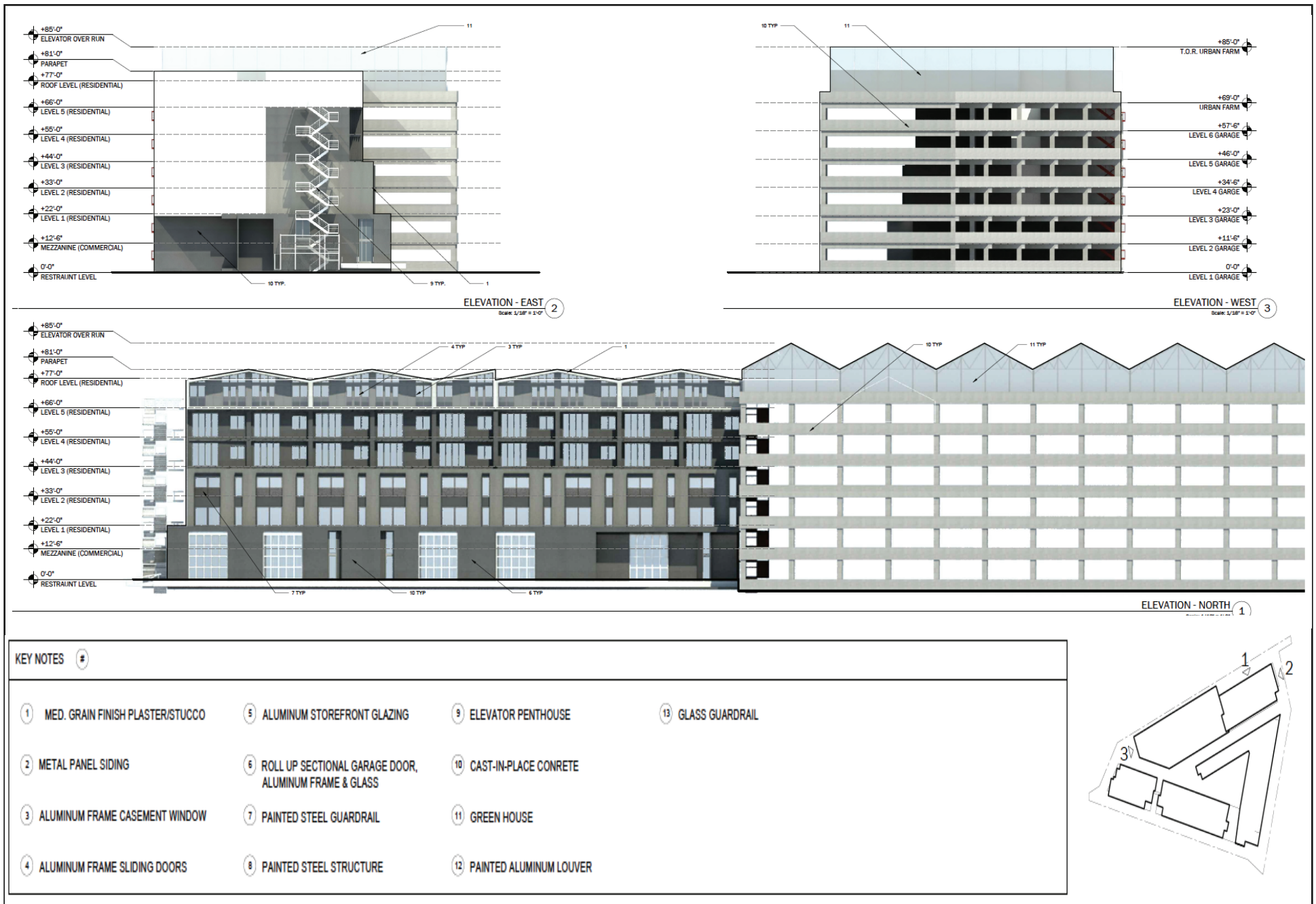


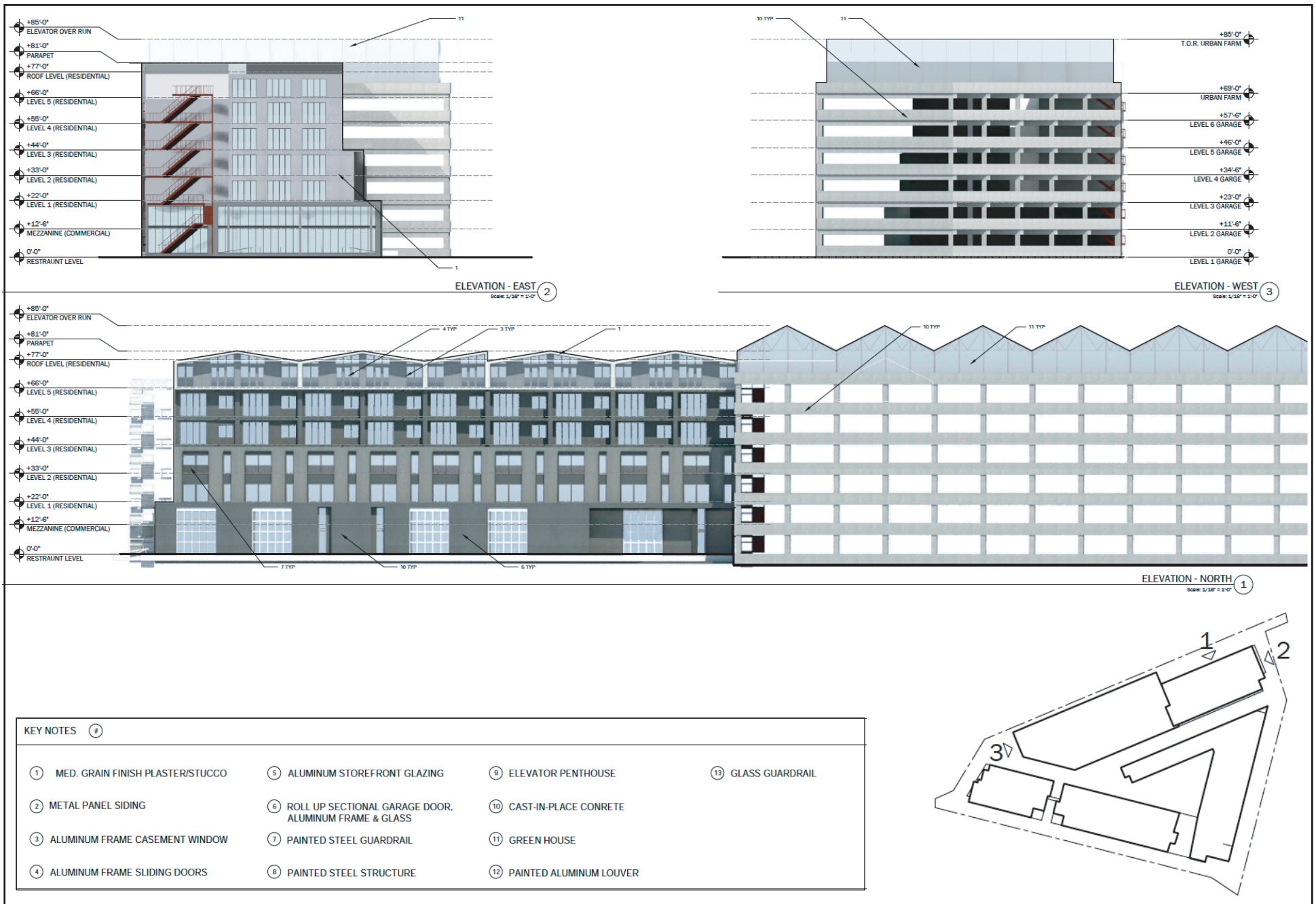
Source: Rios Clementi Hale Studios, June 22, 2018.



Source: Rios Clementi Hale Studios, September 15, 2020.

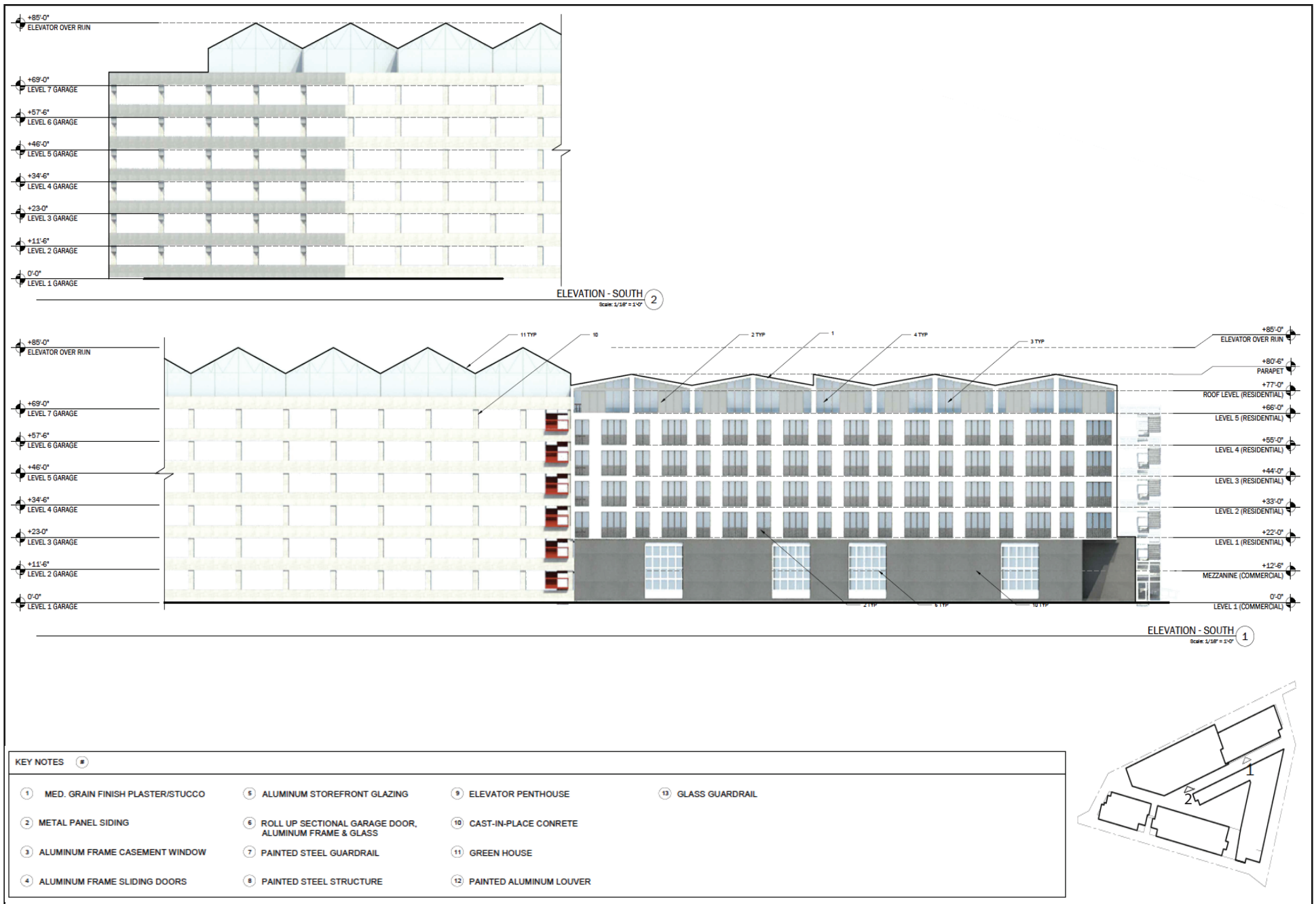
Figure II-9
Courtyard Elevations - South, East and North [REVISED]



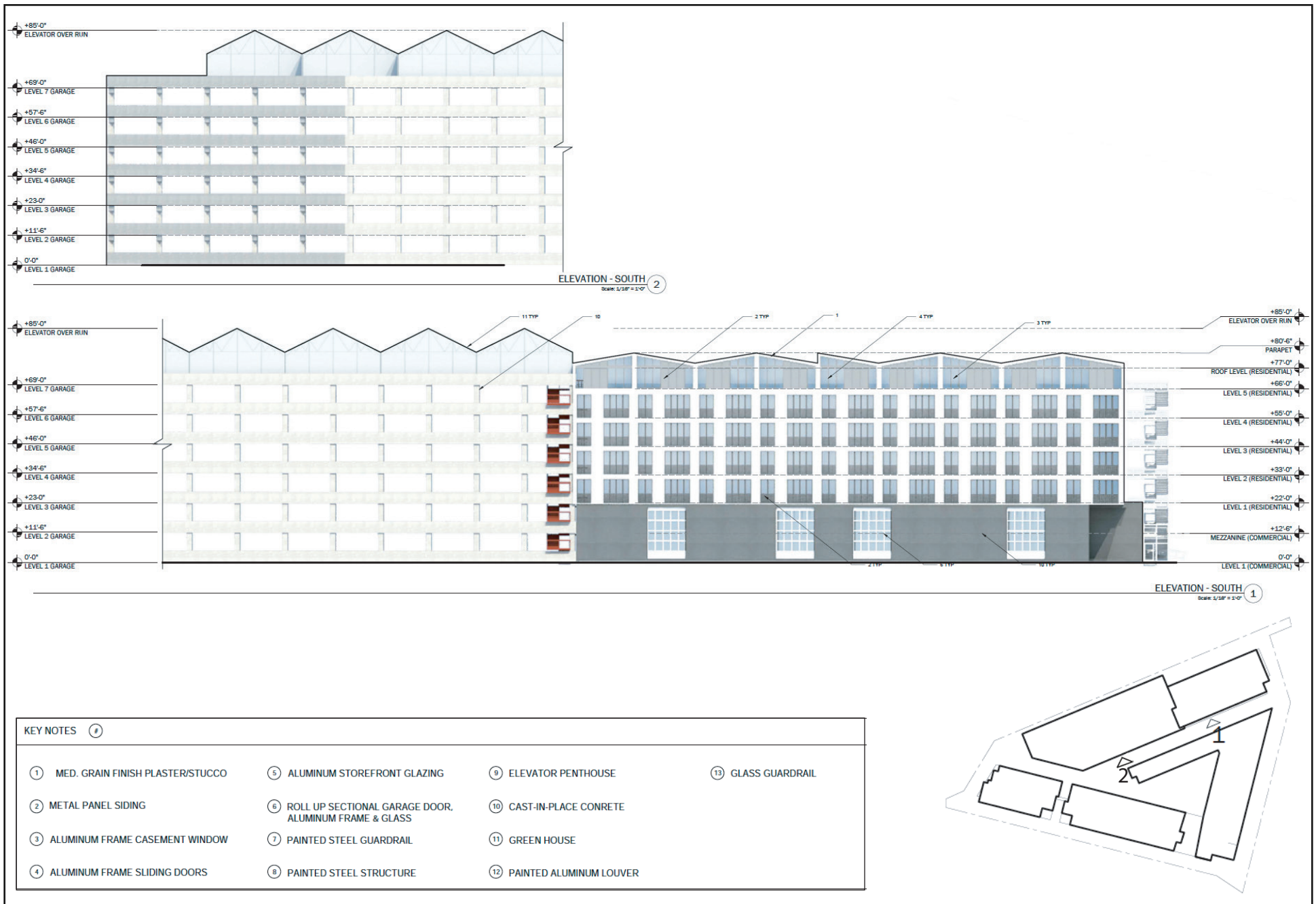


Source: Rios Clementi Hale Studios, September 15, 2020.

Figure II-10
Podium Elevations - West and North [REVISED]

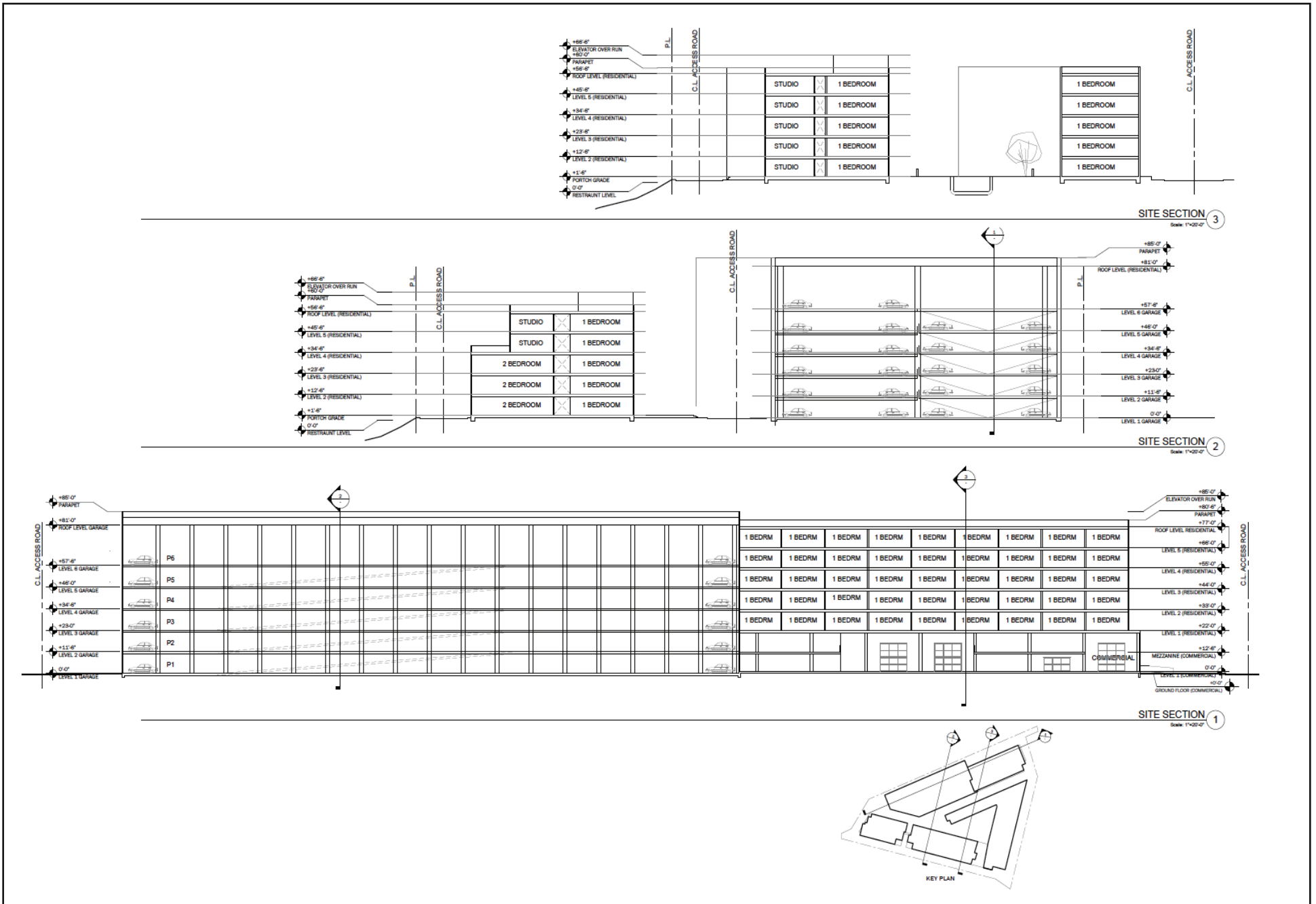


Source: Rios Clementi Hale Studios, June 22, 2018.

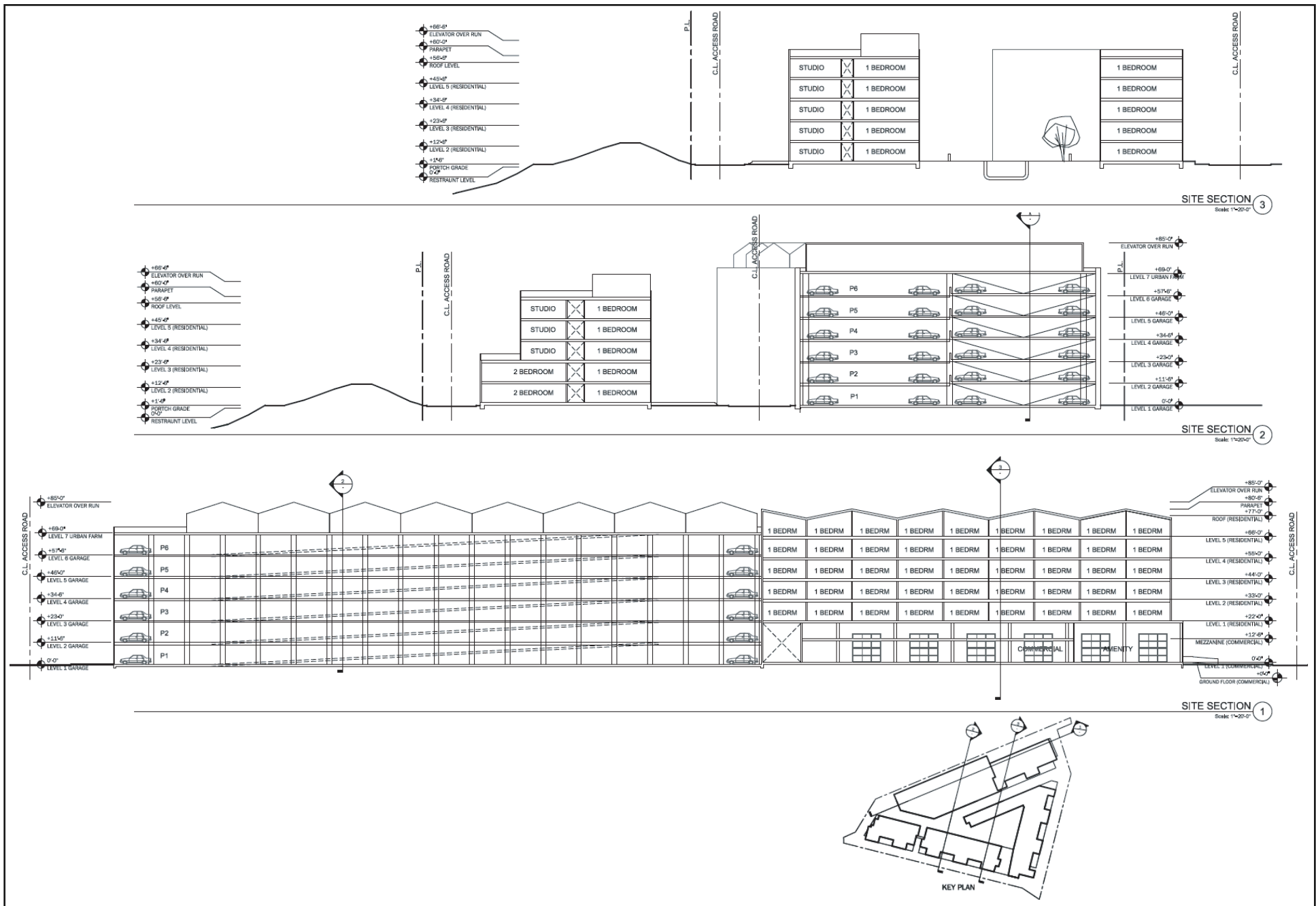


Source: Rios Clementi Hale Studios, September 15, 2020.

Figure II-11
Podium Elevations - South [REVISED]



Source: Rios Clementi Hale Studios, June 22, 2018.



Source: Rios Clementi Hale Studios, September 15, 2020.

Figure II-12
Site Sections of the Proposed Buildings [REVISED]



View from the southeast corner of the Project Site, looking west at Buildings B, C, and D.



View from the northeast corner of the Project Site, looking southwest at the Buildings A and B.

Source: Rios Clementi Hale Studios, June 22, 2018.



View from the southeast corner of the Project Site, looking west at Buildings B, C, and D.



View from the northeast corner of the Project Site, looking southwest at the Buildings A and B.

Source: Rios Clementi Hale Studios, September 15, 2020.

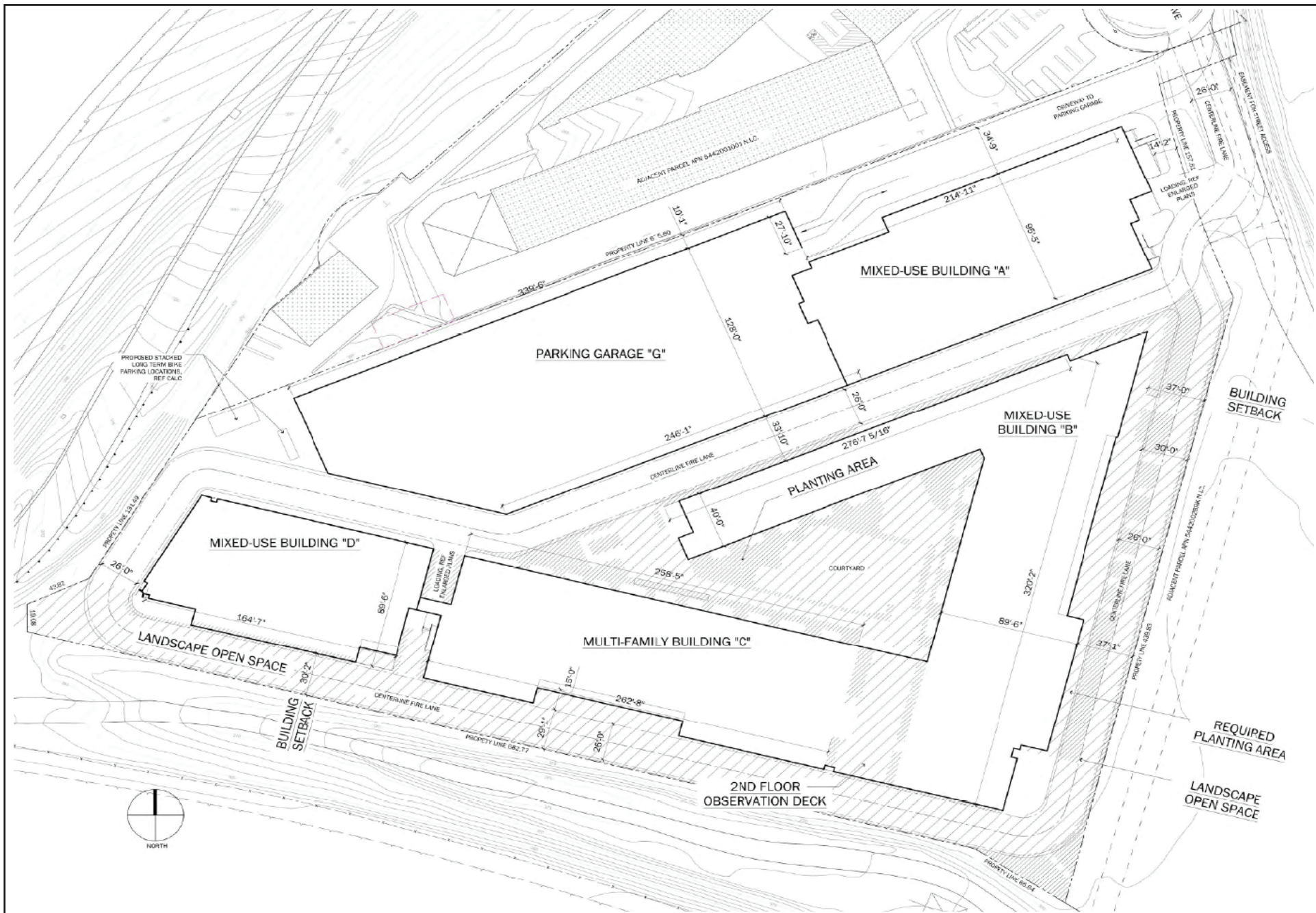
Figure II-13
Illustrative Renderings [REVISED]

c) Open Space and Recreational Amenities

The proposed Project would include 58,176 square feet of open space. The open space requirements and amount of open space proposed for the proposed Project are summarized in Table II-3 below. As shown, the proposed Project exceeds the amount of open space required by the LAMC by approximately 14,276 square feet.

As illustrated in the landscape plans, depicted in Figure II-5 [Revised] and Figure II-6 [Revised], above, the proposed Project would feature a variety of trees, shrubs, vines, and perennials. Proposed landscaping would also feature a variety of ornamental streetscape and common area landscaping. The Project would include a communal patio, pool deck, lounge seating, outdoor barbeque, amenity deck, and community room space. Pursuant to the minimum tree requirements specified in LAMC Section 12.21-G,2 (i.e., 1 tree per every 4 dwelling units), the Project would require a minimum of 105 trees. The proposed Project would include 140 trees. As shown in Figure II-5, Ground Floor Plan and Landscape Plan [Revised], and Figure II-6, Typical Upper Level Floor Plan and Typical Upper Level Landscape Plan [Revised], the landscaping features would be provided at grade, on the porch levels (private balconies), on the upper deck on balconies, and in the common open space areas.

The proposed open space plan is depicted in Figure II-14 [Revised] on page II-22. Additional building elevations depicting the Project with the proposed landscaping features are shown in Figure II-15, Landscape Exterior Elevations [Revised], and Figure II-16, Landscape Courtyard Elevations [Revised], on pages II-23 and II-24, respectively.



Source: Rios Clementi Hale Studios, June 22, 2018.



Figure II-14
Open Space Plan [REVISED]



Source: Rios Clementi Hale Studios, June 22, 2018.



Source: Rios Clementi Hale Studios, September 15, 2020.

Figure II-15
Landscape Exterior Elevations [REVISED]



Source: Rios Clementi Hale Studios, June 22, 2018.



Source: Rios Clementi Hale Studios, September 15, 2020.

Figure II-16
Landscape Courtyard Elevations [REVISED]

**Table II-3
Required and Proposed Open Space Calculations**

Open Space Code Requirements			
Type	Number of Units	Square Feet Required ^a	Total Square Feet Required
Less than three habitable rooms (studio units and 1-bedroom units)	339	100 sf / du	33,900
Three habitable rooms (2-bedroom units)	80	125 sf / du	10,000
TOTAL			43,900
Open Space Areas		Area Proposed (Square Feet)	
Ground Level		35,478	
Porch Level		18,888	
Second Level		3,810	
TOTAL OPEN SPACE PROPOSED		58,176	
^a LAMC Section 12.21-G,2 Source: Rios Clementi Hale Studios, September 29, 2016 September 15, 2020.			

d) Signage and Lighting

The proposed Project would provide site identification and tenant signage for the commercial land uses and way-finding signage in accordance with the requirements of the LAMC. Interior spaces and exterior walkways, accessways, open space areas, and fire lanes would be illuminated with low-level and directional lighting fixtures to provide for safe and secure pedestrian lighting environment. Lighting and illumination would conform to the illumination standards of the LAMC. Lighting fixtures would be designed and installed to ensure the direct light source cannot be seen from adjacent residential properties and/or the public right-of-way.

e) Access, Circulation, and Public Transportation

Vehicular access to the Project Site would be provided by a full-access driveway off of Casitas Avenue, which would allow ingress and egress to and from the parking structure on-site. A ~~separate driveway for loading would be located on the east side of Building A to allow delivery trucks to temporarily park on the Project Site. All loading, deliveries and trash receptable areas would occur within the interior of Building A adjacent to the proposed parking structure (i.e., Building G), away from public view and the main entry to the Project.~~ A designated fire lane would traverse the Project Site connecting from the northeast corner to the southwest corner of the Project Site; the fire lane would then run along the southern and eastern property lines of the Project Site where it connects back to Casitas Avenue. The fire lane along the southern and eastern property lines would also serve as a bike path and landscaped area for pedestrian use.

(1) Parking

The proposed Project would provide approximately 720 parking spaces, all located within the proposed parking structure (Building G), which includes residential and commercial designated parking spaces. With approximately 720 parking spaces provided on-site, the proposed Project would provide 93 more spaces than the minimum spaces required by the LAMC. The proposed parking inventory would provide 1.4 spaces per dwelling unit to meet the proposed Project's anticipated parking demand. A summary of the proposed Project's required and proposed parking spaces are provided in Table II-4, below.

Table II-4
Summary of Required and Proposed Vehicle Parking Spaces

Description	Quantity	Parking Required by Code ^a		Parking Provided
		Rate	Spaces	
Residential				
For each Residential Unit of 0-1 bedroom	339 du	1 space / du	339	--
For each Residential Unit of 2-3 bedrooms	80 du	2 spaces / du	160	--
Residential Subtotal			499	--
Commercial ^b				
Commercial	64,000 sf	1 space / 500 sf	128	--
Commercial Subtotal			128	--
TOTAL			627	720
<i>Notes: du = dwelling unit, sf = square feet</i>				
^a LAMC Section 12.22-A, 25(d)(1).				
^b The Project Site is located within an Enterprise Zone, which requires a minimum of 1 space / 500 sf for all commercial uses.				
Source: Rios Clemente Hales Studios, September 29, 2016 September 15, 2020.				

The proposed Project would provide bicycle parking in accordance with the City's Bicycle Ordinance. As summarized in Table II-5, Summary of Required and Proposed Bicycle Parking Spaces, below, the proposed Project would be required to provide 476 bicycle spaces, which includes 427 long-term bicycle spaces and 49 short-term bicycle spaces. Bicycle parking spaces would be provided on the first level of the proposed parking structure (Building "G") and in outdoor bike parking areas located throughout the Project Site.

**Table II-5
Summary of Required and Proposed Bicycle Parking Spaces**

Description	Quantity	Bicycle Parking Requirements ^a		Total Spaces Required	Parking Provided
		Short Term	Long Term		
<i>Residential</i>					
Dwelling Units 1-25	25	2	25	27	27
Dwelling Units 26-100	75	5	50	55	55
Dwelling Units 101-200	100	10	50	60	60
Dwelling Units 201+	219	5	55	60	60
Subtotal Residential	419 du	22	180	202	202
<i>Commercial</i>					
Office (1 space /10K sf and 1 space/5K sf)	19,000 sf	2	2	4	4
Restaurant (1 space/2K sf)	3,000 sf	2	2	4	4
Urban Farm (1 space/10 K sf)	42,000 sf	4	4	8	8
Subtotal Commercial		8	8	16	16
TOTAL		30	188	218	218
<i>Notes: du = dwelling unit, sf = square feet</i>					
<i>^a Parking requirements pursuant to LAMC Section 12.22-A.25(d)(1).</i>					
<i>Source: Rios Clemente Hales Studios.</i>					

(2) Public Transportation

The Project area is currently served by a total of three local Metro transit service lines, including one Metro Rapid Bus line (794), four Metro Local Bus lines (90, 91, 94, and 96) and one Metro Circulator Bus line (603). Located north of the Project Site, Fletcher Drive carries one Metro Circulator Bus line (603). To the west of the Project Site, Riverside Drive carries one Metro Local Bus line (96). Located east of the Project Site, San Fernando Road carries three Metro Local Bus lines (90, 91, and 94) and one Rapid line (794). Walking distance to the nearest bus stop (Line 603) on Fletcher Drive is 0.25 miles. The nearest stop to lines 90,91,94, 603 and 794 on San Fernando Road are located approximately 0.5 mile walking distance from the Project Site. Line 96 on Riverside Drive is an approximately 0.87 mile walk from the Project Site. Additionally, the Project area is served by two inter-city transit operators, including Metrolink and Amtrak, as the Project Site is located approximately 1.6 miles south of the Glendale Metrolink and Amtrak station.

The proposed Project would support the use of public transit, pedestrian, and bicycle facilities by accommodating bicycle and pedestrian access through the Project Site and providing connectivity between Casitas Avenue, the pedestrian path along the Los Angeles River, and the Taylor Yard.

(3) Emergency Access

Primary access to the Project Site is available via a main access driveway on Casitas Avenue. This driveway serves as the primary and main point of access to the Project Site for all vehicles, including emergency vehicles. Due to the Project Site's limited access, the Los Angeles Fire Department (LAFD) has requested the Applicant to identify a secondary access point for emergency access and evacuation purposes. It is therefore anticipated that an emergency secondary access/egress to/from the Project Site will be required as a condition of Project approval. Because a secondary emergency access route would be subject to approval by local and/or state entities that own or control these off-site parcels, the Applicant would implement one of the following three potential emergency access options shown in Figure II-17 Secondary Emergency Access Options to satisfy this condition:

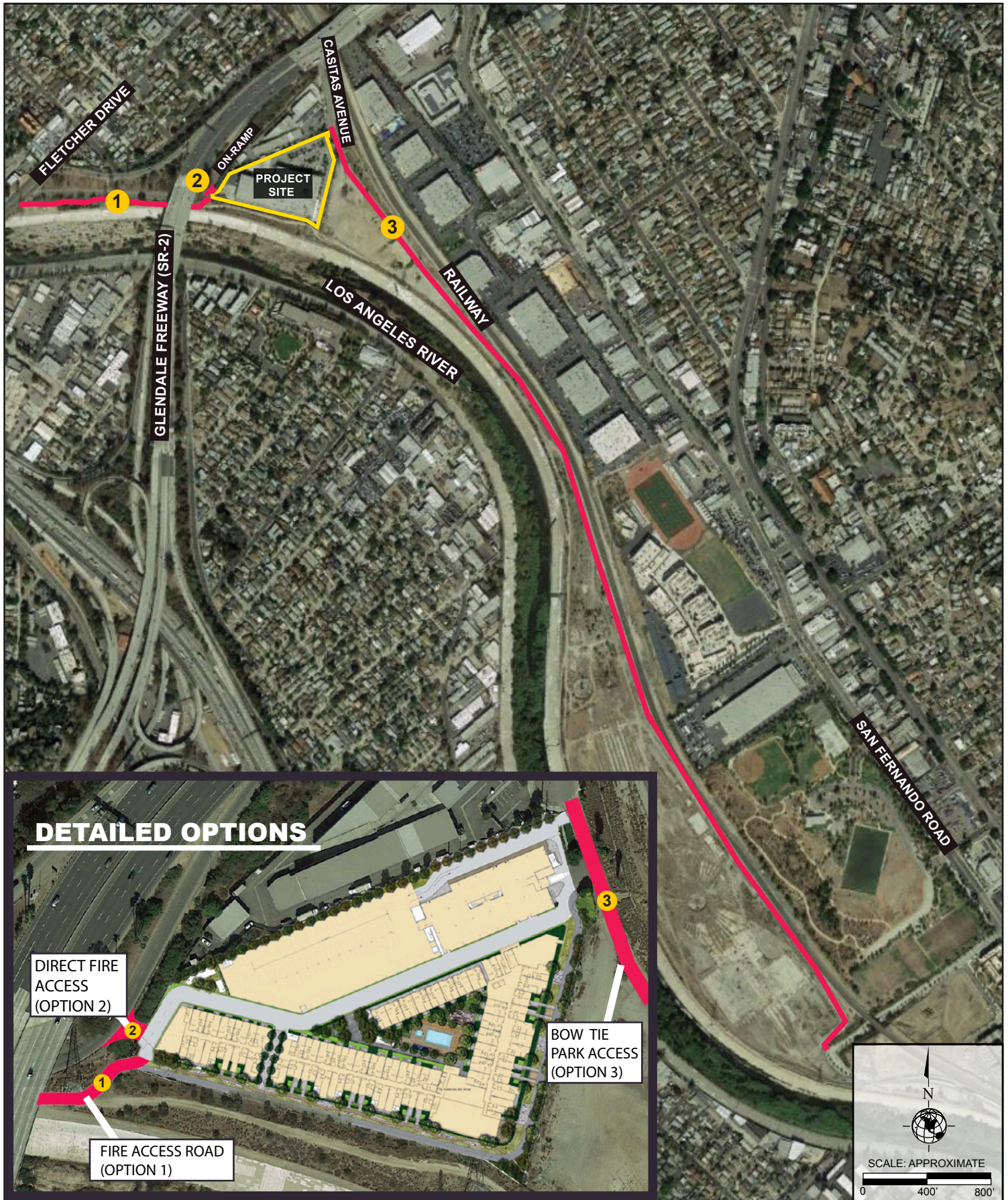
- Option 1: An emergency access gate from the west side of the Project Site connecting to the existing LADWP-owned easement improved with a paved service road on the east bank of the Los Angeles River Channel accessible via Fletcher Drive. ~~This option would require obtaining permission from LADWP, which owns this land (as shown in Figure II-17, Secondary Emergency Access Options);~~
- Option 2: An emergency access gate and driveway from the northbound on-ramp of SR-2, immediately north of an adjacent to the Project Site. ~~This option would require approval from Caltrans; and~~
- Option 3: An emergency access gate on the south side of Casitas Avenue providing access through the State Park property. This option would necessitate improving and paving an approximate 1.2-mile access road through a currently vacant site (which is planned for future parkland) ~~and would require obtaining the permission of the State Parks Department.~~

Each of the three options, which would require permissions by the respective local/state entities, are identified and delineated in Figure II-17 Secondary Emergency Access Options. The physical improvements associated with implementing each Option are described below.

Option 1 would require grading a portion of the DWP land to the west of the Project Site, paving an existing dirt access road over a distance of 0.22 miles northward to Fletcher Drive, and installing an emergency access gate and curb cut on Fletcher Drive.

Option 2 would require grading and paving an access road over a distance of approximately 100 feet adjacent to the western portion of the Project Site to connect to the SR2 on-ramp. This improvement would require a grading footprint of approximately 1,500 square feet of surface area, and the installation of an emergency access gate and curb cut on the SR2 on-ramp.

Option 3 would require off-site improvements to grade an existing partially paved access road over a distance of 1.2 miles southward from the Project Site through the future State and City



Source: Google Maps, 2016.

Figure II-17
Secondary Emergency Access Options

park. This improvement would require roadway paving over an approximately 126,000 square foot area. Using the subject roadway as a secondary fire access road will require adherence to the California Fire Code for Fire Apparatus Access Roads (which has been adopted by the City of Los Angeles), and the following actions: 1) existing gates must be removed and replaced with bollards that prevent any vehicle traffic other than emergency vehicles on the subject roadway; 2) the existing asphalt and sub-base may have to be replaced/resurfaced in sections in a poor state of repair; 3) the entire roadway must be made structurally capable of supporting the weight of a 75,000 pound fire truck; and 4) those segments of the roadway that are less than 20 feet in width must be widened to comply with the Fire Code.

f) Floor Area Ratio (FAR) and Setbacks

The Project Site includes a total of 248,190 gross square feet of lot area. The Project Site is located in Height District No. 1, which limits development to an FAR of 1.5:1 but has no restriction on building height. Pursuant to LAMC Section 12.2.1, the Project Site has an allowed floor area ratio (FAR) of 1.5 to 1. Since the proposed Project would reserve 11 percent of its residential units as Very Low Income housing units, the Project is eligible for a base FAR increase of 35 percent. As such, the Project would be allowed a maximum floor area of 502,584 square feet. The Project consists of up to 487,872 square feet of total floor area (up to 2.0:1 FAR). The proposed Project includes five buildings. Building A would include a maximum of five residential floors above a ground floor commercial level with mezzanine, and would be up to ~~84~~ 85 feet above grade to the top of the parapet. Buildings B, C, and D would include a maximum of five stories and would be up to 60 feet above grade to the top of the parapet. The parking garage and rooftop urban farm/greenhouse proposed in Building G would include seven stories with a building height of up to 85 feet above grade. The building elevations and cross sections of the proposed buildings are illustrated in Figure II-7 through Figure II-11.

Pursuant to the LAMC Section 12.17.1, setbacks for the residential portions of the proposed Project would be required to comply with setback requirements for the R4 Zone with the exception that no front yard setback is required. No front yard setback is required for a CM zone. The R4 Zone requires a minimum of a 5-foot side yard setback with an additional foot added to the width of each side yard for each additional story above the second story. The R4 Zone also requires a minimum of a 15-foot rear yard setback with an additional foot added to the width to of the rear yard for each additional story above three stories. Table II-6, provides a summary of the required and proposed setbacks for each building. As summarized in Table II-6, the proposed Project would be consistent with the yard requirements of the LAMC. The side yards and rear yards are used as a driveway, fire access lane, pedestrian path, bicycle path and landscaping. Therefore, the proposed Project would be consistent with setback requirements for the Project.

Table II-6
Summary of Required and Proposed Building Setbacks

Bldg.	Stories	Setback Required			Setback Provided		
		Front	Side	Rear	Front	Side	Rear
A	6	0'	5' + 4' = 9'	15' + 3' = 18'	14'	34'	> 350'
B	5	0'	5' + 3' = 8'	15' + 2' = 17'	50'	26' to 37'	26'
C	5	0'	5' + 3' = 8'	15' + 2' = 17'	> 250'	69'	26'
D	5	0'	5' + 3' = 8'	15' + 2' = 17'	> 250'	26'	30'
G	7	0'	5' + 4' = 9'	15' + 4' = 19'	228'	10' 1"	> 100'
<i>Source: Rios Clemente Hale, September 29, 2016.</i>							

5. Project Construction and Scheduling

a) Construction Activities

All construction activities would be performed in accordance with all applicable state and federal laws, and City Codes and policies with respect to building construction and activities. As provided in Section 41.40 of LAMC, the permissible hours of construction within the City are 7:00 A.M. to 9:00 P.M., Mondays through Fridays, and between 8:00 A.M. and 6:00 P.M. on Saturdays or any national holiday. No construction activities are permitted on Sundays. The Project will comply with these restrictions.

Due to the Project's location at the terminus of Casitas Avenue, construction activities are not anticipated to require any lane closures on local streets. Site deliveries and the staging of all equipment and materials would be organized on-site in the most efficient manner possible to avoid and minimize any temporary impacts upon the surrounding neighborhood. Construction equipment would be staged on-site for the duration of construction activities. Additionally, all construction workers would be required to park on-site or within a designated off-street parking lot as specified in the Construction Traffic Control/Management Plan.

b) Construction Schedule

This analysis assumes a construction schedule of approximately 30 months, with final buildout occurring in 2023. Construction activities associated with the proposed Project would be undertaken in six main activities: (1) demolition, (2) site clearing/preparation, (3) excavation/grading, (4) building construction, (5) paving, and (6) architectural coatings/finishing.

The demolition and site clearing phases would include the demolition of approximately 117,000 square feet of the existing building and the removal of the asphalt paved parking lot (3,000 cubic yards of asphalt) on the Project Site. The site clearing phase would include the removal of street trees, walls, fences, and other parking lot related debris. The demolition and site clearing would

be completed in approximately two months. It is estimated that approximately 10,800 cubic yards of demolition debris would be hauled from the Project Site during the demolition phase. Pursuant to Section 4.408.1 of the California Green Building Code (CALGreen) and the City of Los Angeles Bureau of Sanitation (LASAN) requirements, all construction and demolition debris would be delivered to a Certified Construction and Demolition Waste Processing Facility.

After the completion of demolition and site clearing, the grading/excavation phase for the Project would occur for approximately two months and would involve excavations up to approximately 15 feet for earthwork removal and recompaction. No subterranean parking is proposed as part of the Project, and all proposed uses would be above grade. The Project would require approximately 10,000 cubic yards of soil to be hauled off-site and 10,000 cubic yards of soil to be imported in order to ensure a proper base for the building foundations.³ As part of the Project, a Construction Traffic Control/Management Plan and Truck Haul Route Program would be implemented during construction to minimize potential conflicts between construction activity and through traffic. The Construction Traffic Control/Management Plan and Truck Haul Route Program would be subject to Los Angeles Department of Transportation (LADOT) review and approval. The anticipated haul route to and from the I-5 Freeway is depicted in Figure II-18, Proposed Haul Route on page II-33.

The building construction phase is expected to occur for approximately 20 months. Building construction activities would include pouring the building foundations, structural framing, and installing plumbing, electrical, heating, natural gas, and heating ventilation and air conditioning (HVAC) systems.

The paving phase would involve pouring concrete for sidewalks and driveway access lanes and laying irrigation for landscaping. It is estimated that paving would occur for one month, which includes cementing the fire lanes and bike lanes.

The architectural coatings/finishing phase would include installing window and façade elements, painting, and installing wayfinding signage. The architectural coatings would occur over the final three months of the construction process.

³ To provide additional flexibility during a conservative analysis the earthwork and grading phases and take into account the potential for unsuitable fill materials to be encountered during construction, the EIR analyzes 10,000 cy of soil export and 10,000 cy of soil import, inclusive of remediation activities and off-site improvements associated with the emergency access easement. The actual grading quantities are likely to be less.

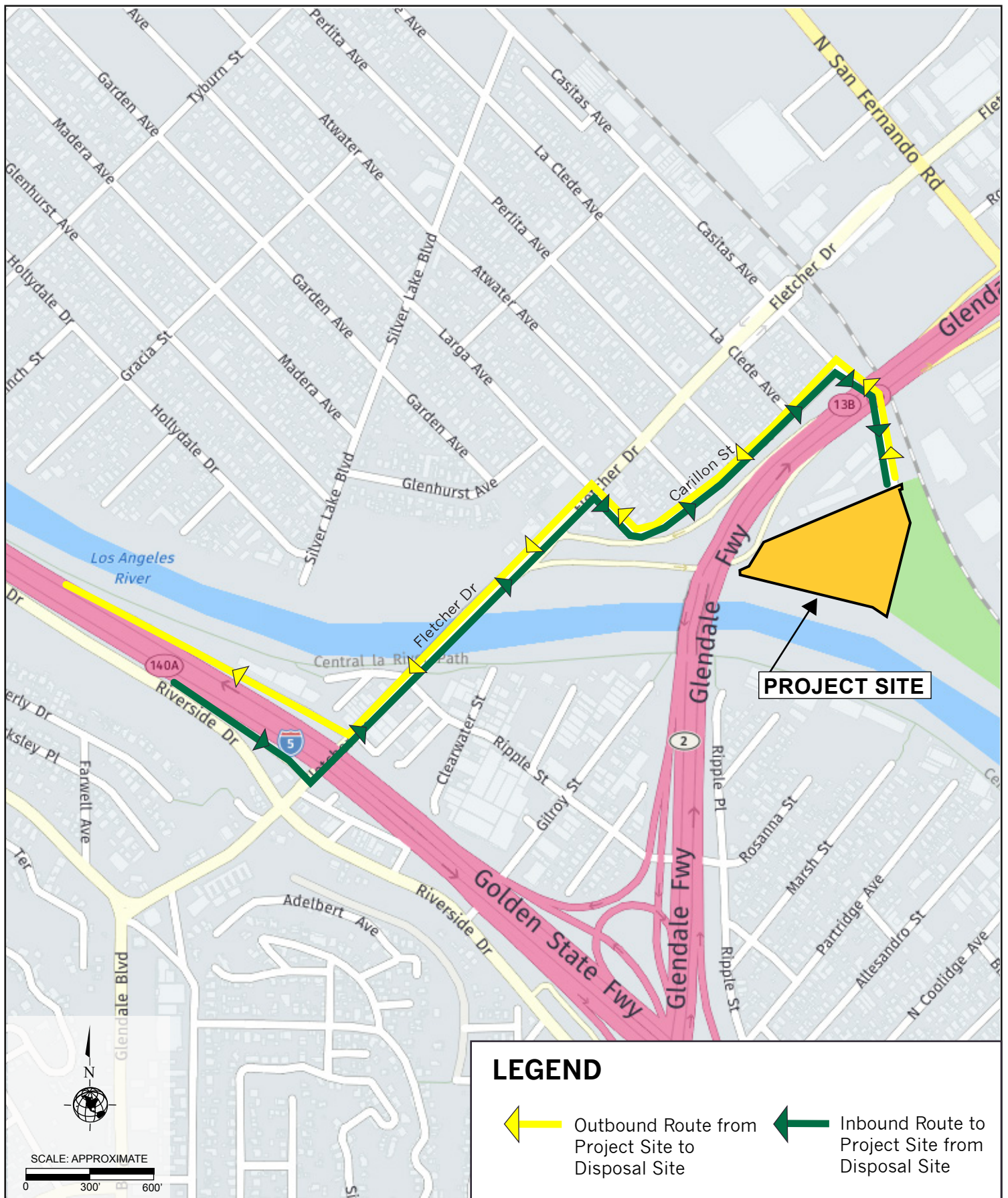


Figure II-18
Proposed Haul Route

IV. Environmental Impact Analysis

E. Hazards and Hazardous Materials

1. Introduction

This Section (formerly referred to in the DEIR as Hazardous Materials)⁴ has been revised and is being recirculated to incorporate additional information in response to the Department of Toxic Substances Control (DTSC) comment letter on the DEIR, included in Appendix A to this PR-DEIR. This Section has been revised in its entirety and supersedes the section that was included in the DEIR.

The following section describes the potential adverse impacts on human health and the environment due to exposure to hazardous materials or conditions that could be encountered as a result of construction and operation of the proposed Project. Except where footnoted otherwise, this Section is based upon the following site-specific investigations:

- Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue, Los Angeles California, Assessor Parcel Number 5442-002-012, prepared by Leighton and Associates, Inc. (Leighton), dated May 31, 2016 (2016 Phase I ESA).
- Technical Memorandum, Human Health Risk Assessment of Soil Exposure and Vapor Intrusion to Indoor Air – 2750 – 2800 Casitas Avenue, Los Angeles, California, prepared by Environmental Health Decisions, November 18, 2020.

The purpose of the 2016 Phase I ESA was to identify historic, controlled, existing, or potential Recognized Environmental Conditions (REC) affecting the Project Site. A REC refers to the presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the Project Site or into the ground, groundwater, or surface water of the Project Site. The 2016 Phase I ESA is included as Appendix F.1 of the DEIR.

The Human Health Risk Assessment of Soil Exposure and Vapor Intrusion to Indoor Air – 2750 – 2800 Casitas Avenue, Los Angeles, California, prepared by Environmental Health Decisions, November 18, 2020, is contained in Appendix B to this PR-DEIR. The Recommended Potential Vapor Reduction Measures for proposed Project at 2800 Casitas Avenue, Los Angeles,

⁴ The title of this Section has been updated to be consistent with Appendix G to the State CEQA Guidelines.

California, prepared by Brownfield Sublab, dated October 23, 2020, is presented in Appendix C to this PR-DEIR.

2. Environmental Setting

a) Regulatory Framework

The regulations governing the storage and handling of hazardous materials are complex, with a varying degree of overlap associated with existing federal, state, and local programs. In general, applicable laws and regulations are aimed at hazardous materials inventory and emergency response planning, risk planning and accident prevention, employee hazard communication, public notification of potential exposure to specific chemicals, and storage of hazardous materials including aboveground storage tanks (AST), and underground storage tanks (UST). A description of the major policies and programs regulating hazardous materials storage and handling applicable to activities at the Project Site is provided below.

(1) Hazardous Materials Use, Storage, and Management

(a) *Emergency Planning and Community Right-to-Know Act (Superfund Amendments and Reauthorization Act, Title III)*

In 1986, Congress adopted the Emergency Planning and Community Right-to Know Act (42 United States Code Sections 11001–11050) as Title III of the federal Superfund Amendments and Reauthorization Act. The federal Emergency Planning and Community Right-to-Know Act establishes reporting and planning requirements for businesses that handle or store specified hazardous materials. These reports and plans provide federal, state, and local emergency planning and response agencies with information about the amounts of materials that businesses use, release, and/or spill. They also provide the public with information about potential hazards in their communities.

In California, many of the requirements of the Emergency Planning and Community Right-to-Know Act overlap with regulations adopted under the State's Hazardous Materials Release Response Plans and Inventory Law Health and Safety Code Sections 25531 *et seq.*, which are discussed below. The Emergency Planning and Community Right-to-Know Act consists of four separate programs, including:

- Planning for emergency response (Sections 301 to 303), which is also addressed by the provisions of the Hazardous Materials Release Response Plans and Inventory Law and the Health and Safety Code Sections 25531 *et seq.*;
- Reporting leaks and spills (Section 304), also covered by the Hazardous Materials Release Response Plans and Inventory Law;

- Reporting hazardous materials inventories (Sections 311 and 312), which is also required by the Hazardous Materials Release Response Plans and Inventory Law; and
- Annual reporting of total releases of specified “toxic chemicals” (Section 313).

(b) Hazardous Materials Release Response Plans and Inventory

Businesses in California that handle hazardous materials are required to comply with California’s Hazardous Materials Release Response Plans and Inventory Law (Assembly Bill 2185; Health and Safety Code Section 25500 *et seq.*). Basic requirements of hazardous materials planning under the Hazardous Materials Release Response Plans and Inventory Law include the development of detailed inventories of the hazardous materials used and stored on-site, a program of employee training for hazardous materials release response, and the identification of emergency contacts and response procedures. The reporting thresholds in the Hazardous Materials Release Response Plans and Inventory Law for hazardous materials are:

- 55 gallons of a liquid;
- 500 pounds of a solid;
- 200 cubic feet of a compressed gas measured at standard temperature and pressure; and
- For radioactive materials, the quantity for which an emergency plan is required under federal or state regulations.

Any facility that meets minimum thresholds for established categories of waste must comply with the reporting requirements and file a business emergency plan with the local administering agency. For the Project Site, the local administering agency is the City of Los Angeles Fire Department (LAFD). The LAFD refers to the business emergency plan as a Hazardous Materials Business Plan. The Hazardous Materials Business Plan must include a complete inventory of all hazardous materials used and stored at a site in quantities above the associated thresholds and a program of employee training for hazardous materials releases.

(c) Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Senate Bill 1082 (1994) established the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. The LAFD is a Certified Unified Program Agency. The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program consolidates and coordinates the six state programs that regulate business and industry’s use, storage, handling, and disposal of hazardous materials and hazardous wastes. The Certified Unified Program Agency requirements include submittal of the following: Business Information Form; Hazardous

Materials System BP-8 Computer Listing of Inventory Submitted; Annual Inventory Update Form; and Regulated Substance Registration Form.

(d) *Health and Safety Code Section 25531*

Health and Safety Code Sections 25531 *et seq.* requires risk planning and accident prevention provisions for facilities that use or store acutely hazardous materials. Acutely hazardous materials (known as Extremely Hazardous Substances under the Emergency Planning and Community Right-to-Know Act) are defined as any chemical designated as an extremely hazardous substance in the Code of Federal Regulations, Title 40, Part 355 (40 Code of Federal Regulations 355), Appendix A. Under Health and Safety Code Sections 25531 *et seq.*, facilities that store or utilize certain types and quantities of hazardous materials may be required to develop Risk Management Plans. Risk Management Plans include management, engineering and safety studies, as well as the construction of physical improvements, if warranted, designed to minimize the potential for hazardous materials accidents and, if an accident does occur, to minimize the impacts of such an event. Risk Management Plans are process-specific rather than project-specific. As such, they focus on the use of hazardous materials in various operations. For processes that use quantities of hazardous materials at or above the thresholds defined by the Health and Safety Code Sections 25531 *et seq.*, a Risk Management Plan must be prepared. Quantity thresholds as defined under Health and Safety Code Sections 25531 *et seq.* vary for different hazardous constituents. Health and Safety Code Sections 25531 *et seq.* require that Risk Management Plans be updated every three years for continuing operations or whenever the process changes to the extent that the current Risk Management Plan does not reflect the revised process.

The State Office of Emergency Services delegated authority to local agencies to administer the Hazardous Materials Release Response Plans and Inventory Law and Health and Safety Code Sections 25531 *et seq.* In the City of Los Angeles, LAFD issues permits for hazardous materials handling (in accordance with the Hazardous Materials Release Response Plans and Inventory Law), enforces Assembly Bill 2185 (per the Hazardous Materials Release Response Plans and Inventory Law), and administers the applicable sections of the Los Angeles Fire Code, including Division 8 (Hazardous Materials Release Response Plans and Inventory Statements). Risk Management Plans are required to be filed with the Los Angeles County Department of Public Works and with the LAFD. The LAFD administers the requirements of the Hazardous Materials Release Response Plans and Inventory Law and Health and Safety Code Sections 25531 *et seq.* through a combination of the following: LAFD inspections; plan checks; disclosure requirements associated with Hazardous Materials Business Plans; and requirements for the preparation and filing of Risk Management Plans. Any business handling hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) is required to obtain a local fire department permit and register the business as a hazardous materials handler.

(e) *Federal and California Occupational Safety and Health Acts*

Federal occupational safety and health regulations also contain provisions with respect to hazardous materials management. The applicable federal law is the Occupational Safety and Health Act of 1970, as amended, which is implemented by the Occupational Safety and Health Administration (OSHA) (29 United States Code, Sections 651–678). Federal Occupational Safety and Health Act requirements, set forth in Title 29 Code of Federal Regulations Section 1910 *et seq.*, are designed to promote worker safety, worker training, and worker right-to-know. A major component of the federal regulations is the requirement that employers implement the Occupational Safety and Health Act Hazard Communication Standard to provide information to employees about the existence and potential risks of exposures to hazardous substances in the workplace. As part of the Hazard Communication Standard, employers must:

- Obtain material safety data sheets from chemical manufacturers which identify the types and handling requirements of hazardous materials used in given areas;
- Make the material safety data sheets available to their employees;
- Label chemical containers in the workplace;
- Develop and maintain a written hazard communication program; and
- Develop and implement programs to train employees about hazardous materials.

Employers are also required to train a team of employees to appropriate federal Occupational Safety and Health Act-defined levels, to respond to accidental releases of hazardous materials, and, as appropriate, to retain on-call contractors to perform hazardous materials accidental release responses (29 Code of Federal Regulations 1910.120, Hazardous Waste Operations and Emergency Response Standards).

Since the State of California has a statewide plan with provisions at least as stringent as those required by the Occupational Safety and Health Act, the United States Department of Labor has delegated the authority to administer the Occupational Safety and Health Act regulations to the State. The California Occupational Safety and Health Act program (codified in the California Code of Regulations, Title 8, or 8 California Code of Regulations generally and in the Labor Code Sections 6300–6719) is administered and enforced by the Division of Occupational Safety and Health, a unit of California's Department of Industrial Relations. The California Occupational Safety and Health Act is similar to the federal program.

In addition to the provisions identified above, the California Occupational Safety and Health Act requires employers to implement a comprehensive, written Injury and Illness Prevention Program. An Injury and Illness Prevention Program is an employee safety program that covers the full range of potential workplace hazards, including those associated with hazardous materials.

(f) *Safe Drinking Water and Toxic Enforcement Act*

The Safe Drinking Water and Toxic Enforcement Act (22 California Code of Regulations Section 12000 *et seq.*), also known as Proposition 65, was developed to improve public health by reducing the incidence of cancer and adverse reproductive outcomes that might result from exposure to potentially hazardous chemicals. Proposition 65 requires the following:

- The creation of a list of chemicals and substances, and the levels at which they are believed to have the potential to cause cancer or deleterious reproductive effects in humans;
- Restriction of discharges of listed chemicals into known drinking water sources at levels above the regulatory levels of concern;
- Public notification of any unauthorized discharge of hazardous waste;
- A clear and understandable warning given prior to a known and intentional exposure to a listed substance; and
- Establishment of a right of action for private citizens and a separate set of notice requirements for “designated government employees” and counties.

Though Proposition 65 is enforced by the County of Los Angeles Health Officer, the law can also be enforced by State or local government prosecutors (i.e., State Attorney General, County District Attorney, and City Attorney), as well as members of the public in certain instances.

(g) *California Radiation Control Regulations*

The California Radiation Control Regulations (17 California Code of Regulations Division 1, Chapter 5, Subchapter 4) include standards for the protection against radiation hazards. The Los Angeles County Department of Health Services, on behalf of the State Department of Health Services, has the primary responsibility for administering these standards, which apply to both employers and employees. Standards include procedures regarding the proper use, storage/labeling, training, waste management and disposal, and emergency release of a regulated source of radiation.

(h) *Uniform Fire Code*

Additional requirements pertaining to hazardous materials management are set forth in the Uniform Fire Code. The Uniform Fire Code regulates the types, configuration, and quantities of hazardous materials that can be stored within structures. The Uniform Fire Code also regulates the storage of hazardous materials (e.g., storage tanks) in outdoor areas. These regulations are implemented by LAFD through regular inspections of on-site operations and through issuance of notices of violation in cases where storage facilities do not meet code requirements. In addition to regulations governing hazardous materials handling, there are reporting requirements

associated with a hazardous materials release. These reporting provisions require, in some instances, notification of the local Certified Unified Program Agency (i.e., LAFD), the State Office of Emergency Services, and National Response Center, if warranted.

(i) *City of Los Angeles General Plan Safety Element*

The City's General Plan Safety Element (adopted on November 26, 1996) includes policies related to the City's response to hazards and natural disasters and represents the long-range emergency response plan for the City of Los Angeles. The General Plan Safety Element seeks to address the protection of people from unreasonable risks associated with natural disasters (e.g., fires, floods, and earthquakes) and reduce future losses of life, injuries, and socioeconomic disruption from other safety issues including the management of hazardous materials.

Additionally, LAFD monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities which store more than the threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the LAFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations.

(2) Hazardous Waste Generation, Handling, and Disposal

(a) *Federal Resource Conservation and Recovery Act and California Hazardous Waste Control Law*

The federal Resource Conservation and Recovery Act (RCRA) (42 United States Code Sections 6901–6992k) regulates the generation, transportation (through standards applicable to transporters of hazardous waste), treatment, storage, and disposal of hazardous waste. Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. The RCRA program also establishes standards for hazardous waste treatment, storage, and disposal units, which are intended to have hazardous wastes managed in a manner that minimizes present and future threats to the environment and human health. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated or disposed of at a facility, any treatment, storage, or disposal unit must be permitted under the RCRA.

The RCRA classifies users that generate greater than 1,000 kilograms (approximately 2,205 pounds) per month of non-acutely hazardous waste as “large quantity generators.” Large-quantity generators are subject to the life cycle hazardous waste management requirements of the RCRA. The RCRA requires large quantity generators to maintain inspection logs of hazardous storage locations, records of the quantity of hazardous waste being generated and stored on-site, manifests of pick-ups of these wastes from the site by licensed hazardous waste transporters, and records from the licensed treatment/storage/disposal facilities which receive and ultimately treat or dispose of the waste.

The RCRA allows individual states to develop their own programs for the regulation of hazardous waste as long as they are at least as stringent as the federal act. The State of California has developed the California Hazardous Waste Control Law (Health and Safety Code Section 25100 *et seq.*; 22 California Code of Regulations Section 66260.1 *et seq.*), which is modeled closely after the RCRA. Unlike the RCRA, the Hazardous Waste Control Law does not recognize a threshold below which generators are exempt from some or all of the Hazardous Waste Control Law requirements.

The United States Environmental Protection Agency (USEPA) delegated RCRA enforcement to the State of California. Primary authority for the statewide administration and enforcement of Hazardous Waste Control Law rests with the California Environmental Protection Agency's (CalEPA) Department of Toxic Substances Control (DTSC). The DTSC is responsible and/or provides oversight for contamination cleanup, and administers statewide hazardous waste reduction programs. The DTSC has delegated to local agencies the authority to inspect and regulate hazardous waste generators. As previously indicated, LAFD is a Certified Unified Program Agency under the Unified Program. The Unified Program consolidates and coordinates the six state programs that regulate business and industry's use, storage, handling, and disposal of hazardous materials and hazardous wastes.

Both the RCRA and the Hazardous Waste Control Law require businesses to prepare biennial hazardous waste reports that identify the nature and quantity of each type of hazardous waste generated and the treatment, disposal method, and facilities used for each waste (40 Code of Federal Regulations 262.41(a) and 22 California Code of Regulations 66262.41). These reports must be submitted to the DTSC.

(b) Federal Occupational Safety and Health Act and California Occupational Safety and Health Act

The federal Occupational Safety and Health Act and California Occupational Safety and Health Act regulations also contain worker safety provisions with respect to routine hazardous waste management operations and emergency responses involving hazardous wastes. The provisions are included in the Hazardous Waste Operations and Emergency Response Standard (29 United States Code sec 651 *et seq.*; 29 Code of Federal Regulations 1910.120; 40 Code of Federal Regulations 311), which requires a written health and safety program, worker training, emergency response training, medical surveillance, and measures to reduce worker exposure to hazardous waste.

(c) Uniform Fire Code

The Uniform Fire Code regulates hazardous waste storage facilities through regular site inspections by the LAFD and through the issuance of notices of violations in cases where storage facilities do not meet code requirements.

(3) Underground Storage Tanks

(a) *Resource Conservation and Recovery Act, Subtitle I*

In 1984, Congress adopted a national UST regulatory program (42 United States Code 6991 *et seq.*), commonly referred to as Subtitle I of the RCRA. Regulations implementing this program are found at 40 Code of Federal Regulations 280. Subtitle I authorized the USEPA to issue regulations establishing construction standards for new UST installations (those installed after December 22, 1988), as well as strict standards for:

- Upgrading existing USTs and associated piping;
- New UST installations;
- Corrosion protection for USTs and piping;
- Spill and overfill protection and, for USTs that contain substances other than petroleum, secondary containment methods to detect and contain leaks and leak detection for associated piping;
- Leak detection and reporting of releases and corrective actions;
- On-site practices and record keeping;
- UST closure standards; and
- Financial responsibility.

After 1998, all nonconforming tanks were required to be upgraded or closed.

(b) *California Code of Regulations and California Health and Safety Code*

Prior to the adoption of the federal UST regulatory program, the State of California initiated the regulation of USTs storing hazardous substances in 1983. The State of California has since further defined the federal laws and regulations related to the UST program. The California Health and Safety Code, Division 20, Chapter 6.7, governs the UST program, and regulates the program in California Code of Regulations Title 23, Division 3, Chapter 16 and Chapter 18. The various elements regulated by the State's UST program include:

- Registration of USTs;
- Permitting USTs;
- Establishment of UST construction and operational standards;

- Installation of leak detection systems and/or monitoring of USTs for leakage;
- Establishment of UST closure requirements;
- Licensing of UST contractors;
- Establishment of financial responsibility requirements;
- Release reporting/corrective action; and
- Enforcement.

California's UST program has been amended frequently to incorporate the federal requirements. As with the federal standards, the State's UST program required that all tanks have leak detection, corrosion protection, and spill and overflow devices by December 1998. USTs that did not meet the 1998 requirements were required to be immediately retrofitted or removed. One notable difference between the federal and state regulations is that under the State's UST program, the demarcation date between "existing" and "new" USTs is January 1, 1984 (as opposed to December 22, 1988).

Oversight of the statewide UST program is assigned to the State Water Resources Control Board (23 California Code of Regulations Section 2610 *et seq.*). The administration of the UST regulatory and permit program is performed by local agencies. The administration of the UST program within the City is performed by the LAFD. The responsibility for oversight of leaking USTs lies with the California Regional Water Quality Control Board—Los Angeles Region. The City of Los Angeles' UST regulations are contained in Chapter 5, Article 7 of the LAMC, commonly called the Los Angeles Fire Code.

(4) Aboveground Storage Tanks

(a) *Aboveground Petroleum Storage Act*

In 1989, California established the Aboveground Petroleum Storage Act instituting a regulatory program covering ASTs containing specified petroleum products (Health and Safety Code Sections 25270–25270.13). The Aboveground Petroleum Storage Act applies to a facility if it has a storage capacity of 10,000 gallons or more or is subject to oil pollution prevention and response requirements under 40 Code of Federal Regulations Part 112 (40 Code of Federal Regulations 112) of the Clean Water Act. Oil pollution prevention requirements must be met if the facility has a cumulative aboveground storage capacity of 1,320 gallons or more of oil and may reasonably be expected to discharge oil in harmful quantities into navigable waters. CalEPA's DTSC regulations may apply if ASTs contain hazardous waste and are stored longer than 90, 180, or 270 days (depending on other criteria).

Under the Aboveground Petroleum Storage Act, each owner or operator of a regulated AST facility must file biennially a storage statement with the State Water Resources Control Board disclosing the name and address of the AST facility; the contact person for the facility; and the location, size, age, and contents of each AST that exceeds 10,000 gallons in capacity and that holds materials that are at least five percent petroleum. In addition, each owner or operator of a regulated AST must prepare a Spill Prevention Control and Countermeasure Plan in accordance with federal and state requirements (40 Code of Federal Regulations 112 and Health and Safety Code Section 25270.5[c]). Compliance is required for facilities with total aboveground oil storage capacity that exceeds 1,320 gallons.

As noted above, the Spill Prevention Control and Countermeasure Plan is intended to minimize the potential for accidental release of oil or petroleum products into or upon the navigable waters of the United States or adjoining shoreline. Groundwater monitoring may also be required if the tank exterior surface, connecting piping, and the floor directly beneath the tank cannot all be monitored by direct viewing. Notification to the State Office of Emergency Services is required immediately upon discovery of any spill or release of 42 gallons or more of petroleum (Health and Safety Code Section 25270.8). Currently, the responsibility for inspecting ASTs and ensuring that Spill Prevention Control and Countermeasure Plans have been prepared lies with the California Regional Water Quality Control Board.

(b) City of Los Angeles Requirements

In addition to the State requirements, local jurisdictions also impose requirements concerning ASTs. The LAFD requires that all ASTs containing more than 60 gallons of combustible materials have a form of secondary containment. If the tank is located inside a building with sprinklers, the secondary containment must be able to hold 100 percent of the tank contents plus 20 minutes of sprinkler water. Outdoor containment must be able to handle 100 percent of the tank contents and 24 hours of rainwater from a 25-year storm.

(iii) South Coast Air Quality Management District Rule 1166

If volatile organic compound (VOC)–contaminated soil resulting from leakage from storage or transfer operations, accidental spillage, or other deposition is discovered during excavation or grading, the South Coast Air Quality Management District's (SCAQMD's) Rule 1166 (VOC Emission from Decontamination of Soil) requirements to control the emission of VOCs are applicable. SCAQMD's Rule 1166 includes the development and approval of a mitigation plan, notification prior to excavation or grading, monitoring for VOC contamination, and the handling and treatment of VOCs if discovered.

(5) Asbestos

(a) *Toxic Substances Control Act*

In 1976, the federal Toxic Substances Control Act (15 United States Code Sections 2601–2671) established a system of evaluation in order to identify chemicals which may pose hazards. The Toxic Substances Control Act also established a process by which public exposure to hazards may be reduced through manufacturing, distribution, use and disposal restrictions or labeling of products. Under the Toxic Substances Control Act (40 Code of Federal Regulations 763), the USEPA has enacted strict requirements on the use, handling, and disposal of asbestos-containing materials (ACMs). These regulations include the phasing out of friable asbestos and ACMs in new construction materials beginning in 1979 (40 Code of Federal Regulations 763). Friable asbestos may be found in pre-1979 construction. In addition, due to potential adverse health effects in exposed persons, in 1989 the USEPA banned most uses of asbestos in the country. Although most of the ban was overturned in 1991, the current banned product categories include corrugated paper, rollboard, commercial paper, specialty paper, flooring felt, and any new uses. The Toxic Substances Control Act is enforced by the USEPA through inspections of places in which ACMs are manufactured, processed, and stored and through the assessment of administrative and civil penalties and fines, as well as injunctions against violators.

(b) *Federal Resource Conservation and Recovery Act (RCRA) and State Hazardous Waste Control Law*

Under the federal RCRA, asbestos is not regulated as hazardous waste, but under the State Hazardous Waste Control Law, it is considered a “non-RCRA” or “California-only” hazardous waste. CalEPA’s DTSC classifies ACMs as hazardous waste if they are friable (e.g., easily crumbled) and contain one percent or more asbestos (California Code of Regulations, Title 22, Section 66261.24). Non-friable bulk asbestos-containing waste is considered by the DTSC as nonhazardous regardless of its asbestos content, so it is not subject to regulation under California Code of Regulations, Title 22, Division 4.5. The DTSC regulates the packaging, on-site accumulation, transportation (through standards applicable to transporters of hazardous waste), and disposal of asbestos when it is a hazardous waste.

(c) *Federal and California Occupational Safety and Health Acts*

The federal and State Occupational Safety and Health Acts regulate asbestos as it relates to employee safety through a set of general notification requirements and corrective actions to reduce potential exposure levels. The federal Occupational Safety and Health Act Worker Exposure Rule for Asbestos (29 Code of Federal Regulations 1910.1001 and 1926.1101) requires certain actions on the part of any employer whose employees are potentially exposed to asbestos fiber levels above the permissible exposure limit (0.2 fiber per cubic centimeter of air, averaged over an 8-hour day). These actions include:

- Corrective measures to reduce exposure levels;

- Notification, including warning signs and labels;
- Controlled access;
- Use of protective equipment;
- Implementation of engineering and housekeeping controls; and
- Employee training programs.

The Occupational Safety and Health Act has established an action level for workplace exposure, as well. If an employee could be exposed above the action level, employers must begin compliance activities such as notification, employee training, air monitoring and, in some cases, medical surveillance. In buildings that contain ACMs, levels of airborne asbestos are not expected to reach Occupational Safety and Health Act exposure standards. Nevertheless, the USEPA recommends that building owners inform building occupants of the presence and location of ACMs, even if potential exposure is below the levels identified above. In addition to these regulations, contractors involved in asbestos surveys and removal are required to be certified by the Division of Occupational Safety and Health.

(d) Connelly Act

The Connelly Act (Assembly Bill 3713; Health and Safety Code Section 25915 *et seq.*) establishes notification requirements for all owners and employees working within any pre-1979 building known to contain ACMs. Notification could be based upon a survey of ACMs and their locations. The notification requirements of the Connelly Act are enforced by the California Division of Occupational Safety and Health.

(e) National Emission Standards for Hazardous Air Pollutants

The USEPA has established National Emission Standards for Hazardous Air Pollutants (40 Code of Federal Regulations 61 Part M) that govern the use, removal, and disposal of ACMs as a hazardous air pollutant. The National Emission Standards for Hazardous Air Pollutants regulations concern the manufacture, spraying, and fabricating of ACMs, as well as its application, removal, and disposal. The National Emission Standards for Hazardous Air Pollutants regulations mandate the removal of friable ACMs before a building is demolished and include notification requirements prior to demolition. The regulations also mandate removal techniques, limit visible emissions of dust to the outside air during removal or renovation, specify disposal procedures, and include provisions governing the packaging and labeling of asbestos wastes. The National Emission Standards for Hazardous Air Pollutants regulations are promulgated and enforced by the USEPA. Responsibility for implementing these requirements has been delegated to the State of California, which in turn has delegated the responsibility to the SCAQMD. The SCAQMD implements the National Emission Standards for Hazardous Air Pollutants through its Rule 1403, discussed below.

(f) *South Coast Air Quality Management District Rule 1403*

SCAQMD Rule 1403, Asbestos Emissions from Renovation/Demolition Activities, regulates asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying agency notifications, appropriate removal procedures, and handling and clean up procedures. Rule 1403 applies to owners and operators involved in the demolition or renovation of structures with ACMs, asbestos storage facilities, and waste disposal sites. The requirements under this rule include the following:

- Surveying structures for ACMs;
- Agency notification of intention to remove asbestos;
- ACMs removal procedures and time schedules;
- ACMs handling and clean up procedures;
- ACMs storage, disposal and landfill requirements; and
- Record keeping.

(6) **Lead-Based Paint**

(a) *Federal and California Occupational Safety and Health Acts*

Federal Occupational Safety and Health Act requirements, set forth in 29 Code of Federal Regulations Section 1910 *et seq.*, are designed to promote worker safety, worker training, and worker right-to-know. Requirements include: General Industry Respiratory Protection Standard (29 Code of Federal Regulations 1910.134) for the use of respiratory protection devices intended to control occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors; the Lead in General Industry Standard (29 Code of Federal Regulations 1910.1025), which is applicable to all occupational exposures to lead, except for lead exposures in the construction industry, to protect employees from significant lead exposures and to educate the employees on health hazards associated with lead; and, the General Industry Hazard Communication Standard (29 Code of Federal Regulations 1910.1200), which is the Occupational Safety and Health Act's general industry hazard communication standard and applies to all employees exposed to chemical and physical hazards in the general industry sector. The Occupational Safety and Health Act requirements set forth in 29 Code of Federal Regulations Section 1926 *et seq.*, are designed to promote safety during construction. These requirements include standards to comprehensively address the issue of evaluating and communicating chemical and physical hazards to employees in the construction sector (the Construction Industry Hazard Communication Standard [29 Code of Federal Regulations 1926.59]) for the demolition, salvage, removal, alternation, etc. of lead-containing materials and lead contamination/emergency clean up, transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed,

including maintenance activities associated with construction activities (the Lead in Construction Standard [29 Code of Federal Regulations 1926.62]). As with 29 Code of Federal Regulations 1910.134, the Respiratory Protection in Construction Standard (29 Code of Federal Regulations 1926.103) is applicable to all employees who are required or choose to wear respiratory protection devices. The intent of the standard is to control occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. This standard requires the establishment of a written respiratory protection program whenever employees are required or choose to wear respirators.

Title 8 of the California Code of Regulations, Section 1532.1 (8 California Code of Regulations 1532.1) is a rule developed by OSHA in 1993 and adopted by the State of California. This rule is comparable to the federal standards described above. While this regulation has been updated several times since 1993, one important difference between it and the federal standard is the additional requirement to notify the Division of Occupational Safety and Health in writing before abating 100 square feet or more of lead-based paint (LBP). Title 17 of the California Code of Regulations, Division 1, Chapter 8 requires that all consultants and contractors conducting activities involving LBP or lead hazards be certified. This regulation also defines LBP, lead hazards, and lead clearance criteria. This regulation requires that the California Department of Health Services be notified in writing before all hazard-related testing and hazard mitigation-related abatement activities.

Title 22 of the California Code of Regulations, Section 66261.24 (22 California Code of Regulations 66261.34) is the State's version of the requirements for testing of all waste streams prior to disposal.

(b) Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (Title 22, Division 2, Chapter 3, Sections 12000 through 14000), enacted as Proposition 65, lists lead as a substance known to the State of California to be a reproductive toxin and prohibits a business from knowingly exposing anyone to levels in excess of the "No Significant Risk Level" without first giving a "clear and reasonable warning." The No Significant Risk Level is set at five micrograms of lead per day. In addition to providing warning requirements, these codes prohibit discharge to land or water where lead can pass into a source of drinking water.

(7) Polychlorinated Biphenyls

(a) Toxic Substances Control Act

Polychlorinated biphenyls (PCBs) can be found in older transformers and other electrical equipment. Due to their hazardous properties, all aspects of PCBs are strictly regulated by the USEPA under the Toxic Substances Control Act. These regulations ban the manufacture of PCBs although the continued use of existing PCB-containing equipment is allowed. Transformer oil containing PCBs at a concentration exceeding five parts per million is the California-regulated

concentration for hazardous waste though PCBs in transformer oil at a concentration up to 50 parts per million are currently allowed in transformers in California. The Toxic Substances Control Act also contains provisions controlling the continued use and disposal of existing PCB-containing equipment.

The disposal of hazardous waste building materials, including PCBs, is also regulated by federal and state laws. The disposal of PCB wastes is regulated by the Toxic Substances Control Act (40 Code of Federal Regulations 761), which contains life cycle provisions similar to those in the RCRA.

(b) California Hazardous Waste Control Law

In addition to the Toxic Substances Control Act, provisions relating to PCBs are contained in the Hazardous Waste Control Law, previously discussed, which lists PCBs as hazardous waste.

(8) Oil Wells and Methane Gas

(a) California State Division of Oil, Gas and Geothermal Resources

In compliance with Section 3229, Division 3 of the California Public Resources Code, before commencing any work to abandon any well, the owner or operator shall file with the California State Division of Oil, Gas and Geothermal Resources a written notice of intention to abandon the well (California State Division of Oil, Gas and Geothermal Resources form OG108). Abandonment shall not proceed until approval is given by the California State Division of Oil, Gas and Geothermal Resources. If a written response to the notice of intention is not received from the California State Division of Oil, Gas and Geothermal Resources within ten working days, the proposed abandonment shall be deemed to have been approved. If abandonment operations have not commenced within one year of receipt of the notice of intention, the notice of intention shall be deemed canceled.

(b) City of Los Angeles Methane Mitigation Requirements

Los Angeles Ordinance No. 175790 defines the methane mitigation requirements for all projects, which fall within the “methane zone” or the “methane buffer zone.” The zones have been defined by the City of Los Angeles to include areas of the City which fall within or adjacent to the oil production fields by the Division of Gas and Geothermal Resources. The ordinance requires that each parcel that falls within the methane or methane buffer zone be evaluated for methane concentration and pressure and certified by an approved testing agency. Upon completion and certification, the highest concentration and pressure measures during the investigation determines the “design level” for the project. The ordinance defines five design levels and corresponding mitigation measures for all sites in the methane and methane buffer zones. Level I is the least stringent escalating to Level V as the most stringent “active” methane mitigation. As

part of the ordinance, alternatives to the measures specified in the ordinance are permitted with the approval of the City.

b) Existing Conditions

(1) Current and Historic Uses of the Project Site

Based on a review of aerial photographs, the Project Site was vacant, undeveloped land until approximately 1928 when activities associated with the neighboring Southern Pacific Railroad's Taylor Yard railroad maintenance facility to the southeast expanded north to include the Project Site. Historical operations of the Taylor Yard included locomotive and refrigeration car maintenance, rail car sorting and assembly, locomotive fueling, rail car storage, switching, equipment storage, and utility department shops for electrical, mechanical, and plumbing works. As part of the Taylor Yard, the Project Site was utilized by the Southern Pacific Railroad Buildings and Bridges for service vehicle maintenance and repair and by the Maintenance of Way Department for maintaining the tracks and rights-of-way, as well as by the carpenters, communications, electrical shop, and water services departments. In 1990, rail operations were terminated on approximately 175 acres of the Taylor Yard, including Taylor Yard Parcel H, of which the Project Site is a portion. In the late 1990s, the Project Site was redeveloped into its current configuration and land use as a light manufacturing facility.

(2) Hazardous Materials Database Search

The Project Site is identified on the following databases: FINDS, CA HAZNET, CA EMI, RCRA-LQG, US AIRS, and EDR US Historical Auto Station.⁵ As discussed above, the Project Site was once part of the Taylor Yard, which is also listed on additional government databases. The Project Site addresses were also identified in the Phase I ESA report related to the former Taylor Yard facility ("Taylor Yard Phase I ESA"). The Taylor Yard Phase I ESA found that the Project Site is included on the following government lists: underground storage tank (UST), aboveground storage tank (AST), Toxic Pits, Cortese, Historical Cortese, LA County Site Mitigation, Voluntary Cleanup Program (VCP), Response, EnviroStor, Historical Cal-Site, CA Bond Plan, RCRA Generator, Spills, Leaks, Investigation, and Cleanup (SLIC), Financial Assurance, Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) No Further Remedial Action Planned (NFRAP), California Hazardous Material Incident Reporting System (CHMIRS), and Waste Discharge System (WDS) lists.

Chemicals of Concern (COCs) identified in the soil and/or groundwater in the Taylor Yard Phase I ESA are primarily arsenic, lead, polynuclear aromatic hydrocarbons (PAHs), tetrachloroethylene (PCE), total petroleum hydrocarbons (TPH), and trichloroethylene (TCE). According to information obtained from the DTSC's EnviroStor website, previous reports, and

⁵ *These regulatory databases are defined in the Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue, Los Angeles California, Assessor Parcel Number 5442-002-012, prepared by Leighton & Associates, dated May 31, 2016 (See Appendix F.1 to the DEIR).*

previous investigations completed by Leighton on the neighboring Taylor Yard Parcel G-1, areas of concern from the former Taylor Yard are primarily located within Parcel G-2 and the southern portion of Parcel G-1, approximately 0.6 miles southeast (hydraulically down-gradient) of the Project Site.

Additionally, the Project Site is located within the San Fernando Valley Area 4 Pollock Well Field (SFV4), an area of contaminated groundwater in the City. The contaminated groundwater, which underlies an area of approximately 5,860 acres, contains PCE and TCE at concentrations above drinking water standards. Results of groundwater monitoring conducted within SFV4 from 1981 to 1987 have revealed that over 50 percent of the water supply wells in the eastern portion of the San Fernando Valley Groundwater Basin were contaminated with various chlorinated volatile organic compounds (VOCs), specifically TCE and PCE.

The 2016 Phase I ESA found that none of the sites identified in the hazardous materials database search represent an adverse effect to the Project Site based on one or more of the following: nature of the database listing and not appearing on a database that reports unauthorized releases of hazardous substances, reported regulatory agency status (i.e., Case Closed), reported nature of the case (soil contamination only), distance of the facility to the Project Site, and/or location of the facility with respect to anticipated groundwater flow direction (southeast).

(3) Previous Site Assessments and Other Reports

As discussed above, the Project Site was historically part of the Taylor Yard, which was owned and operated by the Southern Pacific Company/Union Pacific Railroad Company (UPRR). The Project Site was used for the storage, maintenance, and repair of infrastructure, equipment, and service vehicles. Due to past uses and current uses of the Project Site, previous analyses documenting the hazardous conditions on the Project Site and in the Project area have been conducted. Leighton reviewed and incorporated these reports into the 2016 Phase I ESA. A list of prior studies done on the Project Site is provided below. Additionally, a chronological summary detailing the findings of each report is provided below and presented in 2016 Phase I ESA (included in Appendix F.1 to the DEIR).

- ERM West, Inc. (ERM), Portions of the Final Remedial Action Plan, Taylor Yard Sale Parcel, Los Angeles, California, dated September 17, 1991.
- Pilko & Associates, Inc. (Pilko), Phase I Environmental Site Assessment Parcel H – Taylor Railway, dated June 1998.
- CDM Smith (CDM), Union Pacific Railroad Company 2012 Groundwater Monitoring Report, Taylor Yard, Los Angeles, California, dated August 2012.
- Partner Engineering and Science, Inc. (Partner), Phase I Environmental Site Assessment Report, Casitas Line of Credit, 2750 and 2800 Casitas Avenue, Los Angeles California, dated August 18, 2014.
- Leighton and Associates, Inc., Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue and 2800 Kerr Street, Los Angeles California, Assessor Parcel Number 5442-002-012, dated August 12, 2015.

- Leighton and Associates, Inc., Phase II Environmental Site Assessment Report 2750 and 2800 Casitas Avenue and 2800 Kerr Street, Los Angeles, California, dated October 1, 2015.
- Leighton and Associates, Inc., Additional Phase II Environmental Site Assessment Report 2750 and 2800 Casitas Avenue and 2800 Kerr Street, Los Angeles, California, dated December 22, 2015.
- Enviro-Tox Services, Inc., Human Health Risk Assessment Report, 2750 and 2800 Casitas Avenue and 2800 Kerr Street, Los Angeles, California, dated January 28, 2016.
- Environmental Health Decisions, Technical Memorandum, Human Health Risk Assessment of Soil Exposure and Vapor Intrusion to Indoor Air – 2750 - 2800 Casitas Avenue, Los Angeles, California (HHRA Update), dated November 18, 2020.

The primary purpose of these reports was to analyze and monitor the potential hazardous materials and contaminants that are present on the Project Site from historical land uses. The purpose of the previous Phase I ESAs was to identify historic, controlled, existing, or potential RECs affecting the Project Site. The purpose of the Phase II ESAs, dated October 2015 and December 2015, was to evaluate soil and groundwater on the Project Site where there is suspected petroleum-impacted media and to identify TPH and VOCs. Following the findings of the Phase II ESAs, Enviro-Tox Services, Inc. (ETSI) conducted a Human Health Risk Assessment (HHRA) for the Project Site to determine whether trace concentrations of metals and petroleum hydrocarbons detected in soil and VOCs detected in soil gas at the Project Site represent a health threat to future on-site residents. Additionally, in November 2020, and in response to DTSC's comment letter on the DEIR, included in Appendix A to this PR-DEIR, Environmental Health Decisions prepared a HHRA Update to the January 2016 HHRA performed by ETSI.

As discussed above, rail operations were terminated on approximately 175 acres of Taylor Yard in 1990. This parcel underwent accelerated soil cleanup activities to facilitate the transfer or sale of the parcel. The Project Site is located within this parcel. According to ERM's 1991 report, areas of concern identified in the northwestern portion of the Project Site include a drum storage area, former fueling area, and an equipment storage area. Soil sampling was conducted and analyzed for TPH, metals, PCBs, and VOCs. TPH, lead, PCBs, and methylene chloride were detected in soil samples up to 10 feet below ground surface (bgs). Information regarding the removal or remediation of the detected contaminants was not included in ERM's 1991 report, as reviewed by Leighton for the 2016 Phase I ESA.

The remaining 69 acres of the Taylor Yard, referred to as the "Active Yard" or Parcel G, remained in use as a maintenance and locomotive fueling yard until 2003. Parcel G was further subdivided into Parcel G-1 (19 acres in the northern portion, adjacent to Project Site) and Parcel G-2 (50 acres in the southern portion, approximately 0.6 miles southeast of the Project Site). See Figure IV.E-1, Taylor Yard Parcel Map, for reference to the Taylor Yard properties. Parcel G-1 was sold to the California Department of Parks and Recreation, and Parcel G-2 continued as the Active



Source: City of Los Angeles, Bureau of Engineering, IS/MND for Taylor Yard River Parcel G2 Project, August 2014.

Figure IV.E-1
Map of the Taylor Yard Complex

Yard. Prior to the sale of Parcel G-1, UPRR conducted site assessment and remedial activities under the oversight of the DTSC. UPRR obtained partial closure of Parcel G-1 (soil only to industrial standards) from the DTSC and sold the parcel to California Department of Parks and Recreation circa 2003.

At the time of completion of Pilko's 1998 Phase I ESA report on the Project Site, one main building (estimated to be 15,000 to 20,000 square feet) and approximately a dozen smaller buildings (estimated at 200 square feet or less) occupied the Project Site as part of the former Taylor Yard. According to Pilko, one 12,000-gallon unleaded gasoline UST and one 8,000-gallon diesel UST were removed from the southern portion of the Project Site in November 1989 by Canonie Environmental (Canonie) as part of a program to remove USTs throughout the Taylor Yard. Elevated concentrations of petroleum hydrocarbons were detected at nine of the 16 USTs locations in Taylor Yard. Soil sampling results and locations completed by Canonie were not included in the Pilko report, and it is unknown if hazardous substances and/or petroleum products were detected in soil on the Project Site.

In August 2014, Partner prepared a Phase I ESA of the Project Site. Partner identified the following RECs in connection with the Project Site:

- The historical use of the Project Site as a portion of the former Taylor Yard and the known impacts and/or concerns associated with the Taylor Yard (i.e., two historical USTs and results of soil sampling completed by ERM in 1991).
- The Project Site was occupied by Nelson Nameplate Company (aka Nelson-Miller, Inc.) for industrial purposes. The current and historical use of hazardous materials on site, including halogenated solvents, the presence of the clarifier system, and the duration of operation of the industrial facility at the Project Site (approximately 16 years).
- The known VOC-impacted groundwater in the Project Site vicinity.

Based on the above RECs, Partner recommended a subsurface investigation be conducted to determine the presence or absence of soil and/or groundwater contamination due to the historical use of the Project Site. An additional Phase I ESA report (dated August 12, 2015 and prepared by Leighton) recommended to further assess the presence of hazardous substances and petroleum products in soil and soil gas on the Project Site for the same RECs identified in Partner's report.

Leighton performed an initial Phase II ESA in October 2015. The Phase II ESA discovered the presence of petroleum products in soil in the southern portion of the Project Site, elevated lead in one soil sample on the western portion of the Project Site, and VOCs in shallow soil gas samples collected throughout the Project Site; however, the VOCs were primarily located in the northern portion of the Project Site.

Leighton also obtained information during their review of historical aerial photographs providing coverage of the Project Site. Leighton reviewed the historic aerial photographs to assess for the presence of physical features (e.g., soil discoloration, aboveground storage tanks, drums storage

areas, fuel dispensers, etc.) where hazardous substances and/or petroleum products may have been stored, used, and/or disposed at the Project Site, and formed the basis for further investigation. Based upon the analytical test data collected during the above-mentioned Phase II investigation, Leighton recommended additional investigative activities to: (a) evaluate the vertical and lateral extent of petroleum hydrocarbon-affected soil discovered in the area of the former USTs and the extent of lead-affected soil that exceeds DTSC's Office of Human and Ecological Risk (HERO) HHRA screening level for total lead in a residential setting; and (b) further assess the low concentrations of VOCs detected in the prior soil gas samples to build a more comprehensive dataset for the completion of a HHRA.

In December 2015, Leighton prepared an Additional Phase II ESA. Leighton oversaw 14 additional exploratory borings at the recommended locations noted in the initial Phase II ESA. Twelve borings were made in areas outside and around the on-site building and two borings were made inside the on-site building, within the portion of the building occupied by Nelson-Miller, Inc. Based on the findings of the initial and additional Phase II ESAs, Leighton made the following conclusions and recommendations:

- TPH in the diesel range (TPHd) and TPH in the oil range (TPHo) were detected at concentrations exceeding LARWQCB Maximum Soil Screening Levels (MSSLs) of 100 mg/kg in soil samples collected at depths primarily between 15 and 20 feet bgs in borings LB12, LB13, and LB28. These borings are located in the vicinity of two former USTs associated with the historical Taylor Yard railroad operations that occurred on the Project Site. The source of the TPHd and TPHo in soil is likely associated with a petroleum product release(s) from the historical USTs. Since the extent of impacted soil is primarily confined to depths of 15 and 20 feet bgs in the southeast corner of the Project Site, the potential risk (inhalation, ingestion, and dermal contact) to current and future occupants is very low. Additionally, soil samples collected at depths greater than 20 feet bgs (down to 40 feet bgs) were not affected with TPHd and/or TPHo, indicating that there is at least 20 feet of clean soil between the bottom of the impacted soil and potential groundwater. It is therefore unlikely that groundwater has been affected by the historical TPH release(s).
- Total lead exceeded DTSC's residential soil screening level in one soil sample, LB4 at 0.5 feet bgs. The source of the lead is unknown; however, lead-affected soil was previously detected at the Project Site as a result of historical railroad operations. The vertical and lateral extent of the lead contamination has been defined. As reported in the Additional Phase II ESA (dated December 2015), the concentrations of lead detected in the soil samples collected at the Project Site identified the 95 percent upper confidence limit (UCL) of the population mean for lead at the Project Site to be 31 mg/kg, which is well below DTSC's residential soil screening level of 80 mg/kg. In addition, the soluble lead in the 0.5-foot-bgs soil sample collected from boring LB4 did not exceed its Soluble Threshold Limit Concentration (STLC) and will not require management as a hazardous waste. Based on these analyses, additional investigation of the lead in the area of boring LB4 is not

warranted, and the soil in the area of boring LB4 does not require removal or special handling with respect to lead during construction activities.

- PCE, benzene, and 1,2,4-trimethylbenzene were detected in soil gas samples above DTSC's adjusted screening level for residential uses and regional screening levels established for residential land use. The source of the VOCs detected in the soil gas samples is unknown; however, PCE has been detected in the groundwater in the Project Site vicinity and is a possible source for the PCE detected in the soil gas beneath the Project Site. Soil gas samples exceeding the screening criteria were primarily located in the northern portion of the Project Site, currently an asphalt-paved parking area. The combined cancer risk for VOCs in soil gas between 3 and 5 feet bgs at the Project Site is above the EPA's screening value but within the USEPA established acceptable incremental cancer risk range. Thus, as further discussed below, a HHRA was conducted for the Project Site to determine if any form of mitigation or remediation is necessary prior to redeveloping the Project Site for residential use and to address whether protection of construction workers during redevelopment of the Project Site is recommended.

3. Project Impacts

a) Thresholds of Significance

In 2015, the California Supreme Court in *California Building Industry Assn. v. Bay Area Air Quality Management District* (CBIA v. BAAQMD), held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of the project.⁶ The Appendix G thresholds are intended to comply with this decision. Specifically, the decision held that an impact from the existing environment to the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. For example, if construction of the project on a hazardous waste site will cause the potential dispersion of hazardous waste in the environment, the EIR should assess the impacts of that dispersion to the environment, including to the project's residents.

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to hazardous materials if it would:

Threshold (a) ***Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;***

Threshold (b) ***Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the***

⁶ *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, Case No. S213478.

release of hazardous materials into the environment;

- Threshold (c)** *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;*
- Threshold (d)** *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;*
- Threshold (e)** *For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;*
- Threshold (f)** *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or*
- Threshold (g)** *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.*

For this analysis, the Appendix G Thresholds are relied upon. The analysis utilizes factors and considerations identified in the 2006 L.A. CEQA Thresholds Guide (Thresholds Guide), as appropriate, to assist in answering the Appendix G Threshold questions. The Thresholds Guide identifies the following criteria to evaluate hazards and hazardous materials:

(i) Risk of Upset/Emergency Preparedness

- *The regulatory framework (for the potential accidental release or explosion of a hazardous substance);*
- *The probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance;*
- *The degree to which the project may require a new, or interfere with an existing, emergency response or evacuation plan, and the severity of the consequences; and*
- *The degree to which project design will reduce the frequency or severity of a potential accidental release or explosion of a hazardous substance.*

(ii) Human Health Hazards

- *The regulatory framework for the health hazard;*
- *The probable frequency and severity of consequences to people*

from exposure to the health hazard; and

- *The degree to which project design would reduce the frequency of exposure or severity of consequences of exposure to the health hazard.*

b) Methodology

To evaluate impacts related to hazards and hazardous materials associated with construction and operation of the proposed Project, a Phase I Environmental Assessment was completed for the Project Site. The 2016 Phase I ESA included a review of State and federal records and databases to evaluate present and historic uses on the Project Site, a review of prior Phase I ESA's, Phase II ESA and a Groundwater Monitoring Report conducted for the Project Site and adjacent Taylor Yard properties, a Human Health Risk Assessment (HHRA) conducted for Project Site, as well as a Project Site reconnaissance to determine if any RECs, historical RECs (HRECs), or controlled RECs (CRECs) exist at the Project Site. The findings of the 2016 Phase I Assessment are provided above, under Subsection c) Previous Site Assessments and Other Reports.

Additionally, in response to DTSC's comment letter on the DEIR, Environmental Health Decisions prepared a Human Health Risk Assessment of Soil Exposure and Vapor Intrusion to Indoor Air – 2750 - 2800 Casitas Avenue, Los Angeles, California, dated November 18, 2020 (Updated HHRA), on behalf of Leighton, as an update to the January 2016 HHRA performed by ETSI (described above). The purpose of the Updated HHRA was to address potential health risks to future residents at the Project Site due to the presence of chemicals in soil and soil vapor at the Site based on both DTSC's currently published attenuation factor of 0.001 and the proposed draft, unadopted attenuation factor of 0.03.⁷ The Updated HHRA is included in Appendix B to this PR-DEIR. The findings of the HHRA Update are incorporated into this PR-DEIR as supplemental information.

c) Project Design Features

The following project design feature is proposed to address conditions associated with potential hazards and hazardous materials.

Project Design Feature HAZ-PDF-1: Soil Management Plan—The Applicant shall retain a qualified environmental consultant to prepare a Soil Management Plan (SMP) that will be submitted to the City of Los Angeles Department of Building and Safety for review and approval prior to the commencement of excavation and grading activities. Potential subsurface contamination likely to be encountered during excavation activities includes

⁷ *The currently published value for the attenuation of soil vapors into indoor air for future residential properties is 0.001 [DTSC, 2011]. In February, 2020, DTSC and the California Water Resources Control Board published draft guidance that presents the use of an attenuation factor of 0.03 [DTSC, 2020a]. The Updated HHRA uses both the currently published attenuation factor of 0.001 and the proposed attenuation factor of 0.03.*

metals, TPH or other volatile organic compounds (VOCs). The SMP shall be implemented during excavation and grading activities on the Project Site to ensure that any contaminated soils are properly identified, excavated, and disposed of off-site.

Elements of the SMP shall include, but not be limited to:

- A qualified environmental consultant shall be present on the Project Site during grading and excavation activities in the known or suspected locations of contaminated soils and shall be on call at other times as necessary, to monitor compliance with the SMP and to actively monitor the soils and excavations for evidence of contamination.
- The SMP shall be prepared and executed in accordance with South Coast Air Quality Management District (SCAQMD) Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil (Rule 1166). The SMP shall require the timely testing and sampling of soils so that any VOC-contaminated soils can be separated from inert soils for proper disposal. The SMP shall specify the testing parameters and sampling frequency in accordance with industry best practices and applicable regulatory requirements. The qualified environmental consultant shall have authority to request additional testing based on visual observation, the presence of odors, or other factors.
- Soil monitoring during soil excavation including visual observation, representative sampling via a Photo Ionization Detector and/or VOC monitoring in accordance with SCAQMD Rule 1166.
- During the Project's excavation phase, the Applicant shall remove and properly dispose of impacted materials in accordance with the provisions of the SMP. If soil is stockpiled prior to disposal, it shall be managed in accordance with the Project's Storm Water Pollution Prevention Plan (SWPPP), prior to its transfer for treatment and/or disposal. All impacted soils shall be properly treated and disposed of in accordance with SCAQMD Rule 1166, as well as applicable requirements of the California Department of Toxic Substances Control (DTSC).
- During excavation, SCAQMD Rule 1166 requires that soils identified as VOC-contaminated shall be sprayed with water or another approved vapor suppressant or covered with sheeting and securely anchored during periods of inactivity of greater than an hour, to prevent contaminated soils from becoming airborne. Per SCAQMD Rule 1166, VOC-contaminated soils shall be transported from the Project Site by a licensed transporter and disposed of at a licensed storage/treatment facility to prevent VOC-contaminated soils from becoming airborne or otherwise released into the environment.
- Dust suppression shall also be used for any active or inactive stockpile that is known or suspected to contain contaminants including metals above State or Federal hazardous waste limits. Active and inactive excavations and stockpiles of soil shall be kept visibly moist by water spray, treated with a vapor suppressant, or covered with a

continuous heavy-duty plastic sheeting (4 mm or greater) or other covering. The covering shall be overlapped at the seams and securely anchored.

- During excavation of area where elevated VOCs were identified, vapors shall be monitored by a qualified environmental consultant using a Photo Ionization Detector. If elevated soil vapors are detected, vapor control measures (such as additional dust control by water application) shall be implemented and, if appropriate, SCAQMD Notification shall be made.

d) Analysis of Project Impacts

Threshold (a) *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

(1) Impact Analysis

(a) Construction Impacts

Construction of the proposed Project would involve grading the Project Site to prepare building foundations and establish the finished grade level for internal roads, sidewalks, and open space areas. It is anticipated that up to 10,000 cubic yards (cy) of export and 10,000 cy of soil import would be required. Based on the results of the 2015 on-site assessment activities and the conclusions of the 2016 Phase I ESA, the January 2016 HHRA, and the 2020 HHRA Update, soils impacted with TPHd and TPHo in isolated areas surrounding borings LB12, LB13 and LB28 will be removed in accordance with the Soils Management Plan required under Project Design Feature HAZ-PDF-1 prior to the commencement of building construction and properly disposed of off-site. Additionally, lead was detected at concentrations ranging from 1.3 mg/kg to 39 mg/kg, except for one sample (SB4-0.50) where lead was detected at a concentration of 93 mg/kg. This shallow soil sample will be removed from the Project Site prior to grading activities in accordance with the Soils Management Plan required under Project Design Feature HAZ-PDF-1 above. The specific dust control measures to be used during this limited excavation of non-hazardous waste soils and the methods loading and transport for proper off-disposal will be addressed in the Soils Management Plan to be prepared under the oversight of the Los Angeles Department of Building and Safety (LADBS). During excavation and loading activities, active dust control measures will be implemented and monitored by Leighton and Associates. As noted in the 2016 Phase I ESA, the concentration of soluble lead in the LB4 0.5 foot-bgs soil sample was 1.9 milligrams per liter (mg/L) and did not exceed its 5.0 mg/L Soluble Threshold Limit Concentration (STLC) which is established in the California Code of Regulations, Title 22, Article 11. Accordingly, because it did not exceed the STLC for lead, the LB4 0.5 foot-bgs soil sample will not require management as a hazardous waste.

The proposed Project would also require the routine transport, use and disposal of cleaning solvents, fuels, paints and paint-related products, waste oil, spent solvents, oily rags and other

potentially hazardous materials commonly associated with construction activities. Construction activities would involve the use and storage in small quantities of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. All potentially hazardous materials used during demolition and construction activities would be handled, contained, stored, and used in accordance with all applicable local, State, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste based on its waste classification and the waste acceptance criteria of the permitted disposal facilities. **Therefore, construction of the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.**

(b) Operation Impacts

With respect to operations, the proposed Project would not transport, use, or dispose of hazardous materials as a normal course of operation that would result in reasonably foreseeable upset or accidental conditions. The proposed Project includes the construction of five mixed-use buildings with a total of 419 residential units and approximately 64,000 square feet of commercial space. No hazardous materials other than small amounts of typical cleaning supplies and solvents used for housekeeping and janitorial purposes would routinely be transported to the Project Site. Such materials are typically used and stored on site in quantities less than 220 pounds and are considered Conditionally Exempt Small Quantity Generators (CESQG) by the USEPA. The proposed Project would also include an urban farm, which would result in the use and transport of substances routinely associated with farming practices, such as soil amendments and fertilizers. Based on the approximate size of the urban farm being proposed (i.e., 42,000 square feet), it is anticipated that the urban farm would be classified as a Small Quantity Generator (SQG), generating between 220 and 2,200 pounds per month of hazardous waste. As such, the urban farm use must comply with USEPA requirements for managing hazardous waste, which include obtaining an EPA Identification number and following the USEPA's recommended best management practices for transporting, storing, managing, and disposing of hazardous materials in accordance with USEPA regulations. Further, the use of these substances would comply with State Health Codes and Regulations. The operation of the proposed Project would not use, transport, or dispose of hazardous materials in large quantities (more than 2,200 pounds per month), and thus would not be considered a Large Quantity Generator (LQG). The operation of the urban farm would be located on the roof of the proposed parking garage (Building "G"), which is a separate structure that does not contain any residential uses. The residential uses are proposed within Buildings A, B, C, and D, and thus would not be exposed to agricultural products that may be stored on site within the urban farm use. The Project's proposed buildings would comply with current regulations set by the LADBS. **Therefore, the proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during operation, and impacts would be less than significant.**

(2) Mitigation Measures

Impacts associated with the routine transport, use or disposal of hazardous materials would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts associated with the routine transport, use or disposal of hazardous materials were determined to be less than significant prior to mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

(a) Construction Impacts

During demolition, excavation, on-site grading and building construction, hazardous materials, such as fuel, and oils associated with construction equipment, as well as coatings, paints, adhesives, and caustic or acidic cleaners, would be used, and therefore, would require proper handling and management and, in some cases, disposal. Also, as noted above, based on a review of State and federal records and databases to evaluate present and historic uses on the Project Site, a review of prior Phase I ESAs, Phase II ESA, and a Groundwater Monitoring Report conducted for the Project Site and adjacent Taylor Yard properties, no evidence of existing USTs was observed on the Project Site. One AST of Driox Nitrogen was observed along the exterior of the eastern wall of the on-site structure. This AST is not considered a REC in connection with the Project Site and will be removed in accordance with all applicable laws and regulations prior to site demolition. In the unlikely event that USTs, underground facilities, buried debris, waste drums, tanks, and stained or odorous soils are found within areas proposed for demolition, suspect materials would be removed in accordance with all applicable federal, State, and local regulations. In addition, compliance with applicable permitting, notification, and worker safety regulations and programs would ensure construction worker safety at and near sites with potential contamination. Adherence to these guidelines would serve to effectively avoid worker exposure to hazardous materials that may be encountered on-site during construction activities. Therefore, with compliance with applicable regulations, impacts related to the removal of USTs, ASTs, or other buried materials during demolition and building construction would be less than significant.

Based on a review of State and federal records and databases to evaluate present and historic uses on the Project Site, a review of the prior Phase I ESA, the Phase II ESA and a Groundwater Monitoring Report conducted for the Project Site and adjacent Taylor Yard properties, a Human Health Risk Assessment conducted for Project Site, as well as a Project Site reconnaissance, the 2016 Phase I ESA concluded that precautionary observations should be made during future

property development for areas of possible contamination, such as, but not limited to, the presence of underground facilities, buried debris, waste drums, and USTs, stained soil, or odorous soils. As such, the proposed Project would implement Project Design Feature HAZ-PDF-1, which requires the preparation and implementation of a Soil Management Plan to address potential hazardous substances and/or petroleum products that may be discovered during construction.

Limited excavation and site grading are planned as a part of Project development. During excavation of areas where elevated VOCs were identified, vapors will be monitored by a qualified environmental consultant using a Photo Ionization Detector as part of the Soil Management Plan. If elevated soil vapors are detected, vapor control measures (such as additional dust control by water application) will be implemented and, if appropriate, SCAQMD notification will be made.

Arsenic was detected in the top 10 feet of soil at concentrations ranging from 1 mg/kg to 5.4 mg/kg. As stated above, arsenic detected at concentrations less than 12 mg/kg are considered consistent with the upper-bound ambient level of arsenic in Southern California and would not require remediation. Therefore, the proposed construction activities would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of arsenic into the environment.

Lead was detected at concentrations ranging from 1.3 mg/kg to 39 mg/kg, except for one sample (SB4-0.50) where lead was detected at a concentration of 93 mg/kg. This shallow soil sample will be removed from the site prior to grading activities in accordance with the Soils Management Plan required under Project Design Feature HAZ-PDF-1 in (see Subsection 3(c), Project Design Features). The specific dust control measures to be used during this limited excavation of non-hazardous waste soils and the methods for loading and transport for proper off-disposal will be addressed in the Soils Management Plan to be prepared under the oversight of the LADBS. During excavation and loading activities, active dust control measures will be implemented and monitored by a qualified environmental consultant. The 95 percent upper confidence limit of the mean concentration of lead at the Project Site was 31 mg/kg [Enviro-Tox, 2016], which is less than the screening level of 80 mg/kg. As such, the proposed construction activities would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of lead into the environment.

With implementation of Project Design Feature HAZ-PDF-1, a Soil Management Plan would be implemented during earthwork activities to ensure that any VOC-contaminated soils are handled in accordance with SCAQMD Rule 1166, the SWPPP, and all applicable rules and regulations for disposal of potentially contaminated soil. Thus, impacts related to reasonably foreseeable upset and accident conditions during construction would be less than significant.

(b) *Operational Impacts*

(i) *Risk Assessment for Vapor Intrusion into Indoor Air*

The results of the assessment of vapor intrusion into indoor air using the soil vapor data with the adopted and applicable attenuation factor of 0.001 are presented in the table at page 7 in Appendix B to this PR-DEIR. The cumulative cancer risk is 1E-05 and the cumulative noncancer hazard is 0.5. Cancer risk is driven by the presence of benzene and tetrachloroethylene. The cumulative cancer risks using data from 5 feet below ground surface and an attenuation factor of 0.03 were 4E-04 and the noncancer hazard index was 10. Cancer risk is driven by the presence of benzene, naphthalene, tetrachloroethylene, and trichloroethylene. Noncancer hazard index is driven by the presence of benzene and tetrachloroethylene. The cumulative cancer risks using data from 15 feet below ground surface and an attenuation factor of 0.03 were 2E-04 and the noncancer hazard index was 9. Cancer risk is driven by the presence of benzene, tetrachloroethylene, and trichloroethylene. Noncancer hazard index is driven by the presence of benzene, tetrachloroethylene, and trichloroethylene.

The DTSC has developed specific action levels for TCE directly measured indoor air for a variety of indoor uses in their HERO Note 5.⁸ For a residential scenario, the Accelerated Response Action Level (ARAL) for trichloroethylene is 2 micrograms per cubic meter (ug/m³) and the Urgent Response Action Level (URAL) is 6 ug/m³.⁹ For commercial and industrial uses (assuming 10-hour workdays) the ARAL is 7 ug/m³ and the URAL is 21 ug/m³. These response action levels are meant to address immediate threats to current occupants of buildings so only commercial/industrial uses should be considered for action at this time. Any TCE levels detected in the post-grading soil vapor survey will be again compared to these action levels using the published CalEPA attenuation factor at that time. If the levels exceed the action levels, a vapor barrier system will be installed in the building in the area on any such samples. Then, following the completion of the vapor barrier, the soil vapor probes installed above the liner will be sampled and TCE values will be compared to the URAL and ARAL.

Using an attenuation factor of 0.001, the indoor air concentration of TCE is predicted to be 0.31 ug/m³. This concentration is less than the ARAL and URAL for both residential and commercial uses. Therefore, no response actions are required for the levels of TCE detected at the site using the current CalEPA attenuation factor and considering current site uses since the predicted indoor air risks are acceptable using the current CalEPA vapor attenuation factor.¹⁰

⁸ *Department of Toxic Substances Control, Human and Ecological Risk Office (HERO) Note Number 5, Health-based Indoor Air Screening Criteria for Trichloroethylene (TCE). August 23, 2014.*

⁹ *The Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) issued HERO HHRA Note Number 5 [August 2014] to identify interim action levels for indoor air concentrations of trichloroethylene in order to protect against potential health effects from short term exposures.*

¹⁰ *Department of Toxic Substances Control, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air. Final- October, 2013.*

In response to the DEIR, the DTSC recommended that a proposed draft attenuation factor of 0.03 be applied to estimate vapor intrusion. DTSC's comment letter on the DEIR is provided in Appendix A to this PR-DEIR. The calculations presented in the DEIR and set forth above are based on the current adopted attenuation factor of 0.001. In response to DTSC's comment letter on the DEIR, an Updated HHRA was prepared by Environmental Health Decisions to address the potential health risks resulting from contact with soil (using soil data) and vapor intrusion to indoor air (using soil vapor data). As the draft attenuation factor has not been adopted, the Updated HHRA is provided for informational purposes.

As presented in Table 1a in the Updated HHRA (see Appendix B to this PRDEIR), total petroleum hydrocarbons (TPH) have been detected in the top 10 feet of soil (depth used for residential risk analysis) in the six carbon to 12 carbon range (C6-C12) and 23 carbon to 40 carbon range (C23-C40). As presented in Table 1b in the Updated HHRA, metals have been detected in the top 10 feet of soil. There is the potential for future residents to contact chemicals detected in soil in the outdoor environment. Contact could occur via ingestion, dermal contact, and inhalation of vapors and particulates in outdoor air.

The DTSC provides guidance to evaluate the potential for adverse health effects from contact with chemicals in soil.¹¹ For a chemical identified as a carcinogen, the representative soil concentration of each chemical is divided by the USEPA Regional Screening Level (RSL),¹² modified, if necessary (as discussed in DTSC HHRA Note 3¹³ so that the screening level [(SL)] utilized is the one specifically recommended by the DTSC), and multiplied by 10^{-6} (0.000001) to calculate the cancer risk posed by that chemical. For a chemical identified as causing noncancer health effects, the representative soil concentration of each chemical is divided by its screening level to obtain a Hazard Quotient (HQ) for that chemical.

Cancer risks are calculated for all potential carcinogens detected in the soil using the maximum detected concentration of each chemical. The cancer risk for each carcinogen is summed to arrive at a cumulative cancer risk from chemicals in soil.

The cumulative cancer risk at the Project Site was calculated at 4E^{-08} (also expressed as 4×10^{-8} or 0.04 in 1 million). The cumulative cancer risk for chemicals detected in soil is less than the insignificant or *de minimis* risk of 1E^{-06} (also expressed as 1×10^{-6} or 1 in 1 million) and less than the Proposition 65 target risk of 1E^{-05} (also expressed as 10 in 1 million).

Noncancer hazard is calculated using the maximum concentration of each chemical detected in the soil. The noncancer hazard for each chemical using the maximum detected concentration of

¹¹ California Environmental Protection Agency (Cal/EPA), *Preliminary Endangerment Assessment Manual*, October, 2015.

¹² United States Environmental Protection Agency. *Regional Screening Levels*, <http://www2.epa.gov/risk/risk-based-screening-table-generic-tables>, May, 2020.

¹³ Department of Toxic Substances Control, *Supplemental Guidance: Screening and Evaluating Vapor Intrusion – Draft*, February, 2020.

each chemical (see Table 3 in Appendix B to this PR-DEIR) is summed to arrive at a cumulative noncancer hazard index from chemicals in soil.

The cumulative noncancer hazard index at the Project Site was calculated at 2. The cumulative soil noncancer index is greater than the benchmark value of 1. The noncancer hazard is driven by the presence of TPH in the C13-C22 range found in 3 samples located at the southeastern portion area of the Project Site. A hazard index greater than 1 commonly requires mitigation or remediation by Cal-EPA. Therefore, soils in the vicinity of samples LB12-5', LB12-10' and LB27-5' would have the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of TPH contaminated soils into the environment using the draft, unadopted attenuation factor.

Soil excavation and grading activities during construction will disrupt the soil profile and current soil conditions, which could result in different risk to future residents for soil gas than described above. Therefore, a new soil vapor survey will be conducted following the excavation and grading activities pursuant to MM-HAZ-1 below.

In conclusion, based on DTSC's proposed attenuation factor of 0.03, it is conservatively considered that the proposed Project would have the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of TPH-contaminated Soil Vapor into the environment, and impacts would be potentially significant prior to mitigation.

(2) Mitigation Measures

The following mitigation measure would address potentially significant impacts related to reasonably foreseeable upset and accident conditions involving the release of TPH contaminated Soil Vapor into the environment:

- MM-HAZ-1 A new soil vapor survey shall be conducted following excavation and grading activities, and an updated Human Health Risk Assessment shall be prepared at that time using the adopted attenuation factor then in effect. Based on the results of the updated HHRA, final vapor control measures shall be implemented, as needed, following the review of the engineered plan by the DTSC and City of Los Angeles. If the predicted cumulative cancer health risks are less than or equal to 1 in a million, no vapor control measures shall be required. If the predicted cumulative cancer risk is between 1.5 and 10 in a million, a passive vapor control system shall be installed beneath any buildings showing this elevated risk to residents or commercial occupants on the first floor. If the predicted cumulative cancer risk is greater than 10 in a million, a vapor control system with both passive and active components shall be installed beneath any buildings showing this elevated risk to residents or commercial occupants on the first floor. The active components of the vapor control system shall only be activated if the results of a one-time post-installation vapor testing from the probes installed above the vapor

membrane show levels of VOCs above the DTSC's indoor air screening levels for the future use of that area (commercial or residential).

(3) Level of Significance After Mitigation

Impacts associated with the potential for Project to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of TPH contaminated soil and TPH-impacted soil vapor into the environment would be less than significant after mitigation.

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

(1) Impact Analysis

The Los Feliz Charter School for the Arts, located at 2709 Media Center Drive, is the only school within a 0.25-mile radius of the Project Site.

The Project Site is developed with an approximately 117,000-square-foot light manufacturing/warehouse/film production building and its associated surface parking. The building on-site was constructed in 1999. The use of asbestos, lead, and PCB in building and electrical equipment was banned prior to 1999. Therefore, due to the building's age, there is no risk of asbestos, lead, or PCB release into the environment during building demolition.

As discussed above, soils impacted with TPH and lead in isolated areas of the Project Site will be removed prior to grading activities in accordance with the Soils Management Plan required under Project Design Feature HAZ-PDF-1. The specific dust control measures to be used during this limited excavation of non-hazardous waste soils and the methods loading and transport for proper off-disposal will be addressed in the Soils Management Plan to be prepared under the oversight of the LADBS.

No hazardous materials other than small amounts of typical cleaning supplies and solvents used for housekeeping and janitorial purposes, and substances routinely used with urban farming, would be utilized on the Project Site. In addition, as stated above, the urban farm would be considered a SQG and would transport, store, manage and dispose of any hazardous materials in accordance with the USEPA's best management practices for SQGs. The use of these substances would also comply with State Health Codes and Regulations and any hazardous materials would be handled, transported and disposed in accordance with all applicable local, state and federal regulations. ***As such, the proposed Project would not emit hazardous emissions and would handle limited quantities of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school and but would handle these materials in accordance with applicable regulations and impacts would be less than significant impact upon the nearby school.***

(2) Mitigation Measures

Project impacts related to the use or handling of hazardous materials within 0.25 miles of a school would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Project impacts related to the use or handling of hazardous materials within 0.25 miles of a school were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

a) Construction Impacts

As discussed in the subsection 2.B (2), above, the Project Site is identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Specifically, the Project Site is identified on the following databases: FINDS, CA HAZNET, CA EMI, RCRA-LQG, US AIRS, and EDR US Historical Auto Station.¹⁴ Additionally, the Project Site was formally a part of the Taylor Yard property, which was identified as an UST, AST, Toxic Pits, Cortese, Historical Cortese, LA County Site Mitigation, VCP, Response, EnviroStor, Historical Cal-Site, CA Bond Plan, RCRA Generator, SLIC, Financial Assurance, CERCLIS NFRAP, CHMIRS, and WDS site in the 2016 Phase I ESA. The 2016 Phase I ESA concluded that no further action is necessary with regard to the Project Site's listing on the FINDS, CA HAZNET, CA EMI, RCRA-LQG, US AIRS, and EDR US Historical Auto Station databases as evidence of RECs and CRECs was not identified on the Project Site.

However, as discussed under **Threshold b**, above, TPH have been detected in the top 10 feet of soil (depth used for residential risk analysis) in the six carbon to 12 carbon range (C6-C12) and 23 carbon to 40 carbon range (C23-C40). As presented in Table 1b in the Updated HHRA, metals have been detected in the top 10 feet of soil. As such, grading and earthwork activities during the proposed Project's construction phase would have the potential to encounter TPH contaminated soils. As set forth under **Threshold b** above, construction impacts would be reduced to less than significant levels with implementation of Project Design Feature HAZ-PDF-1, which requires the preparation and implementation of a Soil Management Plan to address potential hazardous substances and/or petroleum products that may be discovered during construction.

¹⁴ *Leighton and Associates, Inc., Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue, Los Angeles California, Assessor Parcel Number 5442-002-012, May 31, 2016 (See Appendix F.1 to the DEIR).*

With implementation of Project Design Feature HAZ-PDF-1, Project construction would not have the potential to create a significant hazard to the public or the environment as a result of being on a list of hazardous materials site pursuant to Government Code Section 65962.5.

b) Operational Impacts

Operation of the proposed Project would have the potential to expose future residents to chemicals detected in soil in the outdoor environment. Contact could occur via ingestion, dermal contact, and inhalation of vapors and particulates in outdoor air. As discussed above, any TPH contaminated soil that is encountered during the grading and earthwork phases of construction would be removed and disposed of in accordance with the SCAQMD Rule 1166 as and specified in the Soil Management Plan (see HAZ-PDF-1, above). As discussed in **Threshold b above**, the Updated HHRA shows that both cancer and non-cancer risks to future residents from soil vapors would be less than significant using the currently adopted attenuation factor. However, the Update HHRA shows that while cancer risks would be less than significant using the proposed draft attenuation factor, cumulative non-cancer risks would exceed the significance threshold using this factor.

Without mitigation, it is conservatively considered that operation of the proposed Project would have the potential to create a significant hazard to the public or the environment as a result of being on a list of hazardous materials site pursuant to Government Code Section 65962.5.

(2) Mitigation Measures

Mitigation measure MM-HAZ-1, identified above in response to **Threshold b**, would address potentially significant impacts related to significant hazard to the public or the environment as a result of being on a list of hazardous materials site pursuant to Government Code Section 65962.5.

(3) Level of Significance After Mitigation

Implementation of Mitigation Measure MM-HAZ-1 would mitigate potential health hazards associated with vapor intrusion into indoor air space during project operations. Mitigation Measure MM-HAZ-1 would require additional soil testing and an Updated HHRA following excavation and grading activities to assess the soil conditions and identify the proper design requirements for a vapor control system that achieves the performance standards for residential development. With the implementation of Mitigation Measure MM-HAZ-1, potentially significant impacts related to significant hazards to the public or the environment occurring as a result of being on a list of hazardous materials site pursuant to Government Code Section 65962.5 would be reduced to a less-than-significant level.

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

As discussed in Section VI, Other CEQA Considerations, and in the Initial Study (Appendix A-1 to the DEIR), the Burbank Bob Hope Airport is the closest airport to the Project Site and is located nine miles northwest from the Project Site. Thus, the Project would have no impact with respect to Threshold (e). No further analysis is required.

Threshold (f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

As discussed in Section VI, Other CEQA Considerations, and in the Initial Study (Appendix A-1 to the DEIR), the Project Site is not located near any private airstrip. Thus, the proposed Project would have no impact with respect to Threshold (f). No further analysis is required.

Threshold (g) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

(1) Impact Analysis

(a) Construction Impacts

With respect to off-site emergency evacuation route impacts, the Project Site is not located on or near a City-designated selected disaster route.^{15,16} Therefore, construction of the proposed Project would not cause any permanent alterations to evacuation routes and patterns or impede emergency access or travel on rights-of-way. Furthermore, all construction activities resulting in temporary alterations to public access and right-of-way would be subject to the LADBS and Los Angeles Department of Transportation (LADOT) permitting processes.

The Project Site is located at the terminus of Casitas Avenue, identified as a local street. Fletcher Drive, which is located approximately 0.22 miles north of the Project Site, is the closest identified disaster route to the Project Site.¹⁷ Since the Project Site is not located on a major street or roadway, construction activities, which would add construction traffic to the street network, would have a minimal effect on fire protection services, such as emergency vehicle response times. **Thus, the Project construction would have a less-than-significant impact upon emergency response or evacuation plans.**

¹⁵ Los Angeles County Department of Public Works, *City of Los Angeles Central Area Disaster Route Map*, August 13, 2008.

¹⁶ *City of Los Angeles, Safety Element of the Los Angeles General Plan, Exhibit H, Critical Facilities and Lifeline Systems in the City of Los Angeles*, April 1995.

¹⁷ *Ibid.*

b) Operational Impacts

With respect to Project operation, the proposed Project would not interfere with emergency response or an evacuation plan. The Project Site is located at the terminus of Casitas Avenue and would not interfere with or physically impede access to existing emergency evacuation routes in the Project vicinity. Access for LAFD apparatus and personnel to and into all structures shall be required, and fire lanes, where required and dead ending streets shall terminate in a cul-de-sac or other turning area approved by the LAFD. No dead ending street or fire lane shall be greater than 700 feet in length or secondary access shall be required. As discussed in Section II, Project Description, it is anticipated that approval of the proposed Project would be conditioned on providing an additional emergency secondary access/egress route to/from the Project Site. To comply with this anticipated condition, the Applicant would implement one of the following three options:

- Option 1: An emergency access gate from the west side of the Project Site connecting to the existing LADWP service road on the east bank of the Los Angeles River Channel accessible via Fletcher Drive;
- Option 2: An emergency access gate and driveway from the northbound onramp of SR-2, immediately north of an adjacent to the Project Site; and
- Option 3: An emergency access gate on the south side of Casitas Avenue providing access through the future Bow Tie Park. This option would necessitate improving and paving an approximate 1.2-mile existing access road through a currently vacant site (which is planned for future parkland).

Each of the three options described above are identified and delineated in Figure II-17 Secondary Emergency Access Options.

The establishment and maintenance of a secondary emergency access point would provide additional and improved emergency access to the Project Site and would facilitate a better response from the LAFD in the event of an emergency. Further, as discussed in detail in Section IV.I, Public Services of this DEIR, site plans must be submitted to the LAFD and the Los Angeles Police Department (LAPD) for their review and approval prior to the issuance of building permits. Emergency vehicle access to the Project Site would continue to be provided from local public roadways. ***Thus, the Project operation would have a less-than-significant impact upon emergency response or evacuation plans.***

(2) Mitigation Measures

Project impacts related to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Project impacts related to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold (h) *Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, caused in whole or in part from the project's exacerbation of existing environmental conditions?*

As discussed in Section VI, Other CEQA Considerations, and in the Initial Study (Appendix A-1 to the DEIR), the Project Site is not located in a Very High Fire Hazard Severity Zone. Thus, the Project would have no impact with respect to Threshold (h). No further analysis is required.

e) Cumulative Impacts

Threshold (a) *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

(1) Impact Analysis

Development of the proposed Project, in combination with the 17 related projects, has the potential to increase the risk for accidental release of hazardous materials. The 17 related projects are located within a two-mile radius of the Project Site and occur within the City of Los Angeles and the City of Glendale. Each of the related projects would require evaluation for potential threats to public health and safety and the accidental release of hazardous materials into the environment during construction and operation, emergency response, transport, use, and disposal of hazardous materials, and hazards to sensitive receptors (including schools). Because the routine transport, use, or disposal of hazardous materials is largely site-specific related to each business or activity, evaluation of potential threats to public safety would occur on a case-by-case basis for each individual project in conjunction with development proposals on these properties. Each related project would be required to follow local, state and federal laws regarding hazardous materials and other hazards. ***As such, the proposed Project's contribution to impacts related to the routine transport, use, or disposal of hazardous materials would not be cumulatively considerable, and cumulative impacts would be less than significant.***

(2) Mitigation Measures

Cumulative impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to the routine transport, use, or disposal of hazardous materials were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

(a) Construction

As stated above, the proposed construction activities would create a potentially significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of TPH contaminated soils into the environment. However, implementation of the Soil Management Plan pursuant the Project Design Feature HAZ-PDF-1 would ensure that any VOC-contaminated soils are handled in accordance with SCAQMD Rule 1166, the SWPPP, and all applicable rules and regulations for disposal of potentially contaminated soil. Implementation of HAZ-PDF-1 would reduce impacts related to reasonably foreseeable upset and accident conditions during construction on the Project Site to less-than-significant levels. Generally, the geographic context for cumulative construction-related impact analysis of hazards includes the related projects in the vicinity of the Project, that when viewed together with the Project, could incrementally increase a hazards impact to a significant level. Based on a review of the Related Projects identified in Section III, Environmental Setting, Related Projects 5, 10, 15 and 17 are located within ½-mile of the Project Site and would have the potential to generate cumulative impacts related to significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Related Project No. 5 is the Resistance Arts Academy Charter School and construction has been completed. As such, no cumulative impacts with respect to construction activities would occur. In conjunction with Related Project No. 5. Related Project No. 10 is an approved project known as the Glassell Park Residential Project with 370 multi-family apartment projects. Based on the IS/MND for the Glassell Park Residential Project (ENV-2016-4394-MND) construction impacts for that project would be mitigated to a less than significant level with incorporation of mitigation measures related to the removal of asbestos containing materials, lead based paint and PCBs in the existing structure proposed to be demolished. Related Project No. 15 and 17 include the adjacent Bowtie Park Project and future development of the G-2 Taylor Yard Project. Chemicals of Concern (COCs) identified in the soil and/or groundwater in the Taylor Yard Phase I ESA include primarily arsenic, lead, PAHs, PCE, TPH, and TCE. According to information obtained from the DTSC's EnviroStor website, previous reports, and previous

investigations completed by Leighton on the neighboring Taylor Yard Parcel G-1, areas of concern from the former Taylor Yard are primarily located within Parcel G-2 and the southern portion of Parcel G-1, approximately 0.6 miles southeast (hydraulically down-gradient) of the Project Site. Accordingly, the G-2 Parcel and the Bowtie Park Project Site are subject to further remediation efforts associated with future development of these parcels as public open space parks. As noted in prior studies conducted for the G-2 Parcel,¹⁸ there is no evidence that known releases or contamination associated with the site or surrounding properties would create reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Compliance with applicable laws and regulations governing excavation, treatment, and disposal of contaminated soils and groundwater, adherence to the City's project specifications and recommendations contained in the City of Los Angeles Department of Recreation and Parks (LARAP), would ensure impacts associated with the cleanup of Site G-2 would be less than significant. ***Therefore, as the proposed Project's construction impacts would be mitigated to less than significant levels, the cumulative impact associated with the proposed Project and potential future remediation activities on adjacent parcels would not be cumulatively considerable after mitigation.***

(b) Operation

The proposed Project would not transport, use, or dispose of hazardous materials as a normal course of operation that would result in reasonably foreseeable upset or accidental conditions. The volume and type of products and chemicals used in typical multi-family and mixed-use developments are those involved in the cleaning and maintenance of residential and commercial retail properties, including restaurants and public spaces. Additionally, the proposed urban farm would be expected to store and use fertilizers in small quantities on site and all materials used and stored on site would be regulated and managed in accordance with manufacturers materials data sheets and all applicable rules and regulations.

Operation of the proposed Project would have the potential to expose future residents to chemicals detected in soil in the outdoor environment. As discussed above, any TPH contaminated soil that is encountered during the grading and earthwork phases of construction would be removed and disposed of in accordance with the SCAQMD Rule 1166 as and specified in the Soil Management Plan (see HAZ-PDF-1, above). Further, mitigation measure MM-HAZ-1 would require additional soil testing and an Updated HHRA following excavation and grading activities to assess the soil conditions and identify the proper design requirements for a vapor control system that achieves the performance standards for residential development. With mitigation, health risks to future residents from soil vapors would be less than significant.

¹⁸ City of Los Angeles, Bureau of Engineering, IS/MND for Taylor Yard River Parcel G2 Project, August 2014.

Generally, the geographic context for cumulative operation-related impact analysis of hazards includes the related projects in the vicinity of the Project, that when viewed together with the Project, could incrementally increase a hazards impact to a significant level. Based on a review of the Related Projects identified in Section III, Environmental Setting, Related Projects 5, 10, 15 and 17 are located within ½-mile of the Project Site and would have the potential to generate cumulative impacts related to significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. These related projects include a charter school, a 370 unit multi-family apartment project and the conversion of vacant land to future park and open space areas. These uses would not create a cumulative significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment because they would be subject to the same regulatory process as the proposed Project with respect to assessing the potential for soil contamination and recognized environmental hazards on a site-by-site basis. Similar to the Project, HHRAs would be conducted for each development, as applicable to their respective uses and permitting procedures, to ensure that significant hazards involving the release of hazardous materials into the environment are reduced to less than significant levels. ***Therefore operational cumulative impacts related to the potential release of hazardous materials into the environment would be less than significant.***

(2) Mitigation Measures

Cumulative impacts related to significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment on the Project Site were concluded to be less than significant. Therefore, no mitigation measures to address cumulative impacts would be required.

(3) Level of Significance After Mitigation

Cumulative impacts related to significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment on the Project Site were determined to be less than significant after mitigation. Therefore, the proposed Project's contribution to cumulative impacts associated with significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be mitigated to less than significant levels and cumulative impacts would be less than significant after mitigation.

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

(1) Impact Analysis

The proposed Project's potential impacts associated with the accidental release of hazardous materials during construction and operation, the handling of hazardous materials near a school,

and emergency response would be reduced to less-than-significant levels with the implementation of Mitigation Measures MM-HAZ-1 and MM-HAZ-2. Similarly, each related project would be required to follow local, state and federal laws regarding hazardous materials and other hazards. As noted above, based on prior studies conducted for the G-2 Parcel,¹⁹ there is no evidence that known releases or contamination associated with the site or surrounding properties would create a significant hazard to the public or the environment related to the transport, use, or disposal of hazardous materials. Compliance with applicable laws and regulations governing excavation, treatment, and disposal of contaminated soils and groundwater, adherence to the City's project specifications and recommendations contained in the City of Los Angeles Department of Recreation and Parks (LARAP), would ensure impacts associated with the cleanup of Site G-2 would be less than significant. ***Therefore, as the proposed Project's impact would be mitigated to less than significant levels, the cumulative impact associated with the proposed Project and potential future remediation activities on adjacent parcels would be less than cumulatively considerable after mitigation.***

(2) Mitigation Measures

Cumulative impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school would be less than significant. Therefore, no mitigation measures to address cumulative impacts would be required.

(3) Level of Significance After Mitigation

Cumulative impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

(a) Construction

As stated above, the Project Site is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment. With implementation of Project

¹⁹ City of Los Angeles, Bureau of Engineering, IS/MND for Taylor Yard River Parcel G2 Project, August 2014.

Design Feature HAZ-PDF-1, the Project's impacts during construction from hazardous materials would be less than significant.

Generally, the geographic context for cumulative construction-related impact analysis of hazards includes the related projects in the vicinity of the Project, that when viewed together with the Project, could incrementally increase a hazards impact to a significant level. Based on a review of the Related Projects identified in Section III, Environmental Setting, Related Projects 15 and 17 are located on sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a cumulative significant hazard to the public or the environment. Related Project No. 15 and 17 include the adjacent Bowtie Park Project and future development of the G-2 Taylor Yard Project. Chemicals of Concern (COCs) identified in the soil and/or groundwater in the Taylor Yard Phase I ESA include primarily arsenic, lead, PAHs, PCE, TPH, and TCE. According to information obtained from the DTSC's EnviroStor website, previous reports, and previous investigations completed by Leighton on the neighboring Taylor Yard Parcel G-1, areas of concern from the former Taylor Yard are primarily located within Parcel G-2 and the southern portion of Parcel G-1, approximately 0.6 miles southeast (hydraulically down-gradient) of the Project Site. Accordingly, the G-2 Parcel and the Bowtie Park Project Site are subject to further remediation efforts associated with future development of these parcels as public open space parks. As noted in prior studies conducted for the G-2 Parcel,²⁰ there is no evidence that known releases or contamination associated with the site or surrounding properties would create a significant hazard to the public or the environment related to the transport, use, or disposal of hazardous materials. Compliance with applicable laws and regulations governing excavation, treatment, and disposal of contaminated soils and groundwater, adherence to the City's project specifications and recommendations contained in the City of Los Angeles Department of Recreation and Parks (LARAP), would ensure impacts associated with the cleanup of Site G-2 would be less than significant. ***Therefore, as the proposed Project's impact would be mitigated to less than significant levels, the cumulative impact associated with the proposed Project and potential future remediation activities on adjacent parcels would be less than cumulatively considerable after mitigation.***

(b) Operation

The project's operational impacts would be less than significant with mitigation. Due to the potential for the proposed Project to expose future residents to chemicals detected in soil in the outdoor environment, MM-HAZ-1 would require additional soil testing and an Updated HHRA following excavation and grading activities to assess the soil conditions and identify the proper design requirements for a vapor control system that achieves the performance standards for residential development.

²⁰ City of Los Angeles, Bureau of Engineering, IS/MND for Taylor Yard River Parcel G2 Project, August 2014.

Generally, the geographic context for cumulative operation-related impact analysis of hazards includes the related projects in the vicinity of the Project, that when viewed together with the Project, could incrementally increase a hazards impact to a significant level. Based on a review of the Related Projects identified in Section III, Environmental Setting, Related Projects 15 and 17 are located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a cumulative significant hazard to the public or the environment. These related projects include the conversion of vacant land to future park and open space areas. As noted above, Related Projects 15 and 17 are undergoing separate environmental review processes pursuant to CEQA. Similar to the proposed Project, these projects would be subject to further soil testing and HHRA investigations to ensure that the future open space or parkland uses would not create a cumulative significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Operational impacts associated with the proposed Project, and the future development and operation of the adjacent Bowtie State Park and G-2 sites that are identified on a list compiled pursuant to Government Code Section 65962.5 and, as a result, would create a less than cumulative significant hazard to the public or the environment.

(2) Mitigation Measures

Cumulative impacts related to the proposed Project and related project sites being located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would be less than significant. Therefore, no mitigation measures to address cumulative impacts would be required.

(3) Level of Significance After Mitigation

Project impacts related to the Project Site being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 were determined to be less than significant after mitigation. With mitigation, the proposed Project's contribution to a potentially significant impact related to the Project Site and other Taylor Yard properties adjacent to the Project Site that are located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would not be cumulatively considerable.

IV. Environmental Impact Analysis

P. Hydrology and Water Quality

1. Introduction

This section analyzes the Project's potential impacts on hydrology (drainage flows), surface water quality, groundwater levels and groundwater quality. The analysis is primarily based on the 2800 Casitas Flood Risk Technical Memorandum, prepared by KHR Associates, dated October 9, 2020, which is provided in Appendix D to this PR-DEIR.²¹

2. Environmental Setting

a) Regulatory Framework

There are several plans, policies, and programs regarding Hydrology and Water Quality at the federal, state, regional, and local levels. Described below, these include:

- Clean Water Act
- Federal Antidegradation Policy
- Safe Drinking Water Act
- National Flood Insurance Program
- Porter-Cologne Water Quality Act (California Water Code)
- California Antidegradation Policy
- California Toxics Rule
- Sustainable Groundwater Management Act of 2014
- County of Los Angeles Hydrology Manual
- NPDES Permit Program
- Los Angeles River Watershed Master Plan
- Los Angeles Municipal Code Section 62.105, Construction "Class B" Permit
- Los Angeles Municipal Code Sections 12.40 through 12.43, Landscape Ordinance
- Los Angeles Municipal Code Section 64.70, Stormwater and Urban Runoff Pollution Control Ordinance
- Los Angeles Municipal Code Section 64.72, Stormwater Pollution Control Measures for Development Planning and Construction Activities
- Low Impact Development Ordinance (No. 181,899)
- Water Quality Compliance Master Plan for Urban Runoff
- Stormwater Program – Los Angeles County MS4 Permit Citywide Implementation

²¹ KHR Associates, 2800 Casitas Flood Risk Technical Memorandum, October 9, 2020. (see Appendix D to this PR-DEIR).

(1) Federal

(a) *Clean Water Act*

The Clean Water Act (CWA), formerly known as the Federal Water Pollution Control Act, was first introduced in 1948, with major amendments in the 1960s, 1970s and 1980s.²² The CWA authorizes Federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. Amendments to the CWA in 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program, which prohibits discharge of pollutants into the nation's waters without procurement of a NPDES permit from the United States Environmental Protection Agency (USEPA). The purpose of the permit is to translate general requirements of the Clean Water Act into specific provisions tailored to the operations of each organization that is discharging pollutants. Although federally mandated, the NPDES permit program is generally administered at the State and Regional levels.

The USEPA NPDES Program requires NPDES permits for: (1) Municipal Separate Storm Sewer Systems (MS4) Permit generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs five acres or more of land. As of March 2003, Phase II of the NPDES Program extended the requirements for NPDES permits to numerous small municipal separate storm sewer systems, construction sites of one to five acres, and industrial facilities owned or operated by small municipal separate storm sewer systems, which were previously exempted from permitting.

(b) *Federal Antidegradation Policy*

The Federal Antidegradation Policy has been incorporated within the Clean Water Act and requires states to develop state-wide antidegradation policies and identify methods for implementing them.²³ Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods must, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

²² United States Environmental Protection Agency, *Clean Water Act*, November 2002, <https://www.epa.gov/sites/production/files/2017-08/documents/federal-water-pollution-control-act-508full.pdf>. Accessed February 2021.

²³ United States Environmental Protection Agency, *Water Quality Standards Handbook - Chapter 4: Antidegradation*, 2010. <https://www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter4.pdf>. Accessed February 2021.

(c) *Safe Drinking Water Act*

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of the Nation's drinking water.²⁴ The SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. Under SDWA, the USEPA sets standards for drinking water quality and oversees the states, localities, and water suppliers that implement those standards. The SDWA regulates contaminants of concern in domestic water supply, including MCLs, and that the EPA has delegated the Cal Dept. of Public Health the responsible agency for administering California's drinking water program. MCLs are established under CCR Title 22, Div. 4, Ch. 15, Article 4 (Title 22 Standards).

(d) *National Flood Insurance Program*

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards.²⁵ FEMA provides flood insurance rate maps (FIRMs) for local and regional planners to promote sound land use and development practices, by identifying potential flood areas based on the current conditions. To delineate a FIRM, FEMA conducts engineering studies referred to as flood insurance studies (FIS). Using information gathered in these studies, FEMA engineers and cartographers delineate special flood hazard areas (SFHA) on FIRMs.

The Flood Disaster Protection Act requires owners of all structures within identified SFHAs to purchase and maintain flood insurance as a condition of receiving federal or federally-related financial assistance, such as mortgage loans from federally-insured lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program (NFIP) afforded by FEMA.

(2) **State**

(a) *Porter-Cologne Water Quality Act (California Water Code)*

The Porter-Cologne Water Quality Control Act established the legal and regulatory framework for California's water quality control.²⁶ The California Water Code (CWC) authorizes the State Water Resources Control Board (SWRCB) to implement the provisions of the CWA, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials

²⁴ *United States Code, Title 42 – The Public Health and Welfare- Chapter 6A Public Health and Service, Safe Drinking Water Act. 2006 Edition, Supplement 4, <https://uscode.house.gov/view.xhtml?path=/prelim@title42/chapter6A/subchapter12&edition=prelim>. Accessed February 2021.*

²⁵ *The National Flood Insurance Act of 1968, as amended, and The Flood Disaster Protection Act of 1973, 42 U.S.C. 4001 et. seq., <https://uscode.house.gov/view.xhtml?path=/prelim@title42/chapter50&edition=prelim>. Accessed February 2021.*

²⁶ *State Water Resources Control Board, Porter-Cologne Water Quality Control Act, January 2018, https://www.waterboards.ca.gov/laws_regulations/docs/portercologne.pdf. Accessed February 2021.*

and other pollutants. In California, the NPDES stormwater permitting program is administered by the SWRCB.

Under the CWC, the State of California is divided into nine Regional Water Quality Control Boards (RWQCBs), which govern the implementation and enforcement of the CWC and the CWA. The Project Site is located within Region 4, also known as the Los Angeles Region (LARWQCB). The RWQCBs develop and enforce water quality objectives and implement plans that will best protect California's waters, acknowledging areas of different climate, topography, geology, and hydrology. Each RWQCB is required to formulate and adopt a Water Quality Control Plan or Basin Plan for its region. The Basin Plan establishes beneficial use definitions for the various types of water bodies, and serves as the basis for establishing water quality objectives, discharge conditions and prohibitions, and must adhere to the policies set forth in the CWC and established by the SWRCB. In this regard, the LARWQCB issued the Los Angeles Basin Plan on August 29, 2014 for the Coastal Watersheds of Los Angeles and Ventura Counties, with subsequent amendments. The RWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality.²⁷

(b) California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB in 1968.²⁸ Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the State, not just surface waters. The policy states that, whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality shall be maintained and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of the water resource.

(c) California Toxics Rule

In 2000, the California Environmental Protection Agency (Cal-EPA) promulgated the California Toxics Rule, which establishes water quality criteria for certain toxic substances to be applied to waters in the State.²⁹ Cal-EPA promulgated this rule based on Cal-EPA's determination that the numeric criteria of specific concentrations of regulated substances are necessary for the State to protect human health and the environment. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface

²⁷ United States Environmental Protection Agency, *Clean Water Act*, December 2016, <https://www.epa.gov/compliance/state-review-framework-compliance-and-enforcement-performance>. Accessed February 2021.

²⁸ California State Water Resources Control Board, *State Board Resolution No. 68-16*. October 1968, https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf. Accessed February 11, 2021.

²⁹ United States Environmental Protection Agency, *Water Quality Standards, Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California*. February 2001, <https://www.epa.gov/wqs-tech/water-quality-standards-establishment-numeric-criteria-priority-toxic-pollutants-state>. Accessed February 2021.

waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

(d) *Sustainable Groundwater Management Act of 2014*

The Sustainable Groundwater Management Act of 2014 (SGMA) requires the designation of groundwater sustainability agencies (GSAs) by one or more local agencies and the adoption of groundwater sustainability plans (GSPs) for basins designated as medium- or high-priority by the California Department of Water Resources (DWR). SGMA grants new powers to GSAs, including the power to adopt rules, regulations, ordinances, and resolutions; regulate groundwater extractions; and to impose fees and assessments. SGMA also allows the State Water Resources Control Board (SWRCB) to intervene if local agencies will not or do not meet the SGMA requirements, in addition to mandating that critically over-drafted basins be sustainable by 2040, and medium- or high-priority by 2042.

(3) Regional

(a) *County of Los Angeles Hydrology Manual*

Drainage and flood control in the City of Los Angeles (City) are subject to review and approval by the Department of Public Works, Bureau of Engineering (Bureau of Engineering). Storm drains within the City are constructed by both the City and the Los Angeles County Flood Control District (County Flood Control). The County Flood Control constructs and has jurisdiction over regional facilities such as major storm drains and open flood control channels, while the City constructs and is responsible for local interconnecting tributary drains.

Per the City's Special Order No. 007-1299, December 3, 1999, the City has adopted the Los Angeles County Department of Public Works' Hydrology Manual as its basis of design for storm drainage facilities.³⁰ The Department of Public Works' Hydrology Manual requires that a storm drain conveyance system be designed for a 25-year storm event and that the combined capacity of a storm drain and street flow system accommodate flow from a 50-year storm event. Areas with sump conditions are required to have a storm drain conveyance system capable of conveying flow from a 50-year storm event. The County also limits the allowable discharge into existing storm drain (MS4) facilities based on the County's MS4 Permit, which is enforced on all new developments that discharge directly into the County's MS4 system.

Drainage and flood control structures and improvements within the City are subject to review and approval by the City's Department of Public Works and Department of Building and Safety. As required by the Department of Public Works, all public storm facilities must be designed in conformity with the standards set forth by Los Angeles County. The Department of Public Works

³⁰ *Los Angeles County Department of Public Works, Hydrology Manual, January 2006, http://dpw.lacounty.gov/wrd/Publication/engineering/2006_Hydrology_Manual/2006%20Hydrology%20Manual-Divided.pdf. Accessed February 2021.*

reviews and approves MS4 plans prior to construction. Any proposed increases in discharge directly into County facilities, or proposed improvements of County-owned MS4 facilities, such as catch basins and drainage lines, require approval from County Flood Control to ensure compliance with the County's Municipal NPDES Permit requirements.

(b) *NPDES Permit Program*

As indicated above, in California, the NPDES stormwater permitting program is administered by the SWRCB through its nine RWQCBs. This NPDES permit, referred to as General Permit for Stormwater Discharges from Construction Activities by the SWRCB, establishes a risk-based approach to stormwater control requirements for construction projects.

(i) *Construction: Stormwater Pollution Prevention Plan*

For all construction activities disturbing one acre of land or more, California mandates the development and implementation of Stormwater Pollution Prevention Plans (SWPPP). The SWPPP documents the selection and implementation of best management practices (BMPs) to prevent discharges of water pollutants to surface or groundwater. The SWPPP also charges owners with stormwater quality management responsibilities. The developer or contractor for a construction site subject to the General Permit must prepare and implement a SWPPP that meets the requirements of the General Permit.³¹ The purpose of an SWPPP is to identify potential sources and types of pollutants associated with construction activity and list BMPs that would prohibit pollutants from being discharged from the construction site into the public stormwater system. BMPs typically address stabilization of construction areas, minimization of erosion during construction, sediment control, control of pollutants from construction materials, and post-construction stormwater management (e.g., the minimization of impervious surfaces or treatment of stormwater runoff). The SWPPP is also required to include a discussion of the proposed program to inspect and maintain all BMPs.

A site-specific SWPPP could include, but not be limited to the following BMPs:

- Erosion Control BMPs – to protect the soil surface and prevent soil particles from detaching. Selection of the appropriate erosion control BMPs would be based on minimizing areas of disturbance, stabilizing disturbed areas, and protecting slopes/channels. Such BMPs may include, but would not be limited to, use of geotextiles and mats, earth dikes, drainage swales, and slope drains.
- Sediment Control BMPs – are treatment controls that trap soil particles that have been detached by water or wind. Selection of the appropriate sediment control BMPs would be based on keeping sediments on-site and controlling the site boundaries. Such BMPs may

³¹ *Construction Stormwater Program, State Water Resources Control Board, October 30, 2019. https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html. Accessed February 2010.*

include, but would not be limited, to use of silt fences, sediment traps, and sandbag barriers, street sweeping and vacuuming, and storm drain inlet protection.

- Wind Erosion Control BMPs – consist of applying water to prevent or minimize dust nuisance.
- Tracking Control BMPs – consist of preventing or reducing the tracking of sediment off-site by vehicles leaving the construction area. These BMPs include street sweeping and vacuuming. Project sites are required to maintain a stabilized construction entrance to prevent off-site tracking of sediment and debris.
- Non-Stormwater Management BMPs – also referred to as “good housekeeping practices,” involve keeping a clean, orderly construction site.
- Waste Management and Materials Pollution Control BMPs – consist of implementing procedural and structural BMPs for handling, storing, and disposing of wastes generated by a construction project to prevent the release of waste materials into stormwater runoff or discharges through the proper management of construction waste.

The SWRCB adopted a General Permit for Stormwater Discharges from Construction Activities on September 2, 2009 and most recently amended the permit on July 17, 2012 (Order No. 2012-0006-DWQ, General NPDES Permit No. CAS000002). The Construction General Permit regulates construction activity, including clearing, grading, and excavation of areas one acre or more in size, and prohibits the discharge of materials other than stormwater, authorized non-stormwater discharges, and all discharges that contain a hazardous substance, unless a separate NPDES permit has been issued for those discharges.

To obtain coverage under the Construction General Permit, a developer is required to file a Notice of Intent (NOI) with the appropriate RWQCB and provide proof of the NOI prior to applying for a grading or building permit from the local jurisdiction, and must prepare a State SWPPP that incorporates the minimum BMPs required under the permit as well as appropriate project-specific BMPs. The SWPPP must be completed and certified by the developer and BMPs must be implemented prior to the commencement of construction, and may require modification during the course of construction as conditions warrant. When project construction is complete, the developer is required to file a Notice of Termination with the RWQCB certifying that all the conditions of the Construction General permit, including conditions necessary for termination, have been met.

(ii) *NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering*

Dewatering operations are practices that discharge non-stormwater, such as ground water, that must be removed from a work location to proceed with construction into the drainage system. Discharges from dewatering operations can contain high levels of fine sediments, which if not properly treated, could lead to exceedance of the NPDES requirements. A NPDES Permit for dewatering discharges was adopted by the LARWQCB on September 13, 2018 (Order No. R4-

2018-0125, General NPDES Permit No. CAG994004. Similar to the Construction General Permit, to be authorized to discharge under this Permit; the developer must submit a NOI to discharge groundwater generated from dewatering operations during construction in accordance with the requirements of this Permit and shall continue in full force until it expires November 13, 2023.³² In accordance with the NOI, among other requirements and actions, the discharger must demonstrate that the discharges shall not cause or contribute to a violation of any applicable water quality objective/criteria for the receiving waters, perform reasonable potential analysis using a representative sample of groundwater or wastewater to be discharged. The discharger must obtain and analyze (using appropriate methods) a representative sample of the groundwater to be treated and discharged under the Order. The analytical method used shall be capable of achieving a detection limit at or below the minimum level. The discharger must also provide a feasibility study on conservation, reuse, and/or alternative disposal methods of the wastewater and provide a flow diagram of the influent to the discharge point.³³

(iii) Operation: Los Angeles County Municipal Stormwater NPDES Program

The County of Los Angeles and the City are two of the Co-Permittees under the Los Angeles County MS4 Permit (Order No. R4-2012-0175, NPDES Permit No. CAS004001). The Los Angeles County MS4 Permit has been determined by the State Water Resources Control Board to be consistent with the requirements of the Clean Water Act and the Porter-Cologne Act for discharges through the public storm drains in Los Angeles County to statutorily-defined waters of the United States (33 United States Code [USC] §1342(p); 33 CFR Part 328.11). On September 8, 2016, the LARWQCB amended the Los Angeles County MS4 Permit to incorporate modifications consistent with the revised Ballona Creek Watershed Trash Total Maximum Daily Load (TMDL) and the revised Los Angeles River Watershed Trash TMDL, among other TMDLs incorporated into the Los Angeles County MS4 Permit and the Basin Plan for the Coastal Waters of Los Angeles and Ventura Counties.

Under the amended Los Angeles County MS4 Permit, the County and City are both required to implement development planning guidance and control measures that control and mitigate stormwater quality and runoff volume impacts to receiving waters as a result of new development

³² Los Angeles Regional Water Quality Control Board, Order No. R4-2018-0125, General NPDES Permit No. CAG994004, *Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties*, September 13, 2018, http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/permits/general/npdes/r4-2013-0095/Dewatering%20Order.pdf. Accessed February 2010.

³³ Los Angeles Regional Water Quality Control Board, Order No. R4-2013-0095, General NPDES Permit No. CAG994004, *Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties*, June 6, 2013, http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/permits/general/npdes/r4-2013-0095/Dewatering%20Order.pdf. Accessed February 2010.

and redevelopment. The County and the City also are required to implement other municipal source detection and elimination programs, as well as maintenance measures.

Under the Los Angeles County MS4 Permit, permittees are required to implement a development planning program to address stormwater pollution. This program requires project applicants for certain types of projects to implement a Low Impact Development (LID) Plan, except where the Standard Urban Stormwater Mitigation Plan (SUSMP) is proven applicable. The purpose of the LID Plan is to reduce the discharge of pollutants in stormwater by outlining BMPs, which must be incorporated into the design of new development and redevelopment. These treatment control BMPs must be sufficiently designed and constructed to treat or retain the greater of an 85th percentile rain event or first 0.75 inch of stormwater runoff from a storm event.

The Los Angeles County MS4 Permit (Part VI.D.7.c, New Development/Redevelopment Project Performance Criteria) includes design requirements for new development and substantial redevelopment. These requirements apply to all projects that create or replace more than 5,000 square feet of impervious cover. Where redevelopment results in an alteration to more than 50 percent of impervious surfaces of a previously existing development and the existing development was not subject to post-construction stormwater quality control requirements, the entire project would be subject to post-construction stormwater quality control measures.

This Enhanced Watershed Management Program for the Upper Los Angeles River (ULAR EWMP) describes a customized compliance pathway that participating agencies will follow to address the pollutant reduction requirements of the Los Angeles County MS4 Permit.³⁴ By electing the optional compliance pathway in the MS4 Permit, the Upper Los Angeles River Watershed Management Group (EWMP Group) has leveraged this EWMP to facilitate a robust, comprehensive approach to stormwater planning for the Upper Los Angeles River watershed. The objective of the EWMP Plan is to determine the network of control measures (BMPs) that will achieve required pollutant reductions while also providing multiple benefits to the community and leveraging sustainable green infrastructure practices. The Permit requires the identification of Watershed Control Measures, which are strategies and BMPs that will be implemented through the EWMP, individually or collectively, at watershed-scale to address the Water Quality Priorities. The EWMP Implementation Strategy is used as a recipe for compliance for each jurisdiction to address Water Quality Priorities and comply with the provisions of the MS4 Permit. The EWMP Implementation Strategy includes individual recipes for each of the 18 jurisdictions and each watershed/assessment area – Los Angeles River above Sepulveda Basin, Los Angeles River below Sepulveda Basin, Compton Creek, Rio Hondo, Verdugo Wash, Arroyo Seco, Burbank Western Channel, Tujunga Wash, Bull Creek, Aliso Wash, Bell Creek, McCoy-Dry Canyon, and

³⁴ Upper Los Angeles River Watershed Management Group, *Enhanced Watershed Management Program*, January 2016, https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/los_angeles/upper_losangeles/20160127/UpperLARiver_mainbody_revEWMP_Jan2016.pdf. Accessed February 2010.

Browns Canyon Wash. Implementation of the EWMP Implementation Strategy will provide a BMP-based compliance pathway for each jurisdiction under the MS4 Permit. s. The Permit specifies that an adaptive management process will be revisited every two years to evaluate the EWMP and update the program. The EWMP strategy will evolve based on monitoring results by identifying updates to the EWMP Implementation Plan to increase its effectiveness.

The Los Angeles County MS4 Permit contains provisions for implementation and enforcement of the Stormwater Quality Management Program. The objective of the Stormwater Quality Management Program is to reduce pollutants in urban stormwater discharges to the “maximum extent practicable,” to attain water quality objectives and protect the beneficial uses of receiving waters in Los Angeles County. Special provisions are provided in the Los Angeles County MS4 Permit to facilitate implementation of the Stormwater Quality Management Program. In addition, the Los Angeles County MS4 Permit requires that permittees implement a LID Plan, as discussed above, that designates BMPs that must be used in specified categories of development projects to infiltrate water, filter, or treat stormwater runoff; control peak flow discharge; and reduce the post-project discharge of pollutants into stormwater conveyance systems. In response to the Los Angeles County MS4 Permit requirements, the City adopted Ordinance No. 173,494 (LID Ordinance), as authorized by Los Angeles Municipal Code (LAMC) Section 64.72.

The City supports the requirements of the Los Angeles County MS4 Permit through the City of Los Angeles’ *Development Best Management Practices Handbook, Low Impact Development Manual, Part B: Planning Activities* (5th edition, May 2016) (LID Handbook)³⁵, which provides guidance to developers to ensure the post-construction operation of newly developed and redeveloped facilities comply with the Developing Planning Program regulations of the City’s Stormwater Program. The LID Handbook assists developers with the selection, design, and incorporation of stormwater source control and treatment control BMPs into project design plans, and provides an overview of the City’s plan review and permitting process.

The City implements the requirement to incorporate stormwater BMPs, including LID BMPs, through the City’s plan review and approval process. During the review process, project plans are reviewed for compliance with the City’s General Plan, zoning ordinances, and other applicable local ordinances and codes, including stormwater requirements. Plans and specifications are reviewed to ensure that the appropriate BMPs are incorporated to address stormwater pollution prevention goals.

³⁵ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, *Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition*, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed September 2020.

(c) *Los Angeles River Watershed Master Plan*

The Los Angeles River Master Plan recognizes the river as a resource of regional importance and that those resources must be protected and enhanced. The Los Angeles River Master Plan was adopted in 1996, and is intended to maintain the river as a resource that provides flood protection and opportunities for recreational and environmental enhancement, improves the aesthetics of the region, enriches the quality of life for residents, and helps sustain the economy of the region.³⁶ Environmental goals of the Watershed Master Plan are to preserve, enhance, and restore environmental resources in and along the river, including improving water quality and cleanliness of the river. Soil contamination on riverfront lands that have supported railroads and other industries is cited as an issue of concern.

(4) Local

(a) *Los Angeles Municipal Code Section 62.105, Construction "Class B" Permit*

Proposed drainage improvements within the street rights-of-way or any other property owned by, to be owned by, or under the control of the City, require the approval of a B-permit (LAMC Section 62.105). Under the B-permit process, storm drain installation plans are subject to review and approval by the Bureau of Engineering. Additionally, connections to the MS4 system from a property line to a catch basin or a storm drain pipe require a storm drain permit from the Bureau of Engineering.

(b) *Los Angeles Municipal Code Sections 12.40 through 12.43, Landscape Ordinance*

In 1996, Ordinance No. 170,978 amended LAMC Sections 12.40 through 12.43 to establish consistent landscape requirements for new projects within the City. LAMC Section 12.40 contains general requirements, including a point system for specific project features and techniques in order to determine compliance with the Ordinance, and defines exemptions from the Ordinance. LAMC Section 12.41 sets minimum standards for water delivery systems (irrigation) to landscapes. LAMC Section 12.43 defines the practices addressed by the Ordinance, of which two are applicable to stormwater management. The Heat and Glare Reduction practice states among its purposes the design of vehicular use areas that reduce stormwater runoff and increase groundwater recharge. The Soil and Watershed Conservation practice is intended to encourage the restoration of native areas that are unavoidably disturbed by development; to conserve soil and accumulated organic litter and reduce erosion by utilization of a variety of methods; and to increase the "residence time of precipitation" (i.e., the time between the original evaporation and the returning of water masses to the land surface as precipitation) within a given watershed. Implementation guidelines developed for the Ordinance provide specific features and techniques

³⁶ *City of Los Angeles, The Los Angeles River Revitalization Master Plan, April 2007, http://boe.lacity.org/lariverrmp/CommunityOutreach/masterplan_download.htm/. Accessed February 2010.*

for incorporation into projects, and include water management guidelines addressing runoff, infiltration, and groundwater recharge. This Ordinance is incorporated into the LID Ordinance discussed below.

(c) *Los Angeles Municipal Code Section 64.70, Stormwater and Urban Runoff Pollution Control Ordinance*

LAMC Section 64.70, the Stormwater and Urban Runoff Pollution Control Ordinance, was added by Ordinance No. 172,176 in 1998 and prohibits the discharge of unauthorized pollutants in the City. The Watershed Protection Program (Stormwater Program) for the City is managed by the Bureau of Sanitation along with all City Flood Protection and Pollution Abatement (Water Quality) Programs, including but not limited to, regulatory compliance, implementation, operations, reporting and funding. Section 64.70 sets forth uniform requirements and prohibitions for discharges and places of discharge into the storm drain system and receiving waters necessary to adequately enforce and administer all federal and state laws, legal standards, orders and/or special orders that provide for the protection, enhancement and restoration of water quality. Through a program employing watershed-based approaches, the regulation implements the following objectives:

1. To comply with all Federal and State laws, lawful standards and orders applicable to stormwater and urban runoff pollution control;
2. To prohibit any discharge which may interfere with the operation of, or cause any damage to the storm drain system, or impair the beneficial use of the receiving waters;
3. To prohibit illicit discharges to the storm drain system;
4. To reduce stormwater runoff pollution;
5. To reduce non-stormwater discharge to the storm drain system to the maximum extent practicable; and
6. To develop and implement effective educational outreach programs designed to educate the public on issues of stormwater and urban runoff pollution.

The Ordinance applies to all dischargers and places of discharge that discharge stormwater or non-stormwater into any storm drain system or receiving waters. While this practice is prohibited under the County's Municipal NPDES Permit, adoption of the Ordinance allows enforcement by the Department of Public Works as well as the levy of fines for violations. General Discharge Prohibitions require that no person shall discharge, cause, permit, or contribute to the discharge any hazardous materials and substances (liquids, solids, or gases) into to the storm drain system or receiving waters that constitute a threat and/or impediment to life and the storm drain system, singly or by interaction with other materials. A specific list of prohibited substances can be found under LAMC Section 64.70.

Under LAMC Section 64.70.02.D, Requirement to Prevent, Control, and Reduce Stormwater Pollutants, any owner of a facility engaged in activities or operations as listed in the Critical

Sources Categories, Section III of the Board's Rules and Regulations shall be required to implement BMPs as promulgated in the Rules and Regulations. The owner/developer of a property under construction shall be required to implement the stormwater pollution control requirements for construction activities as depicted in the project plans approved by the Department of Building and Safety. In the event a specified BMP proves to be ineffective or infeasible, the additional and/or alternative, site-specific BMPs or conditions deemed appropriate to achieve the objectives of this Ordinance as defined in Subsection B of LAMC Section 64.70.

(d) *Los Angeles Municipal Code Section 64.72, Stormwater Pollution Control Measures for Development Planning and Construction Activities*

LAMC Section 64.72, Stormwater Pollution Control Measures for Development Planning and Construction Activities, was added by Ordinance 173,494 (LID Ordinance) in 2000 and sets forth requirements for construction activities and facility operations of development and redevelopment projects to comply with the requirements of the NPDES permit SUSMP requirements. The provisions of this section contain requirements for construction activities and facility operations of development and redevelopment projects to comply with the Land Development requirements of the Los Angeles County MS4 permit through integrating LID practices and standards for stormwater pollution mitigation, and maximize open, green and pervious space on all developments and redevelopments consistent with the City's Landscape Ordinance and other related requirements in the Development Best Management Practices Handbook. The LID Ordinance (see below) applies first to a project in lieu of SUSMP. If a large project cannot meet the requirements of the LID Ordinance, then SUSMP measures are applied.

(e) *Low Impact Development Ordinance (No. 181,899)*

In 2011, the City adopted a Citywide Low Impact Development Ordinance (LID Ordinance) that amended the City's existing Stormwater Ordinance (LAMC Section Nos. 64.70 and 64.72, discussed above). The LID Ordinance, effective May 12, 2012, and updated in updated September 2015 (Ordinance No. 183,833), enforces the requirements of the Los Angeles County MS4 Permit. LID is a stormwater management strategy with goals to mitigate the impacts of increased runoff and stormwater pollution as close to their source as possible; and that promotes the use of natural infiltration systems, evapotranspiration, and the reuse of stormwater.

The goal of LID practices is to remove nutrients, bacteria, and metals from stormwater while also reducing the quantity and intensity of stormwater flows. Through the use of various infiltration strategies, LID is aimed at minimizing impervious surface area. Where infiltration is not feasible, the use of bioretention, rain gardens, green roofs, and rain barrels that will store, evaporate, detain, and/or treat runoff can be used.³⁷

³⁷ *City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition,* May 2016,

The intent of LID standards is to:

- Require the use of LID practices in future developments and redevelopments to encourage the beneficial use of rainwater and urban runoff;
- Reduce stormwater/urban runoff while improving water quality;
- Promote rainwater harvesting;
- Reduce off-site runoff and provide increased groundwater recharge;
- Reduce erosion and hydrologic impacts downstream; and
- Enhance the recreational and aesthetic values in our communities.

The Citywide LID strategy addresses land development planning as well as storm drain infrastructure. Toward this end, LID is implemented through BMPs that fall into four categories: site planning BMPs, landscape BMPs, building BMPs, and street and alley BMPs. While the LID Ordinance and the BMPs contained therein comply with Los Angeles County MS4 Permit requirements for stormwater management, the MS4 requirements apply only to proposed new development and redevelopment of a certain size, primarily address stormwater pollution prevention as opposed to groundwater recharge, and vary over time as the permit is reissued every five years. The LID Ordinance provides a consistent set of BMPs that are intended to be inclusive of, and potentially exceed, SUSMP standards, apply to existing as well as new development, and emphasize natural drainage features and groundwater recharge in addition to pollution prevention in receiving waters. The LID Ordinance requires the capture and management of the greater of an 85th percentile rain event or the first 0.75-inch of runoff flow during storm events defined in the City's LID BMPs, through one or more of the City's preferred LID improvements in priority order: on-site infiltration, capture and reuse, or biofiltration/biotreatment BMPs, to the maximum extent feasible.

Per the City's 2016 LID Manual's Figure 3.3 and Section 4.1, the City's preferred LID improvement is on-site infiltration of stormwater, site since it allows for groundwater recharge and reduces the volume of stormwater entering municipal drains.³⁸ If Project Site conditions are not suitable for infiltration, the City requires on-site retention via stormwater capture and reuse. Should capture and reuse be deemed technically infeasible, high efficiency bio-filtration/ bioretention systems should be utilized. Lastly, under the LID Ordinance (LAMC Section 64.72 (C) 6), as interpreted in

https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed February 2010.

³⁸ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed February 2010.

the LID Manual, if no single approach listed in the LID Manual is feasible, then a combination of approaches may be used.³⁹

The LID Ordinance applies first to a project in lieu of SUSMP. If a large project cannot meet the requirements of the LID Ordinance, then SUSMP applies instead.

(f) *Water Quality Compliance Master Plan for Urban Runoff*

The Water Quality Compliance Master Plan for Urban Runoff (Water Quality Compliance Master Plan)⁴⁰ was developed by the Department of Public Works, Bureau of Sanitation, Watershed Protection Division, and was adopted in April 2009.

The Water Quality Compliance Master Plan addresses planning, budgeting, and funding for achieving clean stormwater and urban runoff for the next 20 years and presents an overview of the status of urban runoff management within the City. The Water Quality Compliance Master Plan identifies the City's four watersheds; summarizes water quality conditions in the City's receiving waters as well as known sources of pollutants; summarizes regulatory requirements for water quality; describes BMPs required by the City for stormwater quality management; and discusses related plans for water quality that are implemented within the Los Angeles region, particularly TMDL Implementation Plans and Watershed Management Plans in Los Angeles.

(g) *Stormwater Program – Los Angeles County MS4 Permit Citywide Implementation*

The Watershed Protection Division of the Department of Public Works, Bureau of Sanitation is responsible for stormwater pollution control throughout the City in compliance with the Los Angeles County MS4 Permit. The Watershed Protection Division administers the City's Stormwater Program, which has two major components: Pollution Abatement and Flood Control. The Watershed Protection Division publishes the two-part Development Best Management Practices Handbook that provides guidance to developers for compliance with the Los Angeles County MS4 permit through the incorporation of water quality management into development planning. The Development Best Management Practices Handbook, Part A: Construction Activities, provides specific minimum BMPs for all construction activities.⁴¹ The Development Best

³⁹ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed February 2010.

⁴⁰ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed February 2010.

⁴¹ City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016,

Management Practices Handbook, Low Impact Development Manual, Part B: Planning Activities (5th edition, May 2016) (LID Handbook) provides guidance to developers to ensure the post-construction operation of newly developed and redeveloped facilities comply with the Developing Planning Program regulations of the City's Stormwater Program.⁴² The LID Handbook assists developers with the selection, design, and incorporation of stormwater source control and treatment control BMPs into project design plans, and provides an overview of the City's plan review and permitting process. The LID Handbook addresses the need for frequent and/or regular inspections of infiltration facilities in order to ensure on-site compliance of BMP standards, soil quality, site vegetations, and permeable surfaces. These inspections are required to guarantee that facilities follow all proprietary operation and maintenance requirements.

During the development review process, project plans are reviewed for compliance with the City's General Plan, zoning ordinances, and other applicable local ordinances and codes, including stormwater requirements. Plans and specifications are reviewed to ensure that the appropriate BMPs are incorporated to address stormwater pollution prevention goals.

b) Existing Conditions

(1) Surface Water Hydrology

(a) Regional

The Project Site is located within the Los Angeles River Watershed. The Los Angeles River Watershed is one of the largest in the Region at 824 square miles; the Los Angeles River is 55 miles long. It is also one of the most diverse in terms of land use patterns. Major tributaries to the Los Angeles River in the San Fernando Valley are the Pacoima Wash, Tujunga Wash (both drain portions of the Angeles National Forest in the San Gabriel Mountains), and Burbank Western Channel and Verdugo Wash (both drain the Verdugo Mountains). Due to major flood events at the beginning of the century, by the 1950's most of the Los Angeles River was lined with concrete.⁴³ Within the Los Angeles River Watershed, there are nine district channel reaches that vary in geometry and width.

https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed February 2010.

⁴² City of Los Angeles Department of Public Works, Bureau of Sanitation, Watershed Protection Division, Planning and Land Development for Low Impact Development (LID), Part B: Planning Activities, 5th Edition, May 2016, https://www.lacitysan.org/cs/groups/sg_sw/documents/document/y250/mde3/~edisp/cnt017152.pdf. Accessed February 2010.

⁴³ California SWRCB, Los Angeles River Watershed, website: https://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/los_angeles_river_watershed/la_summary.shtml, accessed October 2020.

(b) Local

The local vicinity is operated by underground storm drain facilities, which are owned and maintained by the City. A 66-inch diameter storm drain line, which is owned and maintained by the City, is located adjacent to the Project Site along Casitas Avenue and along the eastern side of the Project Site. A catch basin is located at the Casitas Avenue cul-de-sac near the property line at the northeasterly corner of the site, connecting to the 66-inch reinforced concrete pipe storm drain via an 18-inch reinforced concrete connector pipe.⁴⁴ Stormwater runoff from properties in the Project Site area is discharged into gutters and storm drains along Casitas Avenue and enters the underground storm drains through catch basins; stormwater is then conveyed through this underground network into the Los Angeles River. There are no known deficiencies in the local stormwater system.

(c) Project Site

The Los Angeles River is located adjacent to the south of the Project Site. The Los Angeles River Channel has multiple entities that have jurisdiction over the river channel. The Project Site is located within Reach 7 (Taylor Yard) of the Los Angeles River Watershed. At this reach, the Los Angeles River has a soft bottom, and water flows are in the range of 15 to 20 feet per second, during storm events.⁴⁵ The California Department of Transportation (Caltrans) owns the air rights to the overhead air space above the Los Angeles River. The City of Los Angeles controls and monitors surface water flowing through the first 32 miles of the Los Angeles River. Los Angeles County Public Works and the ACOE have jurisdiction over the in-channel right-of-way as well as being responsible for channel structure integrity.

As mentioned previously, a 66-inch diameter storm drain line, which is owned and maintained by the City, is located adjacent to the Project Site along Casitas Avenue and along the eastern side of the Project Site. A catch basin is located at the Casitas Avenue cul-de-sac near the property line at the northeasterly corner of the site, connecting to the 66-inch reinforced concrete pipe storm drain via an 18-inch reinforced concrete connector pipe. The Project Site is currently approximately 100 percent impervious and all surface water is directed off-site to the adjacent storm drain system leading to the LA River channel.

(2) Surface Water Quality*(a) Regional*

Pollutants from dense clusters of residential, industrial and other urban activities have impaired water quality in the middle and lower Los Angeles River Watershed. Added to this complex mixture of pollutant sources (in particular, pollutants associated with urban and stormwater runoff), is the high number of point source permits. Excessive nutrients (and their effects) and coliform are widespread problems in the watershed as well as excessive metals. Water column

⁴⁴ KHR Associates, *Engineering Feasibility Report, Frog Town Lofts, Los Angeles, California, June 10, 2016 (Appendix P to the DEIR)*.

⁴⁵ *City of Los Angeles, Los Angeles river Revitalization Master Plan, Page 33, April 2007.*

toxicity was found at a number of sites sampled by the Surface Water Ambient Monitoring Program.⁴⁶

(b) *Local*

In general, urban stormwater runoff occurs following precipitation events, with the volume of runoff flowing into the drainage system depending on the intensity and duration of the rain event. Contaminants that may be found in stormwater from developed areas include sediments, trash, bacteria, metals, nutrients, organics and pesticides. The source of contaminants includes surface areas where precipitation falls, as well as the air through which it falls. Contaminants on surfaces, such as roads, maintenance areas, parking lots, and buildings, which are usually contained in dry weather conditions, may be carried by rainfall runoff into drainage systems. The City typically installs catch basins with screens to capture debris before entering the storm drain system. In addition, the City conducts routine street cleaning operations, as well as periodic cleaning and maintenance of catch basins, to reduce stormwater pollution within the City.

(c) *Project Site*

The Project Site is currently approximately 100 percent impervious and all surface water is directed off-site to the adjacent storm drain system. Based on a Project Site reconnaissance, one stormwater run-off drain was located within the loading area along the southwest portion of the on-site building structure. It should be noted that the current drainage system is a pre-existing condition, and all existing stormwater runoff is directed to the drainage system and is not subject to the City's current Low Impact Development Standards (LID) standards that require retention of the first ¾ inch of rainfall and treatment prior to discharging into the storm drain system. The drain was observed to be free of debris and uncompromised.⁴⁷

(3) **Groundwater Hydrology**

(a) *Regional*

Groundwater use for domestic water supply is a major beneficial use of groundwater basins in Los Angeles County. The Project Site is located within San Fernando Valley Groundwater Basin. The San Fernando Valley Groundwater Basin was adjudicated in 1979 and includes the water-bearing sediments beneath the San Fernando Valley, Tujunga Valley, Browns Canyon, and the alluvial areas surrounding the Verdugo Mountains near La Crescenta and Eagle Rock.⁴⁸ The basin covers approximately 145,000 acres (226 square miles) and is bounded on the north and northwest by the Santa Susana Mountains, on the north and northeast by the San Gabriel Mountains, on the east by the San Rafael Hills, on the south by the Santa Monica Mountains and

⁴⁶ California SWRCB, Los Angeles River Watershed, website: https://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/los_angeles_river_watershed/la_summary.shtml, accessed October 2020.

⁴⁷ Leighton and Associates, Inc., *Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue, Los Angeles California, Assessor Parcel Number 5442-002-012*, prepared by (Leighton), May 31, 2016 (Appendix F.1 of the DEIR).

⁴⁸ California Groundwater Bulletin 118, *South Coast Hydrologic Region, San Fernando Valley Groundwater Basin*, accessed March 2021.

Chalk Hills, and on the west by the Simi Hills.⁴⁹ Pursuant to the Department of Water Resources' Sustainable Groundwater Management Act 2019 Basin Prioritization report, the San Fernando Valley Groundwater Basin is designated as a low priority.⁵⁰

(b) *Local*

The Project Site is located within the San Fernando Valley Groundwater Basin (SFVGWB) within the Upper Los Angeles River Area (ULARA). The ULARA encompasses all of the Los Angeles River Watershed and its tributaries above a point in the Los Angeles River designated as Los Angeles County Department of Public Works Gauging Station F-57C-R, near the junction of the Los Angeles River and the Arroyo Seco, just to the south of the Project Site. Groundwater in the Project Site vicinity occurs under unconfined conditions, with a regional gradient to the south-southeast. Significant groundwater is present beneath the Project Site, primarily in the Gaspar Aquifer, which is a water-bearing zone of coarse sediments approximately 120 feet in thickness, located at the base of the Quaternary sediments.⁵¹

(c) *Project Site*

Groundwater was encountered during the Project Site explorations and borings at depths ranging from approximately 37 feet to 41 feet below existing grade. Historic high groundwater is estimated to be about 25 feet below existing grade.⁵² It should be noted that higher localized and seasonal perched groundwater conditions may accumulate below the surface. In general, groundwater conditions below any given site may vary over time depending on numerous factors, including seasonal rainfall. The general direction of groundwater beneath the Project Site is to the south-southeast, mimicking the flow of the Los Angeles River.⁵³ The Project Site is approximately 100 percent impervious, and existing water runoff is directed toward surrounding stormwater infrastructure and generally does not interfere with groundwater recharge.

⁴⁹ *California Groundwater Bulletin 118, South Coast Hydrologic Region, San Fernando Valley Groundwater Basin*, accessed March 2021.

⁵⁰ *California Natural Resources Agency, Department of Water Resources, Sustainable Groundwater Management Act 2019 Basin Prioritization*, April 2019.

⁵¹ *Leighton and Associates, Inc., Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue, Los Angeles California, Assessor Parcel Number 5442-002-012*, prepared by (Leighton), May 31, 2016 (Appendix F.1 of the DEIR).

⁵² *LGC Geotechnical, Inc., Preliminary Geotechnical Report for Proposed Bow Tie Yard Lofts Project and Adjacent Parking Structure, Vesting Tentative Tract 4366, 2750 to 2800 West Casitas Avenue, Los Angeles, California, January 16, 2017* (Appendix D.2 of the DEIR).

⁵³ *Leighton and Associates, Inc., Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue, Los Angeles California, Assessor Parcel Number 5442-002-012*, prepared by (Leighton), May 31, 2016 (Appendix F.1 of the DEIR).

(4) Groundwater Quality

(a) *Regional*

Groundwater resources in the watershed are greatly impacted. In general, due to historical activities and practices, groundwater quality in the City of Los Angeles has been substantially degraded. The degradation of regional groundwater is a result of hundreds of cases of known leaking underground storage tanks that have contaminated soil and/or ground water with petroleum hydrocarbons and volatile organic compounds. There are also a number of cases of refineries/tank farms that have contaminated soil and/or ground water. Seawater intrusion is of concern in other areas of the watershed, which has necessitated wellhead treatment, shutdown, or blending. Additionally, a number of wells have been shut down due to nitrate contamination and pathogenic bacteria from septic systems.⁵⁴

(b) *Local*

As discussed within Section IV.E, Hazardous Materials/Risk of Upset of this Recirculated Draft EIR, the Project Site is located within the San Fernando Valley Area 4 Pollock Well Field (SFV4), an area of contaminated groundwater in the City. The contaminated groundwater, which underlies an area of approximately 5,860 acres, contains trichloroethylene (TCE) and tetrachloroethylene (PCE) at concentrations above drinking water standards. Results of groundwater monitoring conducted within SFV4 from 1981 to 1987 have revealed that over 50 percent of the water supply wells in the eastern portion of the San Fernando Valley Groundwater Basin were contaminated with various chlorinated volatile organic compounds (VOCs), specifically TCE and PCE.⁵⁵

(c) *Project Site*

As stated previously, the Project Site is located within the SFV4, an area of contaminated groundwater in the City. Additionally, the Project Site was once a part of the Union Pacific Railroad Taylor Yard Parcel, which has been associated with the use, handling, and storage of chemicals on site. The former Taylor Yard was identified as an underground storage tank (UST), aboveground storage tank (AST), Toxic Pits, Cortese, Historical Cortese, LA County Site Mitigation, Voluntary Cleanup Program (VCP), Response, EnviroStor, Historical Cal-Site, CA Bond Plan, Resource Conservation and Recovery Act (RCRA) Generator, Spills, Leaks, Investigation, and Cleanup (SLIC), Financial Assurance, Cerclis No Further Remedial Action Planned (NFRAP), California Hazardous Material Incident Reporting System (CHMIRS), and Waste Discharge System (WDS) facility in the Environmental Data Resources (EDR) database

⁵⁴ California SWRCB, Los Angeles River Watershed, website: https://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/los_angeles_river_watershed/la_summary.shtml, accessed October 2020.

⁵⁵ Leighton and Associates, Inc., *Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue, Los Angeles California, Assessor Parcel Number 5442-002-012*, prepared by (Leighton), May 31, 2016 (Appendix F.1 of the DEIR).

report. According to the EDR database report, numerous assessments and several remedial actions have been conducted at the former Taylor Yard from 1980 to the present.

Chemicals of concern (COCs) identified in soil and/or groundwater are primarily arsenic, lead, polynuclear aromatic hydrocarbons (PAHs), tetrachloroethylene (PCE), total petroleum hydrocarbons (TPH), and TCE. The 2016 Phase I ESA found that none of the sites identified in the EDR database search represent an adverse effect to the Project Site based on one or more of the following: nature of the database listing and not appearing on a database that reports unauthorized releases of hazardous substances; reported regulatory agency status (i.e., Case Closed); reported nature of the case (soil contamination only); distance of the facility to the Project Site; and/or location of the facility with respect to anticipated groundwater flow direction (southeast). Further, with the exception of the known regional VOC-impacted groundwater in the SFV4, environmental concerns were not identified on off-site properties that would adversely impact the Project Site.⁵⁶ With respect to the potential for surface water-borne contaminants within the Project Site to percolate into groundwater and affect groundwater quality, the Project Site is currently entirely covered with impervious surfaces with a warehouse building footprint and paved surface parking areas. As such, no appreciable infiltration of potential contaminants is expected to occur. Therefore, groundwater quality is not impacted by existing activities at the Project Site.

(5) Flood Zone

(a) Project Site

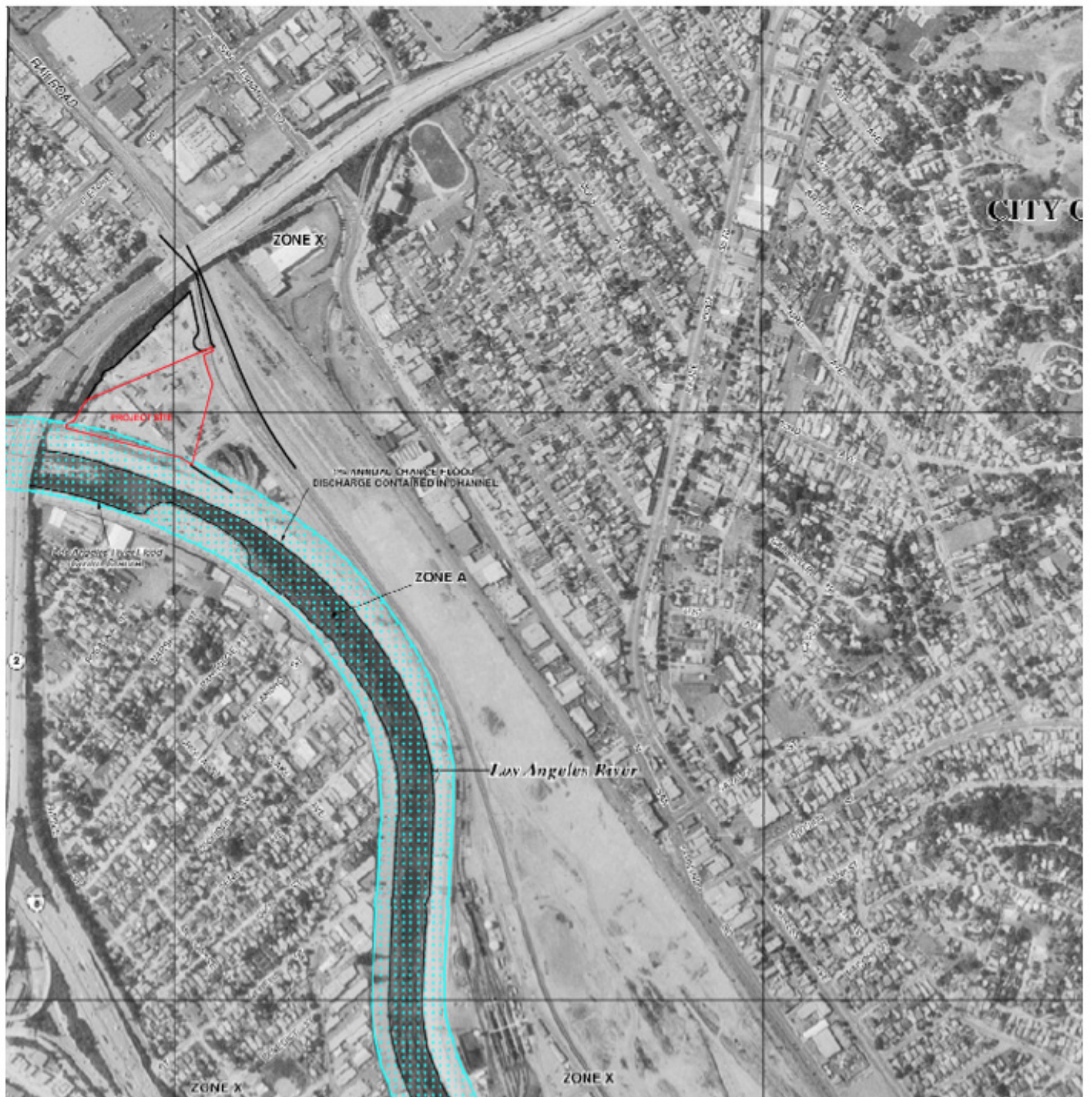
The City of Los Angeles General Plan Safety Element indicates that the Project Site is located within a potential inundation area. However, according to FEMA's Flood Insurance Rate Map, the Project Site is located within Zone X, which signifies that the Project Site is determined to be outside the 100 and 500-year flood zone.⁵⁷ See Figure IV.P-1, FEMA Designated Flood Hazard Map, below. Additionally, the City of Los Angeles Zoning Information and Map Access System (ZIMAS) indicates that floodwater would be contained in storm drains.

Based on a topographic survey of the Project Site (see attached ALTA/NSPS survey by KHR Associates)⁵⁸, existing mean elevations range from 365.7 to 368.9 feet above sea level. The southwest corner of the Project Site is at the lowest elevation of 365.7 feet above sea level. It should be noted that there is also an 8-foot high berm (or levee) that separates most of the Project Site from the banks of the Los Angeles River, with a high point of 376.4 feet.

⁵⁶ *Leighton and Associates, Inc., Phase I Environmental Site Assessment, 2750 and 2800 Casitas Avenue, Los Angeles California, Assessor Parcel Number 5442-002-012, prepared by (Leighton), May 31, 2016 (Appendix F.1 of the DEIR).*

⁵⁷ *Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map, Panel Number 06037C1610F, September 26, 2008, website: <http://dpw.lacounty.gov/wmd/floodzone/>, accessed October 2020.*

⁵⁸ *KHR Associates, 2800 Casitas Flood Risk Technical Memorandum, October 9, 2020. (see Appendix D to this PR-DEIR).*



Source: Federal Emergency Management Agency.

Figure IV.P-1
FEMA Flood Hazard Map

ACOE's 2016 Floodplain Analysis⁵⁹ indicates the Project Site is located adjacent to ACOE's hydraulic analysis for the 1 percent annual chance exceedance (100-year floodplain). Given the scale of the exhibits, it cannot be determined with any certainty whether a small corner of the Project is currently within the one-percent ACE floodplain. See Figure IV.P-2, Los Angeles River 1% Annual Chance Exceedance (100-Year) Floodplain for Grid Index 8, below.

However, the ACOE's 2016 Floodplain Analysis indicates that portions of the Project Site occur within ACOE's hydraulic analysis for the 0.2 percent annual chance exceedance (500-year floodplain). See Figure IV.P-3, Los Angeles River 0.2% Annual Chance Exceedance (500-Year) Floodplain for Grid Index 8, below.

It should be noted that, as discussed above, the ACOE's 2016 Floodplain Analysis is intended for planning purposes only and has not been adopted by the City or by FEMA.⁶⁰ Nevertheless, in response to the ACOE's Floodplain Analysis, the Applicant has performed a detailed topographical survey of the Project Site (see Appendix D to this PR-DEIR) that shows existing mean elevations at the Project Site range from 365.7 to 368.9 feet above mean sea level. The southwest corner of the Project Site is at the lowest elevation of 365.7 feet above mean sea level and is in the area that the ACOE's 2016 Floodplain Analysis may show to be within the 100-year flood hazard zone.⁶¹

Additionally, the ACOE's 500-year flood exhibit seems to cover much of the Project Site, except for the southeastern corner of the Project Site where the existing elevation is over 368 feet. It should be noted that there is also an 8-foot high berm (or levee) that separates most of the Project Site from the banks of the Los Angeles River, with a high point of 376.4 feet.

The ACOE operates and maintains the 22.5-mile stretch of the Los Angeles River between Lankershim Boulevard in Hollywood and Stuart and Grey Road in Downey, which includes the portion adjacent to the Project Site. ACOE is taking an active role in identifying levees in that area in need of repair and flood mitigation. ACOE's maintenance activities include inspection and cleaning of the channel walls and removing vegetation growing in cracks and joints.⁶² Between September 2018 and April 2019, the ACOE completed a sediment removal project involving the removal of 40,000 cubic yards of sediment and vegetation within Reach 6A.

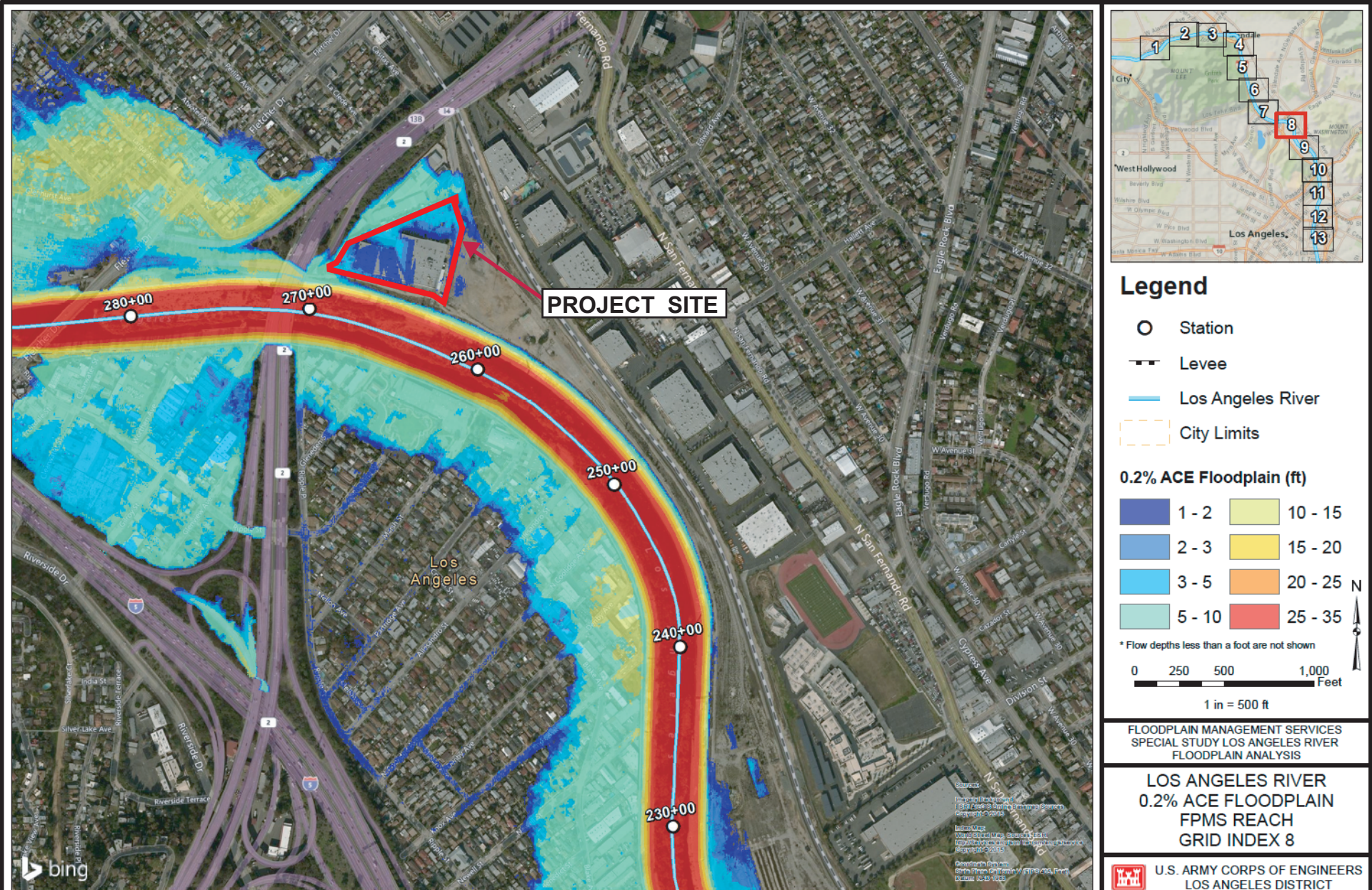
⁵⁹ ACOE 2016. U.S. Army Corps of Engineers, Los Angeles District: *Hydraulics Report, Floodplain Analysis, Los Angeles River: Barham Boulevard to First Street, Flood Plain Management Services Special Study, Los Angeles, California*, October 2016 (at page 4, Special Notice).

⁶⁰ ACOE 2016. U.S. Army Corps of Engineers, Los Angeles District: *Hydraulics Report, Floodplain Analysis, Los Angeles River: Barham Boulevard to First Street, Flood Plain Management Services Special Study, Los Angeles, California*, October 2016 (at page 4, Special Notice).

⁶¹ KHR Associates, 2800 Casitas Flood Risk Technical Memorandum, October 9, 2020. (see Appendix D to this PR-DEIR).

⁶² <https://www.usace.army.mil/Missions/Civil-Works/Levee-Safety-Program/Levee-Inspections/>

Figure IV.P-2
L.A. River 1% Annual Chance Exceedance (100-Year) Floodplain For Grid Index 8



Source: USACE, L.A. District, Hydraulics Report, Floodplain Analysis, October 2016.

Figure IV.P-3
L.A. River 0.2% Annual Chance Exceedance (500-Year) Floodplain For Grid Index 8

3. Project Impacts

a) Thresholds of Significance

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to hazardous materials if it would:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;*
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;*
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

 - i. Result in substantial erosion or siltation on- or off-site;*
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*
 - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
 - iv. Impede or redirect flood flows;**
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or*
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*

For this analysis, the Appendix G Thresholds stated above are relied upon. The analysis utilizes factors and considerations identified in the 2006 L.A. CEQA Thresholds Guide (Thresholds Guide), as appropriate, to assist in answering the Appendix G Threshold questions. The Thresholds Guide identifies the following criteria to evaluate hydrology and water quality impacts include whether the proposed Project would:

a. Surface Water Hydrology

- *Cause flooding during the projected 50-year developed storm event which would have the potential to harm people or damage property or sensitive biological resources;*

- *Substantially reduce or increase the amount of surface water in a water body; or*
- *Result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow.*

b. Surface Water Quality

- *Result in discharges that would create pollution, contamination or nuisance as defined in Section 13050 of the CWC or would cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for the receiving water body.*

As defined in the CWC:

- *“Pollution” means an alteration of the quality of the waters of the state to a degree which unreasonably affects either of the following: (1) the waters for beneficial uses; or (2) facilities which serve these beneficial uses. Pollution may include contamination.*
- *“Contamination” means an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of diseases. Contamination includes any equivalent effect resulting from the disposal of waste whether or not waters of the state are affected.*
- *“Nuisance” means anything which meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property so as to interfere with the comfortable enjoyment of life or property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons although the extent of the annoyance or damage inflicted upon individuals may be unequal; and (3) occurs during or as a result of the treatment or disposal of wastes.*

c. Groundwater

- *Change potable water levels sufficiently to:*
 - *Reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or to respond to emergencies and drought;*
 - *Reduce yields of adjacent wells or well fields (public or private); or*
 - *Adversely change the rate or direction of flow of groundwater;*

- *Result in demonstrable and sustained reduction of groundwater recharge capacity;*

d. Groundwater Quality

- *Affect the rate or change the direction of movement of existing contaminants;*
- *Expand the area affected by contaminants;*
- *Result in an increased level of groundwater contamination (including that from direct percolation, injection or salt water intrusion); or*
- *Cause regulatory water quality standards at an existing production well to be violated, as defined in the California Code of Regulations CCR), Title 22, Division 4, and Chapter 15 and in the Safe Drinking Water Act.*

b) Methodology

The analysis in this section addresses the proposed Project's potential impacts on hydrology (drainage and flooding), surface water quality, and groundwater levels/quality. The analysis is based, in part, on the 2800 Casitas Flood Risk Technical Memorandum, prepared by KHR Associates, dated October 9, 2020, which is included as Appendix D to this PR-DEIR. A summary of the analytical methodology for hydrology and surface water quality is provided below.

(1) Surface Water Hydrology (Drainage)

Potential impacts to the storm drain system from the proposed Project were analyzed by comparing the calculated existing runoff rates to the calculated post-Project runoff rates to determine the proposed Project's effect on existing stormwater drainage flows. The proposed Project's proposed on-site stormwater treatment system is evaluated for consistency with applicable regulatory measures for reducing off-site flooding and erosion impacts. The Project Site's topography and proposed Project's development elevations were analyzed to assess the potential for flooding and/or inundation impacts.

(2) Surface Water Quality

Water quality impacts were assessed by characterizing the types of pollutants and/or effects on water quality likely to be associated with temporary construction and long-term operation of the proposed Project and expected contaminant flows with Project implementation. Project consistency with relevant regulatory permits/requirements, including BMPs and applicable plans, is evaluated to demonstrate how compliance would reduce potential proposed Project impacts.

Under Section 3.2.2 of the City's LID Manual, post-construction stormwater runoff from a new development must be, in order of desirability, infiltrated, captured and used, and/or treated through high efficiency on-site biofiltration/biotreatment systems for at least the volume of water produced by the first ¾-inch of rainfall in a 24-hour period or the rainfall from an 85th percentile

24-hour runoff event, whichever is greater. In accordance with these requirements, the feasibility of the different potential BMPs outlined in the LID is evaluated in the analysis, and the required capacity of the identified preferred feasible BMP is calculated.

(3) Groundwater Hydrology

The evaluation of groundwater impacts is based on studies describing historic groundwater levels and conditions in the area and on the Project Site. The determination of impact is based on whether perched conditions, in which the groundwater is disconnected from the area's water table and groundwater flow, occur and whether the proposed Project would intercept the estimated groundwater resource. The analysis is based on the Preliminary Geotechnical Report prepared for the Project Site and other public information.⁶³

(4) Water Quality and Sustainable Groundwater Management Plans

The evaluation of Project consistency with Water Quality and Sustainable Groundwater Management Plans is based on a summary of the preceding analyses of proposed Project impacts on water quality and groundwater resources. The summary identifies the applicable plans, the regulatory mechanisms for meeting the standards in those plans, and the proposed Project characteristics that conform to those regulatory standards.

c) Project Design Features

The following project design features related to hydrology will be implemented as part of the Project:

Project Design Feature HYDRO-PDF-1 Building finish floors will be constructed at elevations of at least 369 feet and perimeter roadways and other at-grade surfaces will be raised to approximately 368 feet, more than two feet higher than the lowest existing elevation in the southwest corner of the site.

d) Analysis of Project Impacts

The following is a discussion of the proposed Project's impacts during construction and operation with respect to hydrology and water quality.

⁶³ LGC Geotechnical, Inc., *Preliminary Geotechnical Report for Proposed Bow Tie Yard Lofts Project and Adjacent Parking Structure, Vesting Tentative Tract 4366, 2750 to 2800 West Casitas Avenue, Los Angeles, California, January 16, 2017 (Appendix D.2 of the DEIR).*

Threshold a) *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

(1) Impact Analysis

(a) *Surface Water Quality*

(i) *Construction Impacts*

As discussed in Section II, Project Description, the proposed Project would include the demolition of the existing building (approximately 117,000 square feet of total building area) and site clearance of the paved surface parking lot (3,000 cubic yards of asphalt to be exported from the Project Site) and would include the construction of a mixed-use development with five buildings. The proposed Project's total gross building floor area would be approximately 487,872 square feet, including 419 residential dwelling units (423,872 square feet), 64,000 square feet of commercial uses, and an approximate 240,000-square-foot parking garage.

Prior to the initiation of any grading or earthwork activities, the structure and surface parking existing on the Project Site would be demolished to allow for new development. After the completion of demolition/site clearance, the excavation phase for the proposed Project would occur for approximately two months and would involve shallow excavation of the Project Site to ensure the proper base and slope for the structures and building foundations. The proposed development would all be above grade and does not propose any subterranean levels. The earthwork anticipated at the Project Site would consist of clearing and grubbing, minimal excavation, and placement and compaction of fill. It is conservatively estimated that the proposed earthwork and excavation activities would generate approximately 10,000 cubic yards of soil material, which would be exported to off-site fill sites or inert landfills and approximately 10,000 cy of soil import to balance the site. Temporary shoring would be required for supporting the vertical sides of the basement and perimeter footing excavations.

Three general sources of potential short-term, construction-related stormwater pollution associated with the proposed Project include: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion via storm runoff or mechanical equipment.

Prior to issuance of a grading permit, the Applicant shall obtain coverage under the SWRCB NPDES Construction General Permit. The Applicant shall provide the Waste Discharge Identification Number to the City of Los Angeles to demonstrate proof of coverage under the Construction General Permit. A Storm Water Pollution Prevention Plan (SWPPP) would be prepared and implemented for the proposed Project in compliance with the requirements of the Construction General Permit. The SWPPP shall identify construction Best Management Practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is

minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities.

The SWPPP would incorporate the required implementation of BMPs for erosion control and other measures to meet the NPDES requirements for stormwater quality. Implementation of the BMPs identified in the SWPPP and compliance with the NPDES and City discharge requirements would ensure that the construction of the proposed Project would not violate any water quality standards or discharge requirements, or otherwise substantially degrade water quality. Additionally, City of Los Angeles Ordinance No. 173,494 further sets procedures for stormwater pollution control for the planning and construction of development and redevelopment projects.

As discussed in Section II, Project Description, of the DEIR, excavation would extend to a maximum depth of up to 15 feet below the ground surface. As discussed above, the historic high groundwater level for the Project Site is approximately 25 feet below ground surface, and groundwater was not encountered above 37 feet during borings at the Project Site. As such, the Project is not expected to require dewatering during construction. Dewatering operations are practices that discharge non-stormwater, such as groundwater, that must be removed from a work location to proceed with construction into the drainage system. Discharges from dewatering operations can contain high levels of fine sediments, which if not properly treated, could lead to exceedance of the NPDES requirements. If groundwater is encountered during construction, temporary pumps and filtration would be utilized in compliance with the NPDES permit. Any such temporary system would comply with all relevant NPDES requirements related to construction and discharges from dewatering operations.

As such, with compliance with NPDES requirements and implementation of the code-required SWPPP and compliance with the City's Low-Impact Development Ordinance (Ord. No. 173,494) would ensure that the proposed Project's construction-related water quality impacts would be less than significant.

(ii) Operational Impacts

Project operation would not increase concentrations of the items listed as constituents of concern for the Los Angeles River Watershed but would introduce sources of potential water pollution that are typical of office, retail, and restaurant uses (e.g., sediment, nutrients, pesticides, metals, pathogens, and oil and grease).⁶⁴ Stormwater runoff from precipitation events could also potentially carry urban pollutants into municipal storm drains.

The Project Site is currently developed with a light industrial building and surface parking lot. The Project Site is mostly covered with impervious surfaces, with the exception of some limited landscaping within the surface parking areas. Thus, approximately 100 percent of the surface water runoff from the Project Site is directed to adjacent storm drains and does not percolate into

⁶⁴ *Constituents of concern listed for the Los Angeles River under California's Clean Water Act Section 303(d) List include cadmium (sediment), trash, coliform bacteria, copper (dissolved), lead, e. coli, selenium, sediment toxicity, Shellfish Harvesting Advisory, silver, toxicity, viruses (Enteric), and zinc.*

the groundwater table beneath the Project Site. An existing 66-inch diameter storm drain line extends along Casitas Avenue, runs along the east side of the Project Site, and continues southward.⁶⁵ The City of Los Angeles owns and maintains the storm drain line. The proposed Project would continue to generate surface water runoff, and runoff would be directed to existing stormwater inlets in a similar manner as existing conditions. The proposed Project's potential impacts to surface water runoff would ensure a less-than-significant impact by incorporating stormwater pollution control measures as set forth below that would regulate the amount and water quality of stormwater leaving the Project Site.

The proposed Project would be required to comply with the City of Los Angeles Stormwater and Urban Runoff Pollution Control Ordinance (Ordinance No. 172,176, effectuated October 1998), which established LAMC Sections 64.70 through 64.70.13 and set the foundation for stormwater management in the City of Los Angeles. The proposed Project would also be required to comply with LAMC Article 4.4, including the preparation of a LID Plan (Ordinance No. 183,833, which incorporates the requirements of the MS4 Permit) and demonstrate compliance with the LID requirements and standards and retain or treat the first 3/4-inch of rainfall in a 24-hour period or the rainfall from an 85th percentile 24-hour runoff event, whichever is greater.⁶⁶

The proposed Project falls within the second tier of the LID Ordinance requirements, which state that development projects that involve five or more units intended for residential use and result in an alteration of at least 50 percent or more of the impervious surfaces on an existing developed site, the entire Project Site must comply with the standards and requirements of Article 4.4 of Chapter VI of the LAMC and with the Development Best Management Practices Handbook. The Project Site shall be designed to manage and capture stormwater runoff to the maximum extent practicable utilizing various LID techniques, include infiltration, capture for use, and treated through high removal efficiency bio-filtration / bio-treatment systems of all runoff on-site (listed in priority order). If a method is determined infeasible, then the next method in the order is to be used to the Maximum Extent Practicable (MEP). Under the City LID Ordinance, it is estimated that 18,607 cubic feet of stormwater will need to be retained if infiltration or capture and use is feasible, or, if those methods are not feasible, 17,176 square feet of flow-through planter area will be required for treatment.⁶⁷

On-site stormwater management techniques must be designed so that no stormwater runoff leaving the Project Site for at least the volume of water produced by the Stormwater Quality Design Volume (SWQDV). Development and redevelopment projects are required to prepare a LID Plan, which comply with the provisions of the Development Best Management Practices Handbook. If partial or complete on-site compliance of any type is technically infeasible, the

⁶⁵ City of Los Angeles Department of Public Works, Bureau of Engineering, NavigateLA, website: <http://navigatea.lacity.org/navigatea/>, accessed October 2020.

⁶⁶ City of Los Angeles, *Planning and Land Development Handbook for Low Impact Development (LID), Part B Planning Activities, 5th Edition*, May 9, 2016.

⁶⁷ These numbers were generated using a property size of 5.7 acres at a 100% impervious ratio, which is considered a worst-case scenario. Source: KHR Associates, *Engineering Feasibility Report, Frog Town Lofts, Los Angeles, California, June 10, 2016 (Appendix P to the DEIR)*.

Project Site and LID Plan shall be required to manage the flow from the SWQDv on-site in order to maximize on-site compliance. For the remaining runoff that cannot feasibly be managed on-site, the proposed Project would be required to implement off-site mitigation on public and/or private land within the same sub-watershed as defined by the MS4 Permit.⁶⁸ Compliance with the LID requirements would reduce the amount of surface water runoff leaving the Project Site as compared to existing conditions.⁶⁹

In compliance with the LID Plan, prior to issuance of grading permits, the Applicant shall submit a LID Plan and design plans to the LADBS and the Los Angeles Sanitation and Environment Watershed Protection Division for review and approval. The LID Plan shall be prepared consistent with the requirements of the Development Best Management Practices Handbook. The BMPs shall be designed to retain or treat the runoff from a storm event producing $\frac{3}{4}$ -inch of rainfall in a 24-hour period or the rainfall from an 85th percentile 24-hour runoff event (whichever is greater), in accordance with the Planning and Land Development Handbook for Low Impact Development, Part B Planning Activities. The proposed Project would include approximately 25,005 square feet of biofiltration planters for stormwater treatment, which exceeds the minimum of 17,176 square feet of planter area estimated above. A signed certificate from a licensed civil engineer or licensed architect confirming that the proposed BMPs meet the numerical threshold standard shall be provided.

To ensure that all stormwater related BMPs are constructed and/or installed in accordance with the approved LID Plan, the City of Los Angeles requires a Stormwater Observation Report to be submitted to the City prior to the issuance of the Certificate of Occupancy. All projects reviewed and approved would require a Stormwater Observation Report and would be prepared, signed, and stamped by the engineer of record responsible for the approved LID Plan. With approval and issuance of a Certificate of Occupancy from LADBS, the proposed Project would be determined to be in compliance with all applicable codes, ordinances, and other laws.⁷⁰

Full compliance with the LID requirements and implementation of design-related BMPs would ensure that the operation of the proposed Project would not violate any water quality standards or discharge requirements or otherwise substantially degrade water quality. **Therefore, based on the above, Project operation would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality and operational surface water quality impacts would be less than significant.**

⁶⁸ City of Los Angeles Ordinance No. 183,833, 2015.

⁶⁹ City of Los Angeles, *Planning and Land Development Handbook for Low Impact Development (LID), Part B Planning Activities, 5th Edition, May 9, 2016.*

⁷⁰ City of Los Angeles, *Planning and Land Development Handbook for Low Impact Development (LID), Part B Planning Activities, 5th Edition, May 9, 2016.*

(b) *Groundwater Quality*

(i) *Construction*

During on-site grading and building construction, hazardous materials, such as fuels, paints, solvents, and concrete additives, could be used and would therefore require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the potential for hazardous materials to be released into groundwater. Compliance with all applicable federal, state, and local requirements concerning the handling, storage and disposal of hazardous waste would reduce the potential for the construction of the Project to release contaminants into groundwater that could affect existing contaminants, expand the area or increase the level of groundwater contamination, or cause a violation of regulatory water quality standards at an existing production well.

Furthermore, the proposed Project includes surface earthwork activity to ensure the proper base and slope for the proposed buildings. The proposed Project would only include above-grade levels. As discussed above, dewatering operations are not expected during construction. In the event dewatering is required during construction of the Project (e.g., due to perched water), any discharge of groundwater would occur pursuant to, and comply with, the NPDES permit or industrial user sewer discharge permit requirements. Pursuant to such requirements, the groundwater extracted would be chemically analyzed to determine contamination and the appropriate treatment and/or disposal methods.

In addition, as there are no existing groundwater production wells or public water supply wells within one mile of the Project Site, construction activities would not be anticipated to affect existing wells. The Project also would not involve drilling to or drilling through a clean or contaminated aquifer.

Based on the above, construction of the Project would not result in discharge that would violate any groundwater quality standard or waste discharge requirements or otherwise substantially degrade groundwater quality. Therefore, construction-related impacts on groundwater quality would be less than significant.

(ii) *Operation*

The Project would not include the installation or operation of water wells, or any extraction or recharge system that is in the vicinity of the coast, an area of known groundwater contamination or seawater intrusion, a municipal supply well or spreading ground facility.

Operation of the Project would not involve the use of underground storage tanks. While the development of new building facilities would slightly increase the use of on-site hazardous materials, as discussed in Section IV.E, Hazards and Hazardous Materials, of this RDEIR, the Project would comply with all applicable existing regulations at the Project Site regarding the handling and potentially required cleanup of hazardous materials. As such, regulatory compliance

would prevent the Project from affecting or expanding any potential areas of contamination or casing regulatory water quality standards at an existing production well to be violated, as defined in the California Code of Regulations, Title 22, Division 4, Chapter 15 and the Safe Drinking Water Act. Thus, the Project is not anticipated to result in releases or spills of contaminants that could reach a groundwater recharge area or spreading ground or otherwise reach groundwater through percolation. **Based on the above, operation of the Project would not result in discharges that would violate any groundwater quality standard or waste discharge requirements or otherwise substantially degrade groundwater quality. Therefore, Project's potential impact on groundwater quality during operation would be less than significant.**

(2) Mitigation Measures

Impacts regarding water quality were would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Impact After Mitigation

Impacts regarding water quality were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and impacts would be less than significant.

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

(1) Impact Analysis

(a) Construction

The proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the proposed Project would impede sustainable groundwater management of the Basin. Preliminary geological research shows that historic high groundwater on-site is approximately 25 feet below grade. The proposed Project includes surface earthwork activity to ensure the proper base and slope for the proposed buildings. The proposed Project would only include above-grade levels. However, as discussed above, if groundwater is encountered during construction, temporary pumps and filtration would be utilized in compliance with the NPDES permit. Any such temporary system would comply with all relevant NPDES requirements related to construction and discharges from dewatering operations. If groundwater is found during Project construction, it would consist of finite zones of perched groundwater, and any removal of groundwater, should it be required, would only occur up to the point where waterproofing would be installed. Therefore, if dewatering is required, it would have a minimal effect on local groundwater recharge in the vicinity of the Project Site. Furthermore, no water supply wells are located at the Project Site or within one mile of the Project Site that could be impacted by construction, nor would the Project include the construction of water supply wells. Therefore, construction of the proposed Project would not interfere with groundwater on-site.

Additionally, the Project Site is largely impervious and does not contribute to groundwater recharge. ***Based on the above, construction of the Project would not interfere with groundwater recharge. Therefore, the proposed Project would not have the potential to deplete groundwater supplies or interfere with groundwater recharge, and impacts to groundwater supplies and groundwater recharge would be less than significant.***

(b) Operation

As the Project Site is currently comprised of approximately 100 percent impervious surfaces, minimal groundwater recharge occurs. As described above, stormwater also appears to discharge from the Project Site without filtration under existing conditions.

A portion of the Project Site would be allocated for stormwater BMPs intended to control and treat stormwater runoff in compliance with LID requirements. The Project would implement infiltration, capture and use, and/or high-efficiency biofiltration/bioretenion systems. The stormwater that bypasses the BMP systems would discharge to an approved discharge point in the public right-of-way and not result in a large amount of rainfall that would affect groundwater hydrology, including the direction of groundwater flow. In addition, as also discussed above, there are no existing wells or spreading grounds within one mile of the Project Site, and the Project would not include new injection or supply wells. ***Based on the above, operation of the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge in a manner that would impede sustainable groundwater management of the basin. Therefore, the Project's potential impact on groundwater supplies and recharge during operation would be less than significant.***

(2) Mitigation Measures

Project-level impacts related to groundwater supplies or recharge would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to groundwater supplies or recharge were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

- i. Result in substantial erosion or siltation on- or off-site;***
- ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;***

- iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;**

(1) Impact Analysis

(a) Erosion and Siltation On- or Off-Site

(i) Construction

Construction activities for the Project would include demolition of the existing improvements and site preparation, followed by building construction and the installation of hardscape and landscape. The proposed Project would involve excavations to a maximum depth of 15 feet below grade level. These construction activities would have the potential to temporarily alter existing drainage patterns and flows on the Project Site by exposing the underlying soils, modifying flow direction, and rendering the Project Site temporarily more permeable. Exposed and stockpiled soils could be subject to erosion and conveyance into nearby storm drains during storm events. In addition, on-site watering activities used to reduce airborne dust could contribute to pollutant loading in runoff.

Since because the construction site would be greater larger than one acre, the Project would be required to obtain coverage under the NPDES Construction General Permit. In accordance with the permit requirements, the Project would implement a SWPPP that specifies BMPs and erosion control measures during construction to manage runoff flows. These BMPs would be designed to contain stormwater or construction watering on the Project Site such that runoff will not impact off-site drainage facilities or receiving waters. An Erosion Control Plan, prepared and implemented in accordance with City grading permit regulations (LAMC Chapter IX, Division 70), would contain and treat stormwater or construction watering on-site so that runoff does not result in substantial pollution or impact off-site drainage facilities or receiving water. As such, flow directions and runoff volumes during temporary construction activities would be controlled.

Thus, with compliance with NPDES Construction General Permit requirements, including implementation of a SWPPP and BMPs, as well as compliance with applicable City grading permit regulations, Project construction would not substantially alter the existing drainage pattern of the Project Site in a manner that would result in substantial erosion or siltation. As such, impacts from erosion or siltation during construction would be less than significant.

(ii) Operation

During proposed Project operations, surface water runoff would continue to be directed to existing storm drain infrastructure. Surface water runoff would be controlled through site design and engineering practices in accordance with the City of Los Angeles Stormwater and Urban Runoff Pollution Control Ordinance (Ordinance No. 172,176) and the LID Ordinance (Ordinance No. 181,899), which would ensure the Project Site, once operational, does not contribute to

substantial erosion or siltation off-site. ***As such, impacts from erosion or siltation during long-term operation would be less than significant.***

(b) *Increase Rate or Amount of Surface Runoff*

(i) *Construction*

The volume and quality of surface runoff would be controlled by BMPs as required under the SWPPP, and no construction processes would require excessive use of water that would generate greater surface flow from the Project Site than under existing conditions. Construction activities would not generate an increase in surface water runoff. ***Therefore, construction of the proposed Project would not increase the rate or amount of surface runoff in a manner, which would result in flooding on-or off-site, and impacts associated with the potential for off-site flooding would be less than significant.***

(ii) *Operation*

The Project Site is approximately 100 percent impervious under existing conditions. The proposed Project would include approximately 25,005 square feet of biofiltration planters for stormwater treatment, of a total lot area of 248,190 square feet. Therefore, the percentage of impervious surfaces would be reduced to 90 percent under the proposed Project. Surface water runoff under proposed conditions would comply with the City's LID Ordinance (Ordinance No. 181,899). Compliance with the LID Ordinance would ensure the Project Site is developed with BMPs designed to retain or treat the runoff from a storm event producing $\frac{3}{4}$ -inch of rainfall in a 24-hour period or the rainfall from an 85th percentile 24-hour runoff event (whichever is greater). As such, the volume of post-development surface water runoff would be reduced with the proposed Project as compared to the existing conditions. ***Therefore, operation of the proposed Project would not increase the rate or amount of surface runoff in a manner, which would result in flooding on-or off-site, and impacts associated with the potential for off-site flooding would be less than significant.***

(c) *Exceed Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Sources of Polluted Runoff*

(i) *Construction*

As discussed above, construction activities would not generate an increase in surface water runoff. Therefore, the capacity of existing or planned stormwater infrastructure would not be exceeded during Project construction.

Prior to issuance of a grading permit, the Applicant would be required to obtain coverage under the State Water Resources Control Board National Pollution Discharge Elimination System (NPDES) Construction General Permit. The Applicant would be required to provide the Waste Discharge Identification Number to the City of Los Angeles to demonstrate proof of coverage under the Construction General Permit. A Storm Water Pollution Prevention Plan (SWPPP) would be prepared and implemented for the proposed Project in compliance with the requirements of

the Construction General Permit. The SWPPP would identify construction Best Management Practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities.

As discussed within Section IV.E, Hazardous Materials, the proposed Project would require the routine transport, use and disposal of cleaning solvents, fuels, paints and paint-related products, waste oil, spent solvents, oily rags and other potentially hazardous materials commonly associated with construction activities. Construction activities would involve the use and storage in small quantities of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. All potentially hazardous materials used during demolition and construction activities would be handled, contained, stored, and used in accordance with all applicable local, state, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste based on its waste classification and the waste acceptance criteria of the permitted disposal facilities. Compliance with all applicable federal, state, and local requirements concerning the handling, storage and disposal of hazardous waste, would reduce the potential for the construction of the proposed Project to release contaminants into stormwater. Implementation of the BMPs in the SWPPP in accordance with LARWQCB's discharge requirements would further ensure that the project would not generate substantial amounts of polluted runoff. **Therefore, construction of the proposed Project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.**

(ii) Operation

The Project Site is developed almost entirely with impervious surfaces, and approximately 100 percent of surface water runoff is directed to adjacent street storm drains. A 66-inch diameter storm drain line, which is owned and maintained by the City, is located adjacent to the Project Site along Casitas Avenue and along the eastern side of the Project Site. Stormwater runoff from properties in the Project Site area is discharged into gutters and storm drains along Casitas Avenue and enters the underground storm drains through catch basins; stormwater is then conveyed through this underground network into the Los Angeles River.⁷¹ As discussed in Threshold (a), compliance with the City's LID Ordinance would ensure the volume of post-development surface water runoff is reduced under the proposed Project as compared to the existing conditions. Compliance with the LID Ordinance would also ensure BMPs are implemented to treat the quality of surface water runoff before being discharged into the storm drain system. **Therefore, the proposed Project would not create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and water quality impacts would be less than significant.**

⁷¹ City of Los Angeles, Bureau of Engineering, Navigate LA, website: <http://navigatela.lacity.org/navigatela/>, October 2020.

(d) Impede or Redirect Flood Flows

As mentioned previously, a 66-inch diameter storm drain line, which is owned and maintained by the City, is located adjacent to the Project Site along Casitas Avenue and along the eastern side of the Project Site. With the exception of some trees within the surface parking lot, the Project Site is currently approximately 100 percent impervious and all surface water is directed off-site to the adjacent storm drain system. The proposed Project would continue to direct surface water and stormwater run-off onto the existing storm drain system. Further, the proposed Project would slightly decrease the rate of surface runoff, once operational, as some detention would be provided by the proposed biofiltration/bioretenion system.

Additionally, the proposed Project would include approximately 25,005 square feet of biofiltration planters for stormwater treatment, of a total lot area of 248,190 square feet. Therefore, the percentage of impervious surfaces, which is approximately 100 percent under existing conditions, would be reduced to 90 percent under the proposed Project, overall decreasing the flow rates of stormwater runoff discharging into the Los Angeles River. ***Therefore, the proposed Project would not substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or Los Angeles River, or substantially increase the rate or amount of surface runoff, in a manner that would result in flooding on- or off-site. As such, impacts would be less than significant.***

(2) Mitigation Measures

Impacts on existing drainage patterns that would cause increased siltation and flooding on- or off-site, create or contribute to the exceedance of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or impede or redirect flood flows would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Impact After Mitigation

Impacts on existing drainage patterns that would cause increased siltation and flooding on- or off-site, create or contribute to the exceedance of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or impede or redirect flood flows were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

(1) Impact Analysis

The Project Site is located approximately 15 miles east of the Pacific Ocean, and the Safety Element of the City's General Plan does not map the Project Site as being located within an area

potentially affected by a tsunami.⁷² The closest body of water to the Project Site is the Los Angeles River located approximately 160 feet to the south. However, the Los Angeles River includes a sunken concrete-lined channel. Thus, inundation as a result of seiche is considered unlikely.

As discussed in Threshold(c) above, according to FEMA's Flood Insurance Rate Map No. 06037C1610F, dated September 26, 2008, the Project Site is Zone X, which signifies that the Project Site is determined to be outside the FEMA-designated 100 and 500 year flood zone.⁷³ Nevertheless, the ACOE's 2016 Floodplain Analysis⁷⁴ indicates that portions of the Project Site occur within ACOE's hydraulic analysis for the 0.2 percent annual change exceedance (500-year floodplain) and the 1 percent annual change exceedance (100-year floodplain). The ACOE intends for the City to provide the information to the local communities that are affected and for the City to initiate the processing of Letter of Map Revision with FEMA.

Based on a topographic survey of the Project Site (see Appendix D to this PR-DEIR), existing mean elevations range from 365.7 to 368.9 feet above mean sea level. The southwest corner of the Project Site is at the lowest elevation of 365.7 feet above mean sea level and is in the area that is could potentially be within the 100-year flood hazard zone as shown in ACOE's 2016 Floodplain Analysis. Additionally, the 500-year flood exhibit appears to cover much of the Project Site, except for the southeastern corner of the Project Site where the existing elevation is over 368 feet. It should be noted that there is also an eight-foot high berm (or levee) that separates most of the Project Site from the banks of the Los Angeles River, with a high point of 376.4 feet.

As noted in HYDRO-PDF-1, the proposed Project Development Plan would include raised elevations above both the 100-year and 500-year flood levels, as shown in ACOE's Floodplain Analysis. Building finish floors would be constructed at elevations of at least 369 feet and perimeter roadways and other at-grade surfaces would be raised to approximately 368 feet, more than two feet higher than the lowest existing elevation in the southwest corner of the Project Site. The net effect would be that the entire Project Site would not expected to fall within either a 100-year or 500-year storm event, as outlined in ACOE's Floodplain Analysis. Therefore, the potential for inundation at the Project Site as a result of flooding is considered low.

The ACOE operates the nearest levee (approximately 1,100 feet east of the Project Site) and maintains the 22.5-mile stretch of the Los Angeles River that includes the portion adjacent to the Project Site. As such, the ACOE continues to identify areas in need of repair and flood mitigation and is overseeing improvements upstream of the Project Site. Given such activity and based on

⁷² *City of Los Angeles, Safety Element of the Los Angeles City General Plan, Exhibit G, November 26, 1996, p. 59.*

⁷³ *Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map, Panel Number 06037C1610F, September 26, 2008, website: <http://dpw.lacounty.gov/wmd/floodzone/>, accessed September 2016.*

⁷⁴ *ACOE 2016. U.S. Army Corps of Engineers, Los Angeles District: Hydraulics Report, Floodplain Analysis, Los Angeles River: Barham Boulevard to First Street, Flood Plain Management Services Special Study, Los Angeles, California, October 2016 (at page 4, Special Notice).*

the assessment that the area nearest to the Project Site is not in need of improvement, risk to the proposed development related to inundation due to levee failure would be less than significant.

Furthermore, all potentially hazardous materials used during demolition and construction activities would be handled, contained, stored, and used in accordance with all applicable local, state, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste based on its waste classification and the waste acceptance criteria of the permitted disposal facilities. In addition, implementation of the BMPs in the SWPPP in accordance with LARWQCB's discharge requirements would further ensure that the project would not generate substantial amounts of polluted runoff.

Moreover, the proposed Project, once operational, would not use hazardous materials other than modest amounts of typical cleaning supplies and solvents used for housekeeping and janitorial purposes typically associated with the operation of the proposed Project. Based on the approximate size of the urban farm being proposed (i.e., 42,000 square feet), it is anticipated that the urban farm would be classified as a Small Quantity Generator (SQG), generating between 220 and 2,200 pounds per month of hazardous waste. The urban farm use must comply with USEPA requirements for managing hazardous waste, which include obtaining an EPA Identification number and following the USEPA's recommended best management practices for transporting, storing, managing, and disposing of hazardous materials in accordance with USEPA regulations. Further, the urban farm use is located on the roof top of Building "G" and would not be subject to flooding. ***As such, any impacts from the risk release of pollutants due to inundation would be less than significant.***

(2) Mitigation Measures

Impacts regarding water quality would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Impact After Mitigation

Impacts regarding water quality were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and impacts would be less than significant.

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

(1) Impact Analysis

(a) Water Quality Control Plan

The applicable water quality control plan applicable to the proposed Project is the LARWQCB Water Quality Control Plan for the Los Angeles Region (Basin Plan), which was adopted on June 13, 1994. The Los Angeles Regional Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan: (i)

designates beneficial uses for surface and ground waters: (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy; and (iii) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The proposed Project, once operational, would not use hazardous materials other than modest amounts of typical cleaning supplies and solvents used for housekeeping and janitorial purposes typically associated with the operation of the proposed Project. The use of these substances would comply with State health codes and regulations. Further, the proposed Project would comply with all federal, State and local regulations governing stormwater discharge. Additionally, the proposed Project would be required to comply with LAMC Chapter VI, Article 4.4 and all applicable laws and regulations pertaining to stormwater runoff and water quality. Therefore, the proposed Project would not include potential sources of water pollutants that would have the potential to substantially degrade water quality, and impacts to water quality would be less than significant. ***As such, the proposed Project would not obstruct implementation of the LADWP Water Quality Control Plan, and impacts would be less than significant.***

(b) *Groundwater Management Plan*

The Project Site is located within the San Fernando Valley Groundwater Subbasin, which is neither classified as a medium nor high priority groundwater basin.⁷⁵ Therefore, the Project Site is not subject to a sustainable groundwater management plan. Nevertheless, as discussed above, adherence to Chapter VI, Article 4.4 of the LAMC would ensure that the proposed Project would not interfere with groundwater recharge and would not deplete groundwater supplies. ***As such, the proposed Project is not subject to a Sustainable Groundwater Management Plan, and impacts would be less than significant.***

(2) Mitigation Measures

Impacts regarding confliction or obstruction with a water quality control plan or sustainable groundwater management plan would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Impact After Mitigation

Impacts regarding confliction or obstruction with a water quality control plan or sustainable groundwater management plan were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and impacts would be less than significant.

⁷⁵ California Natural Resources Agency, Department of Water Resources, Sustainable Groundwater Management Act 2019 Basin Prioritization, April 2019.

e) Cumulative Impacts

(1) Impact Analysis

(a) Surface Water Quality

As discussed above, construction and operation of developments stormwater runoff from most development has the potential to introduce pollutants into the stormwater system. Given the similar types of land uses proposed by the related projects, anticipated and potential pollutants generated by the related projects could also include sediment, nutrients, pesticides, metals, pathogens, and oil and grease. As discussed above, the proposed Project would introduce BMPs to the Project Site and provide for the collection, treatment, and discharge of site flows. The proposed Project would have a less-than-significant impact on surface water quality. As with the proposed Project, related projects in the Los Angeles River Watershed would also be subject to NPDES requirements relating to water quality, and related projects would also be subject to LID requirements and implementation of BMPs and measures incorporated into site-specific SWPPPs for construction activities to target potential pollutants that could be carried in stormwater runoff. **Therefore, the Project's contribution to impacts related to surface water quality would not be cumulatively considerable, and cumulative impacts to surface water quality would be less than significant.**

(b) Surface Water Hydrology

The geographic context for the cumulative impact analysis on surface water hydrology is the Los Angeles River Watershed. The Project, in conjunction with forecasted growth in the Los Angeles River Watershed, could cumulatively increase stormwater runoff flows. Without detailed drainage plans, it is not possible to determine whether any of the related projects would discharge stormwater into the same storm drainage facilities as the proposed Project. Furthermore, in accordance with City requirements, related projects and other future development projects would be required to implement BMPs to manage stormwater in accordance with LID guidelines. Furthermore, the City of Los Angeles Department of Public Works would review each future development project on a case-by-case basis to ensure sufficient local and regional infrastructure is available to accommodate stormwater runoff. Moreover, the Project would result in reduced stormwater runoff as compared to existing conditions. **As such, the proposed Project's contribution would not be cumulatively considerable, and cumulative impacts to surface water hydrology would be less than significant.**

(c) Groundwater Quality

As noted above, the related projects comprise a variety of uses, including apartments, condominiums, restaurants, schools, hotels, office, and retail uses, as well as mixed-use developments incorporating some or all of these elements. These proposed uses are similar to the types of land uses proposed by the Project. As such, these related projects would be anticipated to involve the use, handling, storage, and disposal of similar potentially hazardous

materials and wastes that could be released into the groundwater. However, as with the proposed Project, the related projects would be required to comply with all applicable federal, state, and local requirements concerning the handling, storage and disposal of hazardous waste, which would reduce the potential for the release of contaminants into groundwater, and would be subject to LARWQCB requirements relating to groundwater quality. Other potential effects to groundwater quality, including from USTs and oil wells, are site specific and would be addressed by each individual related project. This would include coordination with the applicable governing agencies and compliance with applicable regulations, as discussed above for the Project. ***As such, the Project's contribution would not be cumulatively considerable, and cumulative impacts to groundwater quality would be less than significant.***

(d) *Groundwater Hydrology*

The geographic context for the cumulative impact analysis on groundwater level is the Central Subbasin. Cumulative groundwater hydrology impacts could result from the overall utilization of groundwater basins located in proximity to the Project Site and other related projects in the vicinity of the Project Site. In addition, interruptions to existing hydrology flow by dewatering operations would have the potential to affect groundwater levels. Any calculation of the extent to which the related projects would increase or decrease impervious or pervious surfaces that might affect groundwater quality would be speculative. However, no water supply wells, spreading grounds, or injection wells are located within a one-mile radius of the Project Site, and the proposed Project would have a less-than-significant impact on groundwater levels. Moreover, as with the Project, any related project would be required to evaluate its individual impacts to groundwater hydrology due to temporary or permanent dewatering operations. Similar to the proposed Project, other proposed projects within the groundwater basin would likely incorporate structural designs for subterranean levels that are able to withstand hydrostatic forces and incorporate comprehensive waterproofing systems in accordance with current industry standards and construction methods. If any related project requires permanent dewatering systems, such systems would be regulated by the SWRCB. Should excavation for other related projects extend beneath the groundwater level, temporary groundwater dewatering systems would be designed and implemented in accordance with NPDES permit requirements. ***As such, the proposed Project's contribution would not be cumulatively considerable, and cumulative impacts to groundwater hydrology would be less than significant.***

(e) *Flood Hazards, Risk of Release of Pollutants Due to Inundation*

The proposed Projects risk to flooding and potential to release pollutants due to inundation would be less than significant. Risks associated with flooding and inundation are generally site specific and subject to the influence of topography, gradient, and surface elevation. The proposed Project, in combination with other projects in the vicinity, would not result in a cumulative risk to flooding. The proposed Project would not increase surface water flows leaving the Project Site. Similarly, the related projects nearest to the Project Site, Related Projects 15 and 17 are currently vacant land that are proposed to be developed and improved with parkland in conjunction with the

restorative efforts of the Los Angeles River Master Plan. The hydrological impacts associated with these projects would be beneficial with respect to flooding and inundation. **Therefore, cumulative impacts associated with flood hazards and potential release of hazardous pollutants due to inundation would be less than significant.**

(f) *Conflict with or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan*

The proposed Project would not conflict with or obstruct implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan. Similar to the proposed Project each Related Project would be subject to independent CEQA review, as applicable, to determine consistency with all applicable Water Quality Control Plan or Sustainable Groundwater Management Plan. Projects within the RIO Overlay will be subject to the site plan review and development standards imposed by the Department of City Planning. **Thus, cumulative impacts associated with potential conflicts with or obstruction of a Water Quality Control Plan or Sustainable Groundwater Management Plan would be less than significant.**

(2) Mitigation Measures

Cumulative impacts related to hydrology and water quality are less than significant. Therefore, no mitigation measures are required to address cumulative impacts.

(3) Level of Impact After Mitigation

Cumulative impacts related to hydrology and water quality were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the cumulative impact level remains less than significant.