IV. Environmental Impact Analysis

M.2 Utilities and Service Systems—Wastewater

1. Introduction

This section analyzes potential Project impacts on wastewater collection and treatment facilities and infrastructure, including whether such existing infrastructure has sufficient capacity to serve the Project. The analysis included herein is based on the *Water and Sewer Infrastructure Assessment Report* prepared for the Project (Infrastructure Assessment Report) and is included as Appendix L of this Recirculated Draft EIR.

2. Environmental Setting

a. Regulatory Framework

There are several plans, policies, and programs regarding wastewater at the state and local levels. Described below, these include:

- California Green Building Standards Code;
- City of Los Angeles General Plan Framework Element;
- Los Angeles Integrated Resources Plan;
- One Water LA 2040 Plan; and
- Los Angeles Municipal Codes:
  - Los Angeles Green Building Code (Ordinance No. 181,480);
  - Water Efficiency Requirements Ordinance (Ordinance No. 180,822);
  - Sewer Capacity Availability Review (SCAR; LAMC Section 64.15);
  - Sewerage Facilities Charge (LAMC Sections 64.11.2 and 64.16.1); and
  - Bureau of Engineering Special Order No. SO 06-0691.

(1) State

(a) California Green Building Code

The California Green Building Standards Code (CALGreen Code) is set forth in California Code of Regulations (CCR) Title 24, Part 11, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all flush toilets are limited to 1.28 gallons per flush, and urinals are limited to 0.5 gallon per flush. In addition, maximum flow rates for faucets are established at 2.0 gallons per minute (gpm) at 80 pounds per square inch (psi) for showerheads, 1.2 gpm at 60 psi for residential lavatory faucets, and 1.8 gpm at 60 psi for kitchen faucets.

(2) Local

(a) City of Los Angeles General Plan Framework Element

The Citywide General Plan Framework Element (Framework Element) establishes the conceptual basis for the City's General Plan.[1] The Framework Element sets forth a comprehensive Citywide long-range growth strategy and defines Citywide policies regarding land use, housing, urban form and neighborhood design, open space and conservation, economic development, transportation, infrastructure and public services. Chapter 9, Infrastructure and Public Services, of the Framework Element identifies goals, objectives, and policies for utilities in the City, including wastewater collection and treatment. Goal 9A is to provide adequate wastewater collection and treatment capacity for the City and in basins tributary to City-owned wastewater treatment facilities.[2]

(b) Los Angeles Integrated Resources Plan

The City of Los Angeles Integrated Resources Plan (IRP) was developed by multiple departments in order to address the facility needs of the City's wastewater program, recycled water, and urban runoff/stormwater management through the year 2020.

The Final IRP 5-Year Review was released in June 2012, which included 12 projects that were separated into two categories: (1) "Go Projects" for immediate implementation; and (2) "Go-If Triggered Projects" for implementation in the future once a trigger is

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[1] *City of Los Angeles Department of City Planning, Citywide General Plan Framework, An Element of the Los Angeles General Plan, July 27, 1995.*

[2] *City of Los Angeles Department of City Planning, Citywide General Plan Framework Element, Chapter 9: Infrastructure and Public Services—Wastewater, originally adopted by City Council on December 11, 1996, and re-adopted on August 8, 2001.*

reached.[3] Triggers for these projects include wastewater flow, population, regulations, or operational efficiency. Based on the Final IRP 5-Year Review, the Go Projects consisted of six capital improvement projects for which triggers were considered to have been met at the time the IRP EIR was certified. The Go-If Triggered Projects consisted of six capital improvement projects for which triggers were not considered to have been met at the time the IRP EIR was certified.

Since the implementation of the IRP, new programs and projects, which have resulted in a substantial decrease in wastewater flows, have affected the Go Projects and Go-If Triggered Projects. Based on the Final IRP 5-Year Review, two of the Go Projects have been moved to the Go-If Triggered category (Go Project 2 and Go Project 3), and two have been deferred beyond the 2020 planning window of the IRP (Go Project 4 and Go Project 5). Construction of wastewater storage facilities at the Donald C. Tillman Water Reclamation Plant (Go Project 1) has been completed. In addition, Go Project 6, involving the design of the North East Interceptor Sewer Phase II, is no longer being pursued.[4]

(c) One Water LA 2040 Plan

In April 2018, the City prepared the One Water LA 2040 Plan (One Water LA Plan), an integrated approach to Citywide recycled water supply, wastewater treatment, and stormwater management.[5] The new plan builds upon the City's Water IRP, which projected needs and set forth improvements and upgrades to wastewater conveyance systems, recycled water systems, and runoff management programs through the year 2020, and extends its planning horizon to 2040. The One Water LA Plan proposes a collaborative approach to managing the City's future water, wastewater treatment, and stormwater needs with the goal of yielding sustainable, long-term water supplies for Los Angeles to ensure greater resilience to drought conditions and climate change. The One Water LA Plan is also intended as a step toward meeting the Mayor's Executive Directive to reduce the City's purchase of imported water by 50 percent by 2024.[6] Major challenges addressed in the One Water LA Plan include recurring drought, climate change, and the availability of recycled water in the future in light of declining wastewater volumes.

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[3] *City of Los Angeles, Department of Public Works, Bureau of Sanitation and Department of Water and Power, Water IRP 5-Year Review FINAL Documents, June 2012.*

[4] *City of Los Angeles, Department of Public Works, Bureau of Engineering, Project Information Report, North East Interceptor Sewer (NEIS) Phase 2A.*

[5] *City of Los Angeles, One Water LA 2040 Plan, Volume 1, Summary Report, April 2018.*

[6] *City of Los Angeles, Office of the Mayor, Executive Directive No. 5, Emergency Drought Response—Creating a Water Wise City, October 14, 2014.*

(d) Los Angeles Municipal Code

(i) Los Angeles Green Building Code

The City has been pursuing a number of green development initiatives intended to promote energy conservation and reductions in the amount of greenhouse gas emissions generated within the City. While these ordinances do not focus on the provision of sewer services, they do mandate the use of water conservation features in new developments. Examples of such water conservation features include, but are not limited to, low water shower heads, toilets, clothes washers and dishwashers. Because the flow through these fixtures is reduced, residual wastewater passing through is reduced, in turn reducing the demand for sewage conveyance and treatment.

LAMC Chapter IX, Article 9, the Los Angeles Green Building Code (LA Green Building Code, Ordinance No. 181,480),[7] was adopted in April 2008 and provides standards and a mechanism for evaluating projects for their water conservation features during site plan review. The LA Green Building Code has been subsequently amended to incorporate various provisions of the CALGreen Code. The LA Green Building Code includes mandatory requirements and elective measures pertaining to wastewater for three categories of buildings: (1) low-rise residential buildings; (2) non-residential and high-rise residential buildings; and (3) additions and alterations to residential and non-residential buildings.

(ii) Water Efficiency Requirements Ordinance

LAMC Chapter XII, Article 5, the Water Efficiency Requirements Ordinance (Ordinance No. 180,822),[8] effective December 1, 2009, requires the installation of efficient water fixtures, appliances, and cooling towers in new buildings and renovation of plumbing in existing buildings, to minimize the effect of water shortages for City customers and enhance water supply sustainability.

(iii) Sewer Capacity Availability Review

The LAMC includes regulations that require the City to assure available sewer capacity for new projects and to collect fees for improvements to the infrastructure system. LAMC Section 64.15 requires that the City perform a Sewer Capacity Availability Review (SCAR) when an applicant seeks a sewer permit to connect a property to the City's sewer system, proposes additional discharge through their existing public sewer connection, or

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[7] *City of Los Angeles, Ordinance No. 181,480.*

[8] *City of Los Angeles, Ordinance No. 180,822.*

proposes a future sewer connection or future development that is anticipated to generate 10,000 gallons or more of sewage per day. A SCAR provides a preliminary assessment of the capacity of the existing municipal sewer system to safely convey a project's newly generated wastewater to the appropriate sewage treatment plant.

(iv) Sewerage Facilities Charge

LAMC Sections 64.11 and 64.12 require approval of a sewer permit, also called an "S" Permit, prior to connection to the wastewater system. LAMC Sections 64.11.2 and 64.16.1 require the payment of fees for new connections to the City's sewer system to assure the sufficiency of sewer infrastructure. New connections to the sewer system are assessed a Sewerage Facilities Charge. The rate structure for the Sewerage Facilities Charge is based upon wastewater flow strength, as well as volume. The determination of wastewater flow strength for each applicable project is based on City guidelines for the average wastewater concentrations of two parameters, biological oxygen demand and suspended solids, for each type of land use. Sewerage Facilities Charge fees are deposited in the City's Sewer Construction and Maintenance Fund for sewer and sewage-related purposes, including, but not limited to, industrial waste control and water reclamation purposes.

(v) Bureau of Engineering Special Order

The City establishes design criteria for sewer systems to assure that new infrastructure provides sewer capacity and operating characteristics to meet City standards (Bureau of Engineering Special Order No. SO 06-0691). Per the Special Order, lateral sewers, which are sewers 18 inches or less in diameter, must be designed for a planning period of 100 years. The Special Order also requires that sewers be designed so that the peak dry weather flow depth during their planning period does not exceed one-half of the pipe diameter (D) (i.e., depth-to-diameter ratio or d/D).[9]

b. Existing Conditions

(1) Wastewater Generation

As discussed in Section II, Project Description, of this Recirculated Draft EIR, the Project Site comprises a portion of the Marina Marketplace shopping center. The Project Site is currently occupied by three structures, including a two-story bookstore, a single-story building providing retail uses, a two-story commercial and retail building, and

[9] *City of Los Angeles Department of Public Works, Bureau of Engineering, Special Order No. 006-0691, Planning Period, Flow, and Design Criteria for Gravity Sanitary Sewers and Pumping Plants, effective June 6, 1991.*

surface parking and circulation areas. Based on the Infrastructure Assessment Report, the existing retail and restaurant uses generate a total average daily wastewater flow of approximately 4,867 gallons per day.

(2) Wastewater Infrastructure

Sanitary sewer service in the Project area is owned and operated by the City of Los Angeles. The existing wastewater collection system includes more than 6,700 miles of public sewers, which serves a population of more than four million people and conveys approximately 400 million gallons per day to the City's four wastewater treatment and water reclamation plants.[10]

As described in the Infrastructure Assessment Report, there is one existing 8-inch diameter City-owned sewer line within the Project Site. The sewer line drains southerly and westerly, through the adjacent Hotel MdR property to the southwest, then southerly to an existing 8-inch sewer line along the north side of the Marina Freeway. There is also an existing 8-inch sewer line in Glencoe Avenue, which drains easterly toward Mindanao Avenue. This 8-inch sewer line currently provides service to a portion of the Project Site. Sewer flows originating from the Project Site are collected and conveyed through a network of sewer lines for treatment at the Hyperion Water Reclamation Plant (HWRP).

(3) Wastewater Treatment

LASAN is responsible for the operation and maintenance of wastewater treatment facilities in the City. The main purpose of these treatment facilities is to remove potential pollutants from sewage in order to protect river and marine environments and public health. LASAN divides the wastewater treatment system of the City into two major service areas: the Hyperion Service Area and the Terminal Island Service Area.[11] The Hyperion Service Area is served by the Hyperion Sanitary Sewer System, which consists of the HWRP, the Donald C. Tillman Water Reclamation Plant, and the Los Angeles–Glendale Water Reclamation Plant.[12] The Terminal Island Service Area is served by the Terminal Island Treatment Plant.[13] The Project Site is located within the Hyperion Service Area.

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[10] *LASAN, Sewers and Pumping Plants, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-s?_adf.ctrl-state=hgp4yycqp_5&_afrLoop=3961669001041971#!, accessed June 9, 2023.*

[11] *LASAN, Clean Water, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw?_adf.ctrl-state=ljvz6q49_5&_afrLoop=8241807351592071#!, accessed June 9, 2023.*

[12] *LASAN, Clean Water, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw?_adf.ctrl-state=ljvz6q49_5&_afrLoop=8241807351592071#!, accessed June 9, 2023.*

[13] *LASAN, Clean Water, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw?_adf.ctrl-state=ljvz6q49_5&_afrLoop=8241807351592071#!, accessed June 9, 2023.*

(a) Hyperion Sanitary Sewer System

As shown in Table IV.M.2-1 on page IV.M.2-8, the existing design capacity of the Hyperion Sanitary Sewer System is approximately 550 million gallons per day (consisting of 450 million gallons per day at the HWRP, 80 million gallons per day at the Donald C. Tillman Water Reclamation Plant, and 20 million gallons per day at the Los Angeles–Glendale Water Reclamation Plant).

Based on the One Water LA 2040 Plan–Wastewater Facilities Plan, the average wastewater flow rate in the Hyperion Sanitary Sewer System was 314 million gallons per day in 2016 (consisting of 250 million gallons per day at the HWRP, 47 million gallons per day at the Donald C. Tillman Water Reclamation Plant, and 17 million gallons per day at the Los Angeles–Glendale Water Reclamation Plant).[14] The One Water LA 2040 Plan–Wastewater Facilities Plan projects that annual average wastewater flows in the Hyperion Sanitary Sewer System would increase to 348 million gallons per day in 2030 and 358 million gallons per day in 2040. All other flow in the Hyperion Sanitary Sewer System, as well as biosolids from the upstream reclamation plants that are returned to the collection system are treated at the HWRP in Playa Del Rey.[15] As such, current and projected flows are below the design capacity of approximately 550 million gallons per day for the Hyperion Sanitary Sewer System.

(b) Hyperion Water Reclamation Plant

As discussed above, wastewater generated from the Project Site is conveyed via the local collector sanitary sewer system directly to the HWRP for treatment. As shown in Table IV.M.2-1, the HWRP has the capacity to treat approximately 450 million gallons per day of wastewater for full secondary treatment and currently treats approximately 275 million gallons per day.[16] As such, the HWRP is currently operating at approximately 61 percent of its capacity, with a remaining available capacity of approximately 175 million gallons per day. Based on the above, current flows to the HWRP are well below the design capacity of the HWRP of approximately 450 mgd.

Incoming wastewater to the HWRP initially passes through screens and basins to remove coarse debris and grit. This is followed by primary treatment, which is a physical separation process where heavy solids settle to the bottom of tanks while oil and grease float to the top. These solids, called sludge, are collected, treated, and recycled. The

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[14] *LASAN, One Water LA 2040 Plan—Volume 2: Wastewater Facilities Plan, April 2018.*

[15] *LASAN, Sewer System Management Plan: Hyperion Sanitary Sewer System, February 2017.*

[16] *LASAN, Hyperion Water Reclamation Plant, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=grj40dmqj_1780&_afrLoop=3950078628628745#!, accessed June 9, 2023.*

Table IV.M.2-1
Existing Capacity of Hyperion Service Area

	Design Capacity (mgd)
Hyperion Water Reclamation Plant	450
Donald C. Tillman Water Reclamation Plant	80
Los Angeles–Glendale Water Reclamation Plant	20
Total	**550**

mgd = million gallons per day

Source: LASAN, Hyperion Water Reclamation Plant, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=ljvz6q49_5&_afrLoop=8241943613187783#!; Donald C. Tillman Water Reclamation Plant, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-dctwrp?_adf.ctrl-state=ljvz6q49_5&_afrLoop=8242084065330158#!; and Los Angeles–Glendale Water Reclamation Plant, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-lagwrp?_adf.ctrl-state=ljvz6q49_5&_afrLoop=8242559400318952#!, accessed June 9, 2023.

portion of water that remains, called primary effluent, is treated through secondary treatment using a natural, biological approach. Living micro-organisms are added to the primary effluent to consume organic pollutants. These micro-organisms are later harvested and removed as sludge.[17] The treated water from the HWRP is discharged through a 5-mile outfall pipe at a depth of 190 feet into the Santa Monica Bay and Pacific Ocean.[18] The discharge from the HWRP into Santa Monica Bay is regulated by the HWRP's National Pollutant Discharge Elimination System (NPDES) Permit issued under the Clean Water Act and is required to meet the Regional Water Quality Control Board's requirements for a recreational beneficial use.[19] Accordingly, the HWRP's effluent that is released to Santa Monica Bay is continually monitored to ensure that it meets or exceeds prescribed water quality standards. LASAN also monitors flows into the Santa Monica Bay.[20]

[17] *LASAN, Hyperion Water Reclamation Plant, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=grj40dmqj_1780&_afrLoop=3950078628628745#!, accessed June 9, 2023.*

[18] *California Regional Water Quality Control Board, Los Angeles Region, Order No. R4-2010-0200, NPDES No. CA0109991, Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of Los Angeles, Hyperion Treatment Plant Discharge to the Pacific Ocean.*

[19] *California Regional Water Quality Control Board, Los Angeles Region, Order No. R4-2010-0200, NPDES No. CA0109991, Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of Los Angeles, Hyperion Treatment Plant Discharge to the Pacific Ocean.*

[20] *LASAN, Environmental Monitoring www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-wp-ec-em?_adf.ctrl-state=xsmd2kqwx_131&_afrLoop=21105064772207683#!, accessed June 9, 2023.*

3. Project Impacts

a. Thresholds of Significance

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

Threshold (a): Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects; [21] or

Threshold (b): [Not] result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

For this analysis, the Appendix G Thresholds listed above are relied upon. The analysis utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide, as appropriate to assist in analyzing the Appendix G Thresholds.

The L.A. CEQA Thresholds Guide states that the determination of significance shall be made on a case-by-case basis, considering the following factors to evaluate wastewater impacts:

- The project would cause a measurable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or
- The project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements.[22]

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[21] *Refer to Section IV.M.1, Utilities and Service Systems–Water of this Recirculated Draft EIR for a discussion of water impacts; Section IV.G, Hydrology and Water Quality of this Recirculated Draft EIR for a discussion of stormwater impacts; Section IV.M.4, Utilities and Service Systems—Energy Infrastructure, of this Recirculated Draft EIR for a discussion of electric power and natural gas impacts; and Section VI, Other CEQA Considerations for a discussion of telecommunications facility impacts.*

[22] *The Wastewater Facilities Plan referenced in the L.A. City CEQA Thresholds Guide has since been superseded by the Integrated Resources Plan.*

b. Methodology

The analysis of Project impacts on wastewater infrastructure and treatment capacity is based on the Infrastructure Assessment Report included in Appendix L of this Recirculated Draft EIR. The anticipated wastewater flows to be generated by the Project are based on 100 percent of the water demand calculated in the Project's WSA since LADWP uses LASAN's wastewater generation rates to calculate water demand. Given the existing capacity of the sanitary sewer system in the vicinity of the Project Site and the Project Site's future wastewater generation, an assessment was made of the impacts to the sanitary sewers and the City's downstream sewers and treatment plants. Data regarding the existing physical features and capacity of the system is based on information provided by LASAN and included in the Infrastructure Assessment Report.

To evaluate potential impacts relative to wastewater treatment capacity, this analysis evaluates whether adequate treatment capacity within the Hyperion Sanitary Sewer System would be available to accommodate the Project based on the estimate of the Project's wastewater generation and data from LASAN. For the assessment of cumulative impacts on wastewater treatment, the projected cumulative wastewater generation is compared to the estimated available capacity of the Hyperion Sanitary Sewer System.

c. Project Design Features

The Project would include water conservation features, which would also result in a reduction in wastewater. Such conservation features are included in Project Design Feature WAT-PDF-1, included in Section IV.M.1, Utilities and Service System—Water Supply and Infrastructure, of this Recirculated Draft EIR.

d. Analysis of Project Impacts

As set forth in Section II, Project Description, of this Recirculated Draft EIR, the Project proposes two development options—Option A and Option B. Under Option A, the Project proposes the development of 658 multi-family residential units and 27,300 square feet of neighborhood-serving commercial uses, including approximately 13,650 square feet of retail space and approximately 13,650 square feet of restaurant space. Option B proposes the development of 425 multi-family residential units, 90,000 square feet of office space, and 40,000 square feet of neighborhood-serving commercial uses, including approximately 20,000 square feet of retail space and approximately 20,000 square feet of restaurant space. Both development scenarios are evaluated in the following analysis.

Threshold (a): Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications

facilities, the construction or relocation of which could cause significant environmental effects?[23]

(1) Impact Analysis

(a) Construction

Construction activities for the Project would result in wastewater generation from construction workers on-site. Wastewater generation would occur incrementally throughout construction of the Project. However, wastewater generation during construction of the Project would be temporary and nominal and would be offset by the existing retail and restaurant uses to be removed. Furthermore, construction workers would typically utilize portable restrooms and hand wash areas provided by the construction contractor. Any sewage generated from these facilities would be collected and hauled off-site and would not contribute to wastewater flows to the City's wastewater system. Thus, wastewater generation from Project construction activities would not cause a measurable increase in wastewater flows that would result in the need for new or expanded wastewater treatment facilities.

The Project, under either Option A or Option B, would require construction of new on-site infrastructure to serve new buildings, and potential upgrades and/or relocations of existing wastewater infrastructure. Construction impacts associated with wastewater infrastructure would primarily be confined to trenching for miscellaneous utility lines and connections to the public infrastructure. Installation of wastewater infrastructure would be limited to the on-site wastewater distribution, and minor off-site work associated with connections to the public main. Although no upgrades to the public main are anticipated, minor off-site work would be required in order to connect the on-site distribution system to the public main. As the design and installation of new service connections would be required to meet applicable City standards, the Project contractors would coordinate with the City to identify the locations and depth of all lines prior to ground disturbance. Furthermore, the City would be notified in advance of proposed ground disturbance activities in order to avoid disruption of service.

The limited off-site connection activities could also temporarily affect access in adjacent rights-of-way. However, as set forth in Project Design Feature TR-PDF-1 included in Section IV.K, Transportation, of this Recirculated Draft EIR, a Construction

[23] *Refer to Section IV.M.1, Utilities and Service Systems–Water of this Recirculated Draft EIR for a discussion of water impacts; Section IV.G, Hydrology and Water Quality of this Recirculated Draft EIR for a discussion of stormwater impacts; Section IV.M.4, Utilities and Service Systems—Energy Infrastructure, of this Recirculated Draft EIR for a discussion of electric power and natural gas impacts; and Section VI, Other CEQA Considerations for a discussion of telecommunications facility impacts.*

Traffic Management Plan would be implemented during Project construction to ensure that adequate and safe pedestrian and vehicle access remains available within and near the Project Site during construction activities. The Construction Traffic Management Plan would identify the location of any temporary street parking or sidewalk closures, warning signs, and access to abutting properties. Appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would also be implemented, as necessary, to ensure emergency access to the Project Site and traffic flow is maintained on adjacent rights-of-way. Overall, when considering impacts resulting from the installation of any required wastewater infrastructure, impacts would be of a relatively short-term duration and would cease to occur once the installation is complete.

Based on the above, Project construction would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects. Therefore, impacts to the wastewater conveyance or treatment system associated with construction of the Project would be less than significant.

(b) Operation

As described in Section II, Project Description, of this Recirculated Draft EIR, the Project would replace three buildings within the existing Marina Marketplace shopping center that together comprise approximately 100,781 square feet of floor area and associated surface parking areas with a new mixed-use development. As described above, the Project proposes two development options referred to herein as Option A and Option B. Option A consists of 658 multi-family residential units and 27,300 square feet of neighborhood-serving commercial uses, including 13,650 square feet of retail space and 13,650 square feet of restaurant space. Option B would include 425 multi-family residential units, 90,000 square feet of office space, and 40,000 square feet of neighborhood-serving commercial uses, including 20,000 square feet of retail space and 20,000 square feet of restaurant space.

Wastewater generated by the Project would be conveyed via the existing wastewater conveyance systems for treatment at the HWRP. As described above, the HWRP has a capacity of 450 million gallons per day, and current average wastewater flows are at approximately 275 million gallons per day. Accordingly, the remaining available capacity at the Hyperion Treatment Plant is approximately 175 million gallons per day.

Wastewater generated by the Project was estimated using wastewater generation factors established by LASAN, for each of the proposed uses. As shown in Table IV.M.2-2 on page IV.M.2-13, it is estimated that Option A would generate a net increase in the average daily wastewater flow from the Project Site of approximately 93,759 gallons per

Table IV.M.2-2
Estimated Project Wastewater Generation—Option A

Land Use	No. of Units/ Floor Area	Generation Rate (gpd/unit)[a]	Total Wastewater Generation (gpd)
Residential Apartments—Studio	97 du	75/du	7,275
Residential Apartments—1 BR	386 du	110/du	42,460
Residential Apartments—2 BR	175 du	150/du	26,250
Residential Amenities			
Gym/Fitness Center	1,000 sf	0.65	650
Lobby	2,250 sf	0.05	113
Pool/Spa	2,000 sf		166[b]
Indoor Lounge/Clubhouse	3,150 sf	0.05	158
Outdoor Lounge	1,670 sf	0.05	84
Roof Deck	5,288 sf	0.05	264
Conference Rooms	2,400 sf	0.12	288
Theater Space	18 seats	3	54
Game/Rec Room	650 sf	0.05	33
Retail	13,650 sf	0.025/sf	341
Restaurant: Full Service	13,650 sf (683 seats)	30/seat	20,490
Total Wastewater Generation			**98,626**
Less Existing to be Removed			**(4,867)**
Net Wastewater Generation (Proposed – Existing)			**93,759**

du = dwelling units

sf = square feet

[a] *Based on sewage generation rates provided by LASAN (2012).*

[b] *Based on Water Supply Assessment—Paseo Marina Project prepared by LADWP. Refer to Appendix L of this Recirculated Draft EIR.*

Source: Fuscoe Engineering, Eyestone Environmental, 2023.

day, or approximately 0.09 million gallons per day. As shown in Table IV.M.2-3 on page IV.M.2-14, Option B would generate a net increase in wastewater flow from the Project Site of approximately 88,103 gallons per day, or 0.09 million gallons per day.

As part of the Infrastructure Assessment Report, LASAN was consulted to determine if the existing sewer system has adequate capacity to accommodate the estimated sewer flows of the Project (refer to Appendix D of the Infrastructure Assessment Report). As provided in the Infrastructure Assessment Report, LASAN approved the Project to discharge up to 99,759 gallons per day into the City's system by connecting to the existing

Table IV.M.2-3
Estimated Project Wastewater Generation—Option B

Land Use	No. of Units/ Floor Area	Generation Rate (gpd/unit)[a]	Total Wastewater Generation (gpd)
Residential Apartments-Studio	62 du	75/du	4,650
Residential Apartments-1 BR	231 du	110/du	25,410
Residential Apartments-2 BR	132 du	150/du	19,800
Residential Amenities	18,426 sf	—	1,810[b]
Office	90,000 sf	0.12/sf	10,800
Retail	20,000 sf	0.025/sf	500
Restaurant	20,000 sf (1,000 seats)	30/seat	30,000
Total Wastewater Generation			**92,970**
Less Existing to be Removed			**(4,867)**
Net Wastewater Generation (Proposed – Existing)			**88,103**

du = dwelling units

sf = square feet

[a] *Based on sewage generation rates provided by LASAN (2012).*

[b] *While Option B would include less residential amenities compared to Option A, it is conservatively assumed the estimated wastewater generation would remain the same as for Option A.*

Source: Fuscoe Engineering, Eyestone Environmental 2023.

sewer lines within the Project Site (northwestern side of the Project Site) and in Glencoe Avenue (refer to Appendix A of the Infrastructure Assessment Report for the sewer utility map). Therefore, the Project's proposed net wastewater flows of approximately 93,759 gallons per day under Option A or 88,103 gallons per day under Option B would be within the approved flow of 99,759 gallons per day.

Based on the above, operation of the Project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects. Therefore, impacts to the wastewater conveyance or treatment system associated with operation of the Project would be less than significant.

(2) Mitigation Measures

Project-level impacts related to the construction or expansion of wastewater facilities would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to the construction or expansion of wastewater facilities 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 result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

(1) Impact Analysis

As shown in Table IV.M.2-2 on page IV.M.2-13, the Project, under Option A, would generate a net increase in wastewater flow from the Project Site of approximately 93,759 gallons per day, or approximately 0.09 million gallons per day. This increase in average daily wastewater flow of 0.09 million gallons per day under Option A would represent approximately 0.05 percent of the current 175 million gallons per day remaining available capacity of the HWRP.[24]

As shown in Table IV.M.2-3 on page IV.M.2-14, Option B would generate a net increase in wastewater flow from the Project Site of approximately 88,103 gallons per day or 0.09 million gallons per day. The increase in average daily wastewater flow of 0.09 million gallons per day under Option B would represent approximately 0.05 percent of the current estimated 175 million gallons per day of remaining available capacity at the HWRP.[25] Therefore, the wastewater generated under either development option would be accommodated by the existing capacity of the HWRP.

Various factors, including future development of new treatment plants, upgrades and improvements to existing treatment capacity, development of new technologies, etc., will ultimately determine the available capacity of the Hyperion Service Area in 2027, the year by which construction of the Project is expected to be completed. While it is anticipated that future updates to the One Water LA 2040 Plan discussed above would provide for

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[24] *93,759 gallons per day ÷ 175,000,000 gallons per day x 100 = ~0.05%*

[25] *88,103 gallons per day ÷ 175,000,000 gallons per day x 100 = ~0.05%*

improvements beyond 2040 to serve future population needs, it is conservatively assumed that no new improvements to the wastewater treatment plants would occur prior to 2027 (the anticipated buildout year of the Project). Thus, based on this conservative assumption, the 2027 effective capacity of the Hyperion Sanitary Sewer System has been assumed to be 550 million gallons per day. Similarly, the capacity of the HWRP in 2027 would continue to be 450 million gallons per day.

Based on LASAN's average flow projections for the HWRP, it is anticipated that average flows in 2027, the Project build-out year, would be approximately 269.3 million gallons per day.[26] Accordingly, the future remaining available capacity in 2027 would be approximately 180.7 million gallons per day (450 million gallons per day – 269.3 million gallons per day). The net increase in average daily wastewater flow of 0.09 million gallons per day under Option A would represent approximately 0.05 percent of the estimated future remaining available capacity of 180.7 million gallons per day at the HWRP.[27] The net increase in average daily wastewater flow of 0.09 million gallons per day under Option B would similarly represent approximately 0.05 percent of the estimated future remaining available capacity of 180.7 million gallons per day at the HWRP.[28] Therefore, wastewater generated under both development options during operation would be accommodated by the future capacity of the HWRP.

Additionally, when accounting for current average flows of approximately 275 million gallons per day within the HWRP and the net increase in average daily wastewater flows of 0.09 million gallons per day under Option A, only 61.1 percent of the HWRP's capacity of 450 million gallons per day would be utilized.[29] Similarly, the net increase in average daily wastewater flows of 0.09 million gallons per day under Option B plus the current average flows of approximately 275 million gallons per day within the HWRP would represent approximately 61.1 percent of the HWRP's capacity of 450 million gallons per day.[30]

With regard to future flows, the net increase of 0.09 million gallons per day under Option A plus the projected flows of approximately 269.3 million gallons per day to the HWRP would represent approximately 59.9 percent of the HWRP's assumed future

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[26] *Los Angeles Department of Water and Power, One Water LA 2040 Plan-Volume 2, Table ES.1, Projected Wastewater Flows. Based on a straight-line interpolation of the projected flows for the Hyperion Water Reclamation Plant for 2020 (approximately 256 million gallons per day) and 2030 (approximately 275 million gallons per day). The 2027 value is extrapolated from 2020 and 2030 values: [(275 million gallons per day – 256 million gallons per day) ÷ 10) * 7] + 256 = 269.3 million gallons per day.*

[27] *(93,759 gallons per day ÷ 180.7 million gallons per day) x 100 = 0.05%*

[28] *(83,393 gallons per day ÷ 180.7 million gallons per day) x 100 = 0.05%*

[29] *[(0.09 mgd + 275 mgd) ÷ 450 mgd] x 100 = ~61.1%*

[30] *[(0.09 mgd + 275 mgd) ÷ 450 mgd] x 100 = ~61.1%*

capacity of 450 million gallons per day.[31] Similarly, the net increase of 0.09 million gallons per day under Option B plus the projected flows of approximately 269.3 million gallons per day to the HWRP would represent approximately 59.9 percent of the HWRP's assumed future capacity of 450 million gallons per day.[32]

Based on the above, the Project's additional wastewater flows would not substantially or incrementally exceed the existing or future scheduled capacity of the HWRP, and there is adequate treatment capacity to serve the Project's projected demand in addition to existing LASAN commitments. **As such, the Project would not result in a determination by the wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments, and impacts would be less than significant.**

(2) Mitigation Measures

Project-level impacts related to wastewater treatment facilities would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to wastewater treatment facilities 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.

e. Cumulative Impacts

(1) Impact Analysis

The geographic context for the cumulative impact analysis on the wastewater conveyance system is the area that includes the Project Site and the related projects that would potentially utilize the same infrastructure as the Project. The geographic context for the cumulative impact analysis on wastewater treatment facilities is the Hyperion Service Area. As discussed above, the Hyperion Service Area is served by the Hyperion Sanitary Sewer System, which consists of the HWRP, the Donald C. Tillman Water Reclamation Plant, and the Los Angeles–Glendale Water Reclamation Plant. The Project, in conjunction with growth forecasted in the Hyperion Service Area through 2027 (i.e., the Project buildout year), would generate wastewater, potentially resulting in cumulative

[31] *[(0.09 mgd + 269.3 mgd) ÷ 450 mgd] x 100 = ~59.9%*

[32] *[(0.09 mgd + 269.3 mgd) ÷ 450 mgd] x 100 = ~59.9%*

impacts on wastewater conveyance and treatment facilities. Cumulative growth in the greater Project area through 2027 includes specific known development projects, as well as general ambient growth projected to occur.

As discussed in Section III, Environmental Setting, of this Recirculated Draft EIR, the projected growth reflected by Related Project Nos. 1 through 14 is a conservative assumption, as some of the related projects may not be built out by 2027 (i.e., the Project buildout year), may never be built, or may be approved and built at reduced densities. To provide a conservative forecast, the future baseline forecast assumes that Related Project Nos. 1 through 14 are fully built out by 2027.

(a) Wastewater Infrastructure

As with the Project, new development projects occurring in the vicinity of the Project Site would be required to coordinate with LASAN via a sewer capacity availability request to determine adequate sewer capacity. In addition, new development projects would also be subject to LAMC Sections 64.11 and 64.12, which require approval of a sewer permit prior to connection to the sewer system. In order to connect to the sewer system, related projects in the City of Los Angeles would also be subject to payment of the City's Sewerage Facilities Charge. Payment of such fees would help to offset the costs associated with infrastructure improvements that would be needed to accommodate wastewater generated by overall future growth. If system upgrades are required as a result of a given project's additional flow, arrangements would be made between the related project and LASAN to construct the necessary improvements. Furthermore, like the Project, each related project would be required to comply with applicable water conservation programs, including the City of Los Angeles Green Building Code. In addition, as with the Project, related projects would be required to implement construction management plans to ensure that adequate and safe access remains available during construction activities. Such construction management plans would also ensure that appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would be implemented, as necessary, to ensure emergency access and traffic flow is maintained on adjacent right-of-ways. **Therefore, the Project and related projects would not result in significant cumulative impacts related to the construction or expansion of wastewater infrastructure. The Project's contribution would not be cumulatively considerable, and cumulative impacts would be less than significant.**

(b) Wastewater Treatment

Development of the Project, in conjunction with the related projects, would result in an increase in the demand for sanitary sewer service in the Hyperion Service Area, which is served by the Sanitary Sewer System. As identified in Section III, Environmental Setting, of this Recirculated Draft EIR, there are 14 related projects located in the Project Site vicinity. Assuming that each of these related projects would connect to some or all of the

City sewers serving the Project Site, forecasted growth from the related projects would generate an average daily wastewater flow of approximately 184,649 gallons per day or approximately 0.18 million gallons per day, as shown in Table IV.M.2-4 on page IV.M.2-20.

Combined with the net increase in wastewater flow of 93,759 gallons per day (0.09 million gallons per day) under Option A, the Project and related projects would result in a cumulative increase in the average daily wastewater flow of approximately 278,408 gallons per day, or 0.28 million gallons per day. Under Option B, the Project's net increase in wastewater flow of 88,103 gallons per day (0.09 million gallons per day) equates to a cumulative increase in average daily wastewater flow of approximately 272,752 gallons per day, or 0.27 million gallons per day.

Based on LASAN's average flow projections for the Hyperion Sanitary Sewer System, it is anticipated that the average flow in 2027, the Project's buildout year, would be 340.5 million gallons per day.[33] In addition, the Hyperion Sanitary Sewer System's total treatment capacity is conservatively estimated to be approximately 550 million gallons per day in 2027, which is the same as its existing capacity.

The Project wastewater flow of approximately 0.09 million gallons per day under Option A combined with the wastewater flow from related projects of approximately 0.18 million gallons per day and the forecasted 2027 wastewater flow of 340.5 million gallons per day for the Hyperion Sanitary Sewer System would result in a total cumulative wastewater flow of approximately 340.77 million gallons per day. Similarly, the wastewater flow of approximately 0.09 million gallons per day under Option B combined with the wastewater flow from related projects of approximately 0.18 million gallons per day and the forecasted 2027 wastewater flow of 340.5 million gallons per day for the Hyperion Sanitary Sewer System would result in a total wastewater flow of approximately 340.77 million gallons per day. Based on the Hyperion Sanitary Sewer System's estimate future capacity of approximately 550 million gallons per day, the Hyperion Sanitary Sewer System is expected to have adequate capacity to accommodate the cumulative wastewater flow of the Project and related projects. Specifically, the cumulative estimated wastewater flow of 0.18 million gallons per day plus the Project wastewater flow (Option A or Option B) would represent approximately 0.05 percent of the Sanitary Sewer System's existing and future

[33] *Los Angeles Department of Water and Power, One Water LA 2040 Plan, Volume 2, Table ES.1, Projected Wastewater Flows. Based on a straight-line interpolation of the projected flows for the Hyperion Service Area for 2020 (approximately 323 million gallons per day) and 2030 (approximately 348 million gallons per day). The 2027 value is extrapolated from 2020 and 2030 values: [(348 million gallons per day – 323 million gallons per day) ÷ 10) * 7] + 323 = 340.5 million gallons per day.*

Table IV.M.2-4
Cumulative Wastewater Generation

No.	Project	Land Use	Size	Generation Factor[a,b]	Total Wastewater Generation (gpd)
City of Los Angeles					
1	X67 Lofts 4140 S. Glencoe Ave.	Apartments	67 du	190 gpd/du	12,730
		Office	3,211 gsf	0.12 gpd/sf	385
2	C1 by CLG 4210 S. Del Rey Ave.	Condominiums	136 du	190 gpd/du	25,840
		Office	14,929 gsf	0.12 gpd/sf	1,791
3	R3 by CLG 4091 S. Redwood Avenue	Condominiums	67 du	190 gpd/du	12,730
		Office	7,525 gsf	0.12 gpd/sf	903
4	G8 by CLG 4040 S. Del Rey Ave.	Apartments	230 du	190 gpd/du	43,700
		Office	18,800 gsf	0.12 gpd/sf	2,256
5	Inclave Mixed-Use Project 4065–71 Glencoe Ave.	Creative Office	35,206 gsf	0.12 gpd/sf	4,225
		Specialty Retail	1,500 gsf	0.025 gpd/sf	38
		Apartments	49 du	190 gpd/du	9,310
6	Warehouse to Office 4721 S. Alla Rd.	Office	118,352 gsf	0.12 gpd/sf	14,202
7	Stella Phase 2 13488 W. Maxella Ave.	Apartments	65 du	190 gpd/du	12,350
8	Thatcher Yard 3233 S. Thatcher Avenue	Affordable Senior Housing	68 du	190 gpd/du	12,920
		Affordable Family Housing	30 du	190 gpd/du	5,700
9	Cedars-Sinai Marina del Rey Replacement Hospital 4650 Lincoln Boulevard	Hospital	160 Beds	70 gpd/bed	11,200
Culver City					
10	Costco Expansion 13463 Washington Blvd.	Discount Club	31,023 gsf	0.025 gpd/sf	776
		Fueling Station	2 pumps		N/A
11	Baldwin Site 12803 Washington Blvd.	Apartments	37 du	190 gpd/sf	7,030
		Retail	7,206 gsf	0.025 gpd/sf	180

Table IV.M.2-4 (Continued)
Cumulative Wastewater Generation

No.	Project	Land Use	Size	Generation Factor[a,b]	Total Wastewater Generation (gpd)
12	Kayvon Mixed-Use 12712–12718 Washington Blvd.	Residential	5 du	0.025 gpd/du	950
		Retail	3,414 gsf	0.0025 gpd/sf	85
13	Townhome Development 4118 Wade St.	Townhome	4 du	190 gpd/du	760
L.A. County					
14	Pier 44 4637 Admiralty Way	Commercial	91,760 gsf	0.05 gpd/sf	4,588
		Marina	141 berths		N/A
Related Projects Wastewater Generation					**184,649**

du = dwelling units

sf = square feet

[a] *Cumulative wastewater generation was calculated using LASAN's sewage generation factors. Uses not listed are estimated by the closest type of use available.*

[b] *Conservatively assumes rate for 3-bedroom units for all dwelling units. In addition, number of seats for restaurant uses based on LADWP standard of 1 seat per 30 square feet.*

Source: Eyestone Environmental, 2023.

design capacity of 550 million gallons per day.[34] **Therefore, the Project and related projects would not result in significant cumulative impacts related to wastewater treatment. The Project's contribution would not be cumulatively considerable, and cumulative impacts would be less than significant.**

(2) Mitigation Measures

Cumulative impacts with regard to wastewater generation, treatment, and infrastructure would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to wastewater generation, treatment, and infrastructure 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.

[34] *[(0.18 million gallons per day + 0.09 million gallons per day) ÷ 550 million gallons per day] x 100 = 0.05%.*