IV. Environmental Impact Analysis

O.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 utilizes the Harvard-Westlake River Park Project (4141 Whitsett Avenue, Studio City, CA 91604) Utility Infrastructure Technical Report: Water, Wastewater, and Energy (Utility Report) prepared for the Project and is included in Appendix O of this Draft EIR.[1]

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
- L.A.'s Green New Deal - Sustainable City pLAn 2019
- Los Angeles Municipal Codes
  - Los Angeles Green Building Code (Ordinance No. 181,480),
  - Sewer Capacity Availability Review (SCAR; LAMC Section 64.15)
  - Sewerage Facilities Charge (LAMC Sections 64.11.2 and 64.16.1)
  - Bureau of Engineering Special Order No. SO 06-0691

[1] KPFF Consulting Engineers, Harvard-Westlake River Park Project (4141 Whitsett Avenue, Studio City, CA 91604) Utility Infrastructure Technical Report: Water, Wastewater, and Energy, February 2022. Provided in Appendix O of this Draft EIR.

(1) State

(a) California Green Building Standards 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.[2] 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.[3]

(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 reached.[4] 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

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2 City of Los Angeles Department of City Planning, Citywide General Plan Framework, An Element of the Los Angeles General Plan, 1995.

3 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 readopted on August 8, 2001.

4 City of Los Angeles Department of Public Works Bureau of Sanitation and Department of Water and Power, Water Integrated Resources Plan 5-Year Review FINAL Documents, June 2012.

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.[5]

(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.[6] 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.[7] 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.

(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.

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

6 City of Los Angeles, One Water LA 2040 Plan, Volume 1, Summary Report, April 2018.

7 City of Los Angeles, Office of the Mayor, Executive Directive No. 5, Emergency Drought Response - Creating a Water Wise City, October 14, 2014.

LAMC Chapter IX, Article 9, the Los Angeles Green Building Code (Los Angeles Green Building Code, Ordinance No. 181,480),[8] was adopted in April 2008 and provides standards and a mechanism for evaluating projects for their water conservation features during site plan review. The Los Angeles Green Building Code has been subsequently amended to incorporate various provisions of the CALGreen Code. The Los Angeles Green Building Code includes mandatory requirements and elective measures pertaining to wastewater for three categories of buildings, the second of which applies to this Project: (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) 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 proposes a future sewer connection or future development that is anticipated to generate 10,000 gallons or more of sewage per day.

(iii) 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.

(iv) 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

8 City of Los Angeles, Ordinance No. 181480.

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 Treatment

LASAN is responsible for the operation 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 three service systems: the Hyperion System, the Terminal Island System, and the Los Angeles Regional System (Harbor Gateway). The Hyperion System is serviced by the Hyperion Sanitary Sewer System, which consists of the Hyperion Water Reclamation Plant (HWRP), the Donald C. Tillman Water Reclamation Plant (TWRP), and the Los Angeles–Glendale Water Reclamation Plant (LAGWRP). The Terminal Island System is served by the Terminal Island Treatment Plant (TTP). The Los Angeles Regional System is served by the County Sanitation District's Joint Water Pollution Control Plant. The Project Site is located within the Hyperion Sanitary Service Area, and its wastewater would be conveyed to and treated at the HWRP, which is described in further detail below.[10]

(a) Hyperion Sanitary Sewer System

The existing design capacity of the Hyperion Sanitary Sewer System is approximately 550 mgd (consisting of 450 mgd at the HWRP, 80 mgd at the TWRP, and 20 mgd at the LAGWRP). Based on the One Water LA 2040 Plan—Wastewater Facilities Plan, the average wastewater flow rate in the Hyperion Sanitary Sewer System was 314 mgd in 2016 (consisting of 250 mgd at the HWRP, 47 mgd at the TWRP, and 17 mgd at the LAGWRP).[11] The One Water LA 2040 Plan–Wastewater Facilities Plan projects that annual average wastewater flows in the Hyperion Sanitary Sewer System would increase to 323 mgd in 2020, 348 mgd in 2030, and 358 in 2040. As such, current and projected flows are below the design capacity of approximately 550 mgd for the Hyperion Sanitary Sewer System.

(b) Hyperion Water Reclamation Plant

Wastewater generated from the Project Site is conveyed via the local collector sanitary sewer system directly to the HWRP for treatment. The HWRP is the City's primary water reclamation plant and one of the oldest and largest wastewater treatment facilities in the world. The HWRP provides preliminary, primary, and secondary treatment processes,

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.

10 KPFF Consulting Engineers, Harvard-Westlake River Park Project (4141 Whitsett Avenue, Studio City, CA 91604) Utility Infrastructure Technical Report: Water, Wastewater, and Energy, February 2022, page 4. Provided in Appendix O of this Draft EIR.

11 LASAN, One Water LA 2040 Plan—Volume 2: Wastewater Facilities Plan, April 2018.

and also treats wastewater flows bypassed from the TWRP and LADWRP. Typically, the TWRP and LAGWRP treat wastewater up to or near their capacities on most days.

On average, 275 million gallons of wastewater enters the HWRP on a typical dry weather day. Because the amount of wastewater entering the HWRP can double on rainy days, the plant was designed to accommodate both dry and wet weather days with a maximum daily dry weather flow of 450 mgd and peak wet weather flow of 800 mgd.[12] As such, the HWRP's current remaining treatment capacity for dry weather flows is approximately 175 mgd on an average day.

Following the secondary treatment of wastewater, the majority of effluent from HWRP is discharged into Santa Monica Bay, while the remaining flows are conveyed to the West Basin Water Reclamation Plant for tertiary treatment and reuse as reclaimed water. The HWRP has two outfalls that presently discharge into the Santa Monica Bay, a one-mile outfall pipeline and five-mile outfall pipeline. Both outfalls are 12 feet in diameter. The one-mile outfall pipeline is 50 feet deep and is only used on an emergency basis. The five-mile outfall pipeline is 187 feet deep and is used to discharge secondary treated effluent on a daily basis.[13]

HWRP effluent is required to meet the Los Angeles Regional Water Quality Control Board's (LARWQCB) requirements for a recreational beneficial use, which imposes performance standards on water quality that are equal to or more stringent than the standards required under the Clean Water Act permit administered under the system's National Pollution Discharge Elimination System (NPDES) permit. Accordingly, HWRP effluent to Santa Monica Bay is continually monitored by the City of Los Angeles Environmental Monitoring Division (EMD) to ensure that it meets or exceeds prescribed standards. The Los Angeles County Department of Health Services also monitors flows into the Santa Monica Bay.

(2) Project Site

(a) Wastewater Generation

The Project Site is currently developed with Weddington Golf & Tennis, which includes a nine-hole golf course, a putting green, tennis courts, a driving range, a 2,700-square-foot clubhouse with a 10-seat café, a 799-square-foot tennis shack, and associated surface parking area. The existing uses on the Project Site are estimated to generate 1,651

[12] LA Sanitation & Environment, Hyperion Water Reclamation Plant, https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=1186mdvh8u_393&_afrLoop=10107387348315793#!, accessed February 2022.

[13] LASAN, Hyperion Treatment Plant 5-Mile Outfall Inspection and Diversion to 1-Mile Outfall Fact Sheet, November 2006.

gallons per day (gpd) of wastewater as shown in **Table IV.O.2-1**, *Existing Daily Project Site Wastewater Generation*.[14]

TABLE IV.O.2-1
EXISTING DAILY PROJECT SITE WASTEWATER GENERATION

Land Use	Sewage Generation (GPD/1,000 GSF)[a]	Quantity (SF)	Total Wastewater Generation (gpd)
Field Buildings[b]	30	3,900	117
Parking Lot[c]	20	60,500	1,210
Clubhouse/Cafe (to remain)[d]	120	2,700	324
Total Estimated Existing Project Site Wastewater Generation			**1,651**

NOTES: sf = square feet, gpd = gallons per day, gsf = gross square feet

[a] The generation rates are based on the LASAN sewerage generation factors.

[b] Field Buildings – Storage: Building/Warehouse 30/1,000 GSF

[c] Parking Lot (surface parking) – Auto Parking (a) 20/1,000 GSF

[d] Clubhouse to remain (Visitor Center) – Office Building 120/1,000 GSF

SOURCE: KPFF Consulting Engineers, Harvard-Westlake River Park Project (4141 Whitsett Avenue, Studio City, CA 91604) Utility Infrastructure Technical Report: Water, Wastewater, and Energy, February 2022, page 6. Provided in Appendix O of this Draft EIR.

(b) Wastewater Collection

According to the Wastewater Service Information (WWSI) letter prepared by LASAN's Wastewater Engineering Division (WESD), the Project Site is served directly by two existing sewer lines.[15] First, there is an existing 8-inch line on Bellaire Avenue between Valleyheart Drive and Valley Spring Lane that flows northward to Woodbridge Street. This sewer line has a 50-percent design capacity of 229,000 gpd. Second, there is an existing 8-inch line on Whitsett Avenue, which also has a 50-percent design capacity of 229,000 gpd and flows southward. Wastewater flows from the Whitsett line flow into a 15-inch line on Valleyheart Drive (the Valleyheart line begins at the intersection of Valleyheart Drive and Whitsett Avenue and flows easterly to Laurel Canyon Boulevard and then to Woodbridge Street), which has a 50-percent design capacity of 348,000 gpd, before discharging into a 48-inch line on Woodbridge Street. The current flow levels (d/D) in the two 8-inch lines (on Bellaire Avenue and Whitsett Avenue) and the 15-inch line (on Valleyheart Drive) cannot be determined at this time without additional gauging. Future detailed gauging and evaluation will be needed as part of the standard permit process to identify a specific sewer connection point and confirm the sewer capacity near the time of Project development. The localized lines (in Bellaire Avenue and

[14] KPFF Consulting Engineers, Harvard-Westlake River Park Project (4141 Whitsett Avenue, Studio City, CA 91604) Utility Infrastructure Technical Report: Water, Wastewater, and Energy, February 2022, page 6. Provided in Appendix O of this Draft EIR.

[15] The WWSI is included as an attachment to Utility Report, which is included in Appendix O to this Draft EIR.

Whitsett Avenue) all eventually feed into the 48-inch line in Woodbridge Street, which has over 700,000 gallons of capacity remaining to reach the 50-percent design capacity.

3. Project Impacts

a) Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, a 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 could cause significant environmental effects;[16] ***or***

Threshold (b): Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

For this analysis, the Appendix G Thresholds 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 answering the Appendix G Threshold Questions. The factors to evaluate wastewater impacts include:

- 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.

b) Methodology

All wastewater generation calculations were provided in the Utility Report and are based on the LASAN sewage generation factors. Wastewater generation and sewer availability data included in the Utility Report was provided in a WWSI letter prepared by LASAN's WESD. The WWSI is included as an attachment to Utility Report, which is included in

[16] Refer to Section IV.O.1, Utilities and Service Systems—Water Supply, of this Draft EIR for a discussion of water impacts; Section IV.I, Hydrology and Water Quality, of this Draft EIR for a discussion of stormwater impacts; Section IV.E, Energy, of this 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.

Appendix O to this Draft EIR. In the WWSI, LASAN made a preliminary analysis of the local sewer conditions to determine if available wastewater conveyance capacity exists for future development of the Project Site. LASAN's approach consisted of the study of a highly conservative worst-case scenario for a single day, taking into account the possible need for a full flush of a 52-meter pool concurrent with peak wastewater generation from every other source on the Project Site. However, maintenance of the pool requiring a full flush is a very rare occurrence and may happen only a few times per year, if at all, and, further, is highly unlikely to occur simultaneously with usage of every other wastewater source.

In order to evaluate treatment capacity, the Project's estimated wastewater generation and projected average dry weather flow were compared with the available capacity of the local sewer conveyance infrastructure and the treatment capacity within the HWRP. Cumulative wastewater generation was compared with the available capacity of the local sewer conveyance infrastructure and the capacity of the HWRP using the average dry weather flow for 2015 and 2020, the latest projections available. While it is anticipated that future iterations of the IRP would provide for improvements to serve future population needs, it was conservatively assumed that no new improvements to the wastewater treatment plants would occur prior to the Project's buildout year of 2025. Based on this conservative assumption, wastewater generation would be compared with the projected available treatment capacity of the HWRP of 450 mgd for 2025, the Project's buildout year.

c) Project Design Features

No specific Project Design Features are proposed with regard to wastewater.

d) Analysis of Project Impacts

Threshold (a): Would the Project require or result in the relocation or construction of new or expanded water or wastewater treatment or storm water, drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? [17]

(1) Impact Analysis

(a) Construction

With respect to wastewater generation during construction, temporary facilities, such as portable toilet and hand wash areas, would be provided by the construction contractor. Any sewage generated from these facilities would be collected and hauled off-site and

[17] Refer to Section IV.O.1, Utilities and Service Systems—Water Supply, of this Draft EIR for a discussion of water impacts; Section IV.I, Hydrology and Water Quality, of this Draft EIR for a discussion of stormwater impacts; Section IV.E, Energy, of this 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.

would not be discharged into the public sewer system. Therefore, construction activities for the Project would not result in wastewater generation as construction workers would typically utilize portable restrooms and hand wash areas, which would not contribute to wastewater flows to the City's wastewater system. Thus, wastewater generation from Project construction activities is not anticipated to cause a measurable increase in wastewater flows and would not result in the need for new or expanded wastewater treatment facilities.

In addition, construction of the Project would include all necessary on- and off-site sewer pipe improvements and connections to adequately connect to the City's existing sewer system. As discussed under Threshold (b) below, although not anticipated, if existing sewer lines are found to be substandard or in deteriorated condition, the Project Applicant would be required to make necessary improvements to achieve adequate service under City's Building and Safety Code and the Los Angeles Department of Public Works (LADPW) requirements. Construction relative to the wastewater system for the Project would occur at the Project Site and immediate vicinity. Such construction activities, if required, would be minimal and confined to trenching to place the connections or upgrade lines below the ground's surface and would be temporary in nature. The design of these connections would be developed by a registered engineer and approved by the City's Bureau of Engineering (BOE). All necessary improvements would be verified through the permit approval process of obtaining a sewer connection permit from the City. Further, all construction activities that would happen in coordination with the appropriate agencies, including the LASAN and BOE. These agencies would provide input on the Project and would coordinate with the Project Applicant before, during, and after construction activities. Finally, as discussed in Section IV.M, *Transportation,* of this Draft EIR, in accordance with Project Design Feature TRAF-PDF-1, the Project would implement a Construction Management Plan to reduce temporary pedestrian and traffic impacts during construction, including maintaining lanes of travel and ensuring safe pedestrian access and adequate emergency vehicle access wherever construction of wastewater lines would impede such access.

Based on the above, 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, and impacts would be less than significant.

(b) Operation

Table IV.O.2-2, *Maximum Daily Estimated Wastewater Generation During Project Operation (Prior to Mitigation)*, shows that the Project would generate a net increase of 525,923 gpd, or approximately 0.526 mgd on a worst-case analyzed day. As indicated above, LASAN's approach consisted of the study of a highly conservative worst-case scenario for a single day, taking into account the possible need for a full flush of a 52-meter pool concurrent with peak wastewater generation from every other source on the Project Site. However, maintenance of the pool requiring a full flush is a very rare occurrence and may happen only a few times per year, if at all. As shown in Table IV.O.2-2, the total amount

of wastewater generation for swimming pools is 500,000 gpd. Daily wastewater generation from the swimming pool process flow would typically be less than approximately 500 gallons per day. Therefore, typical daily wastewater flows for the Project Site would be 28,074 gpd (an increase of 26,423 gpd from existing uses that total 1,651 gpd) with 500 gpd of swimming pool process flow included rather than 500,000 gallons.

TABLE IV.O.2-2
MAXIMUM DAILY ESTIMATED WASTEWATER GENERATION DURING PROJECT OPERATION (PRIOR TO MITIGATION)

Land Use	Units	Generation Rate (gpd/1,000 sf)[a]	Total Wastewater Generation (gpd)
Gymnasium	80,249 sf	200	16,050
Parking Structure	223,580 sf	20	4,471
Locker Rooms	9,323 sf	650	6,060
Restrooms	2,382 sf	250	596
Storage & Sheds	2,420 sf	30	73
Swimming Pools	52 meter pool	-	500,000[b]
Clubhouse (to remain)	2,700 sf	120	324
Total Estimated Proposed Wastewater Generation (Worst-Case Day - Prior to Mitigation)			*527,574[c]*
		Existing Total Wastewater Generation	1,651
Net Increase in Wastewater Generation Worst-Case Day (Proposed - Existing) – Prior to Mitigation			**525,923**

NOTES: sf = square feet, gpd = gallons per day

[a] The generation rates are based on the LASAN sewerage generation factors.

[b] Wastewater generation for the proposed swimming pool accounts for a "full flush" of the 52-meter pool.

[c] Totals may not add up due to rounding.

SOURCE: KPFF Consulting Engineers, 2022.

According to the WWSI prepared for the Project, the following two conditions are recommended for the Project to accommodate conditions during a full flushing of the Project's swimming pool:

1. Developer shall discharge the swimming pool volume during a 72-hour period at a rate not greater than 166,000 GPD per day.
2. Developer shall split the resulting flow (from a full discharge of the swimming pool) (50 percent of the resulting volume) into the 8-inch lines on Bellaire Avenue and Whitsett Avenue.[18]

[18] The condition included in the WWSI has been revised herein to clarify this condition applies to the scenario when a full discharge of the swimming pool would occur.

As discussed above, the sewer infrastructure directly serving the Project Site includes two existing sewer lines, which include 8-inch lines on Bellaire Avenue and another on Whitsett Avenue. Wastewater that flows into the 8-inch line on Whitsett Avenue feeds into a 15-inch line on Valleyheart Drive. All of these lines eventually feed into a 48-inch line on Woodbridge Street, which has over 700,000 gallons of capacity remaining to reach the 50-percent design capacity. Future detailed gauging and evaluation will be needed as part of the standard permit process to identify a specific sewer connection point and confirm the sewer capacity near the time of Project development. Although not anticipated, if the public sewer lacks sufficient capacity, then the Project would be required to upgrade sewer lines to a point in the sewer system with sufficient capacity. A final approval of the sewer capacity and connection permit would be made at the time of permitting. In addition, Project-related sanitary sewer connections and on-site infrastructure would be designed and constructed in accordance with applicable LASAN and California Plumbing Code standards. Furthermore, in accordance with LAMC Sections 64.11 and 64.16.1, the Project would pay the required sewer connection fees to help offset the Project's contribution to the City's wastewater collection infrastructure needs.

Nonetheless, in recognition of the City's standard permit process described above, the Project's worst-case daily wastewater generation scenario of 527,574 gpd could result in potentially significant impacts to the capacity of the local sewer system based on the WWSI.

Construction of any on- or off-site wastewater infrastructure connections or upgrades would occur as discussed under the Construction impact analysis, above.

Ultimately, this sewage flow would be conveyed to the HWRP, which has sufficient capacity for the Project. As discussed in further detail under Threshold (b), below, the Project's conservative worst-case daily increase in wastewater generation of 0.526 mgd (prior to mitigation) would represent 0.30 percent of the current estimated 175 mgd of remaining available capacity at the HWRP. In addition, with regard to future flows, the Project's net increase of 0.526 mgd plus the projected 2025 flows of approximately 265.5 mgd to the HWRP would represent 59.1 percent of the HWRP's assumed future capacity of 450 mgd. The calculations provided under Threshold (b) demonstrate that HWRP would have available capacity to treat the Project's wastewater generation.

Based on the above, the Project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities associated with the HWRP. However, the local sewer system may not have adequate capacity to serve the Project's projected maximum daily demand in addition to existing commitments. Therefore, impacts regarding wastewater infrastructure would be potentially significant.

(2) Mitigation Measures

Impacts regarding capacity for wastewater treatment at the HWRP were determined to be less than significant without mitigation. However, the following mitigation measures address impacts related to capacity of the local sewer system during Project operation:

> **WW-MM-1:** The swimming pool volume shall be discharged at a rate of no more than 166,000 gallons per day.
>
> **WW-MM-2:** The Project shall split the wastewater flow from the discharge of the swimming pool (50 percent of the resulting volume) into the 8-inch lines on Bellaire Avenue and Whitsett Avenue, unless an alternative split is otherwise approved by LASAN based on future detailed gauging and evaluation as part of the final approval process for the sewer capacity and connection permit.

(3) Level of Significance After Mitigation

Impacts regarding capacity of the Hyperion Sanitary Sewer System and the HWRP for wastewater treatment were determined to be less than significant without mitigation during construction and operation of the Project. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Impacts to the wastewater infrastructure system during Project construction would be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

During Project operation, Mitigation Measures WW-MM-1 and WW-MM-2, which are provided as conditions in the WWSI, would establish maximum daily wastewater discharge volumes into the local sewer system to ensure adequate capacity of the local sewer system is maintained. By limiting the daily discharge of the swimming pool to 166,000 gallons per the first condition (and required as Mitigation Measure WW-MM-1), the Project's worst-case daily wastewater generation would be reduced from 527,574 gallons to 193,574 gallons. Thus, the daily net increase (proposed less existing) in wastewater generation would be reduced from 525,923 gallons to 191,923 gallons with the condition (incorporated into Mitigation Measure WW-MM-1) in place. Because the net increase of 191,923 gallons would be far less than the available 700,000 gallons of capacity in the Woodbridge Street sewer line, any potential upgrades would be limited to the localized lines in Bellaire Avenue, Whitsett Avenue, and/or Valleyheart Drive. With implementation of the two conditions above (incorporated into Mitigation Measures WW-MM-1 and MM-WW-2) and in consideration of the Project's typical daily wastewater generation of 28,074 gpd, the localized lines would accommodate the typical wastewater flow for the Project.

With implementation of Mitigation Measures WW-MM-1 and WW-MM-2, potentially significant impacts related to wastewater infrastructure capacity of the local sewer system during operation would be reduced to a less-than-significant level.

Threshold (b): Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

(1) Impact Analysis

(a) Construction

As discussed under Threshold (a), with respect to wastewater generation during construction, temporary facilities, such as portable toilet and hand wash areas, would be provided by the construction contractor. Any sewage generated from these facilities would be collected and hauled off-site and would not be discharged into the public sewer system. Therefore, construction activities for the Project would not result in wastewater generation as construction workers would typically utilize portable restrooms and hand wash areas, which would not contribute to wastewater flows to the City's wastewater system. Thus, wastewater generation from Project construction activities is not anticipated to cause a measurable change to the available wastewater capacity of the Hyperion Sanitary Sewer System or the HWRP, which serve the Project Site. As discussed above, the HWRP's current remaining treatment capacity for dry weather flows is approximately 175 mgd on an average day. **Accordingly, there would be adequate treatment capacity in the Hyperion Sanitary Sewer System and HWRP during Project construction to serve the Project's projected demand in addition to existing commitments, and impacts would be less than significant.**

(b) Operation

As provided in Table IV.O.2-1, which assumes the worst case daily condition and includes a full flush of the pool, the Project would generate a net increase in wastewater flow from the Project Site of 525,923 gpd or 0.526 mgd. As discussed under Threshold (a), by limiting the daily discharge of the swimming pool to 166,000 gallons per LASAN's recommended condition in the WWSI (and required as Mitigation Measure WW-MM-1), the Project's worst-case daily net increase (proposed – existing) in wastewater generation would be reduced from 525,923 gallons to 191,923 gallons (or 0.192 mgd) with the condition (or Mitigation Measure WW-MM-1) in place. However, to provide a conservative analysis, the Project's net wastewater generation increase of 0.526 mgd (prior to mitigation) is evaluated below.

The Project's increase in average daily wastewater flow of 0.526 mgd would represent 0.30 percent of the current estimated 175 mgd of remaining available capacity at the HWRP. Therefore, the wastewater generated by the Project would be accommodated by the existing capacity of the Hyperion Treatment Plant.

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 2025, the year

by which construction of the Project is expected to be completed. Future updates to the One Water LA 2040 Plan discussed above would provide for 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 2025. Thus, based on this conservative assumption, the 2025 effective capacity of the Hyperion Sanitary Sewer System would continue to be approximately 550 mgd. Similarly, the capacity of the HWRP in 2025 would continue to be 450 mgd.

Based on LASAN's average flow projections for the HWRP, it is anticipated that average flows in 2025, the Project build-out year, would be approximately 265.5 mgd.[19] Accordingly, the future remaining available capacity in 2025 would be approximately 184.5 mgd. The Project's increase in average daily wastewater flow of 0.526 mgd would represent 0.28 percent of the estimated future 2025 remaining available capacity of 184.5 mgd at the HWRP. Therefore, wastewater generated by the Project, during operation, would be accommodated by the future 2025 capacity of the HWRP.

Additionally, the Project's net increase in average daily wastewater generation of 0.526 mgd plus the current average flows of approximately 275 mgd to the HWRP would represent 61.2 percent of the HWRP's capacity of 450 mgd. With regard to future flows, the Project's net increase of 0.526 mgd plus the projected 2025 flows of approximately 265.5 mgd to the HWRP would also represent 59.1 percent of the HWRP's assumed future capacity of 450 mgd.

Based on the above, there is adequate treatment capacity to serve the Project's projected demand in addition to existing LASAN commitments. As such, the Project would 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, and impacts would be less than significant.

(2) Mitigation Measures

Impacts regarding wastewater treatment facilities and their capacity to serve the Project were determined to be less than significant. Therefore, no mitigation measures are required.

[19] 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 mgd) and 2030 (approximately 275 mgd). The 2025 value is extrapolated from 2020 and 2030 values: [(275 mgd – 256 mgd)/10) * 5] + 256 = 265.5 mgd.

(3) Level of Significance After Mitigation

Impacts regarding wastewater treatment facilities and their capacity to serve the Project 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

Chapter III, *Environmental Setting,* of this Draft EIR, identifies 5 related projects that are anticipated to be developed within the Project vicinity. Operation of these 5 related projects would cumulatively contribute, in conjunction with the Project, to wastewater generation in the Hyperion Service Area. For purposes of this analysis, wastewater generated by the related projects is assumed to be treated at the HWRP.

The Project would result in less-than-significant impacts with regard to wastewater treatment facilities associated with the Hyperion Service Area and HWRP. However, mitigation was prescribed to ensure adequate capacity of the local sewer system is maintained. With implementation of Mitigation Measures WW-MM-1 and WW-MM-2, potentially significant impacts related to wastewater infrastructure capacity of the local sewer system during operation would be reduced to a less-than-significant level. As discussed above, operation of the Project on a worst-case day (prior to mitigation and assuming a full flush of the pool) would generate 525,923 gpd of wastewater (net of existing uses), or 0.526 mgd. With mitigation, the daily net increase in wastewater generation would be reduced from 525,923 gallons to 191,923 gallons. However, typical daily wastewater flows for the Project Site would be approximately 28,074 gpd. The maximum worst-case day typically would only occur during highly infrequent but nonetheless significant maintenance of the pool.

As shown in **Table IV.O.2-3,** *Estimated Cumulative Operational Wastewater Generation*, the estimated average wastewater dry weather flow generation associated with the related projects is up to 329,897 gpd or 0.330 mgd. As indicated, the Project under the highly conservative worst-case day scenario prior to mitigation would contribute an additional 525,923 gpd of wastewater, or 0.526 mgd of wastewater dry weather flow. The estimated generation for the Project (prior to mitigation) and the related projects would result in a combined total of 855,820 gpd or 0.856 mgd of average wastewater dry weather flow. This represents 0.49 percent of the HWRP's total remaining daily capacity of 175 mgd. The Project with mitigation under the worst-case day scenario would contribute an additional 191,923 gpd of wastewater, or 0.192 mgd of wastewater dry weather flow. The estimated generation for the Project (with mitigation) and the related projects would result in a combined total of 521,820 gpd or 0.522 mgd of average wastewater dry weather flow. This represents 0.30 percent of the HWRP's total remaining daily capacity of 175 mgd. These estimates do not account for reductions in wastewater generation that would occur with implementation of conservation measures for the related projects or the Project.

TABLE IV.O.2-3
ESTIMATED CUMULATIVE OPERATIONAL WASTEWATER GENERATION

Related Project No.	Land Uses	Quantity	Generation Factor	Average Daily Wastewater Generated (gpd)
1	Health Club/ Restaurant	91.466 ksf (6,098 seats)[a]	30 gpd/seat	182,940
2	Retail	10.747 ksf	50 gpd/ksf	537
	Apartments	62 du	150 gpd/du	9,300
	Other[b]	1.925 ksf	50 gpd/ksf	96
3	Other[b]	15.7 ksf	50 gpd/ksf	785
4	Other[b]	12.782 ksf	50 gpd/ksf	639
5	Apartments	504 du	150 gpd/du	75,600
	Restaurant	30 ksf (2,000 seats)[c]	30 gpd/seat	60,000
			Related Projects Subtotal (without Project)[d]	*329,897*
			Net Project Total (worst-case day – prior to mitigation)	525,923
			Cumulative Total with Project (prior to Project mitigation)	**855,820**
			Net Project Total (worst-case day – with Project mitigation)	191,923
			Cumulative Total with Project (with Project mitigation)	**521,820**

NOTES: ksf = thousand square feet; gpd = gallons per day; du = dwelling units

[a] Conservatively assumed entire square footage for this use is restaurant. Restaurants assume each seat will occupy 15 square feet.

[b] "Other" uses conservatively assumed to be retail uses.

[c] Restaurants assume each seat will occupy 15 square feet.

[d] Totals may not add up due to rounding.

SOURCE: ESA, 2021.

Accordingly, the Project's impacts, when considered together with the impacts of the related projects, would not result in a cumulatively considerable contribution to a significant cumulative impact related to wastewater treatment system capacity at the HWRP. Therefore, cumulative impacts would be less than significant.

The HWRP currently meets applicable water quality standards as set forth by its NPDES Permit.[20] Implementation of the SSMPs, upgrades in the advanced treatment processes at the treatment plants, and continual monitoring by the EMD would ensure that effluent

[20] California Regional Water Quality Control Board Los Angeles Region, U.S. Environmental Protection Agency Region IX, Order R4-2017-0045, 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.

discharged into Santa Monica Bay by the Project and related projects are within applicable limits. Accordingly, the Project's incremental impacts, when considered together with the impacts of the related projects, would not result in a cumulatively considerable contribution to a significant cumulative impact related to wastewater treatment requirements. Therefore, Project impacts on wastewater treatment requirements would not be cumulatively considerable, and cumulative impacts would be less than significant.

The related projects are all located south of the Los Angeles River and none would connect directly to the Bellaire Avenue or Whitsett Avenue sewer lines directly serving the Project Site. However, wastewater from the related projects could feed into the Valleyheart Drive sewer line (at a point located approximately 0.25 miles east of the Project Site just north of Laurelgrove Avenue), which ultimately feeds into the 48-inch line on Woodbridge Street. The Woodbridge Street sewer line has over 700,000 gallons of capacity remaining to reach the 50-percent design capacity. As such, the Woodbridge Street line could accommodate all wastewater from the Project and the related projects. The current flow levels (d/D) in the Valleyheart Drive cannot be determined at this time without additional gauging. Future detailed gauging and evaluation will be needed as part of the standard permit process for the Project and related projects to identify a specific sewer connection point and confirm the sewer capacity near the time of project development. As with the Project, all related projects would be subject to the provisions of the LAMC requiring provision of on-site infrastructure, improvements to address local capacity issues and payment of fees for future sewerage replacement and/or relief improvements. As discussed above for the Project, mitigation measures are required to ensure its wastewater generation does not exceed the capacity of the local system. As with the Project, related projects would be subject to LAMC Section 64.15, which requires a determination by LASAN that there is sufficient sewer capacity available for each project. The City would continue to review new development projects to ensure that sewer capacity is available prior to the on-set of construction, and fees and mitigation include requirements to improve infrastructure if necessary to account for the project would be required. Related projects connecting to the surrounding sewer system would be required to obtain a sewer connection permit and submit a SCAR and/or Wastewater Services Information to LASAN as part of the related project's development review. Impact determination will be provided following the completion of the Wastewater Services Information analysis. If system upgrades are required as a result of a given related project's additional flow, arrangements would be made between the related project and the LASAN to construct the necessary improvements.

Also, in accordance with LAMC Section 64.11, the Project and the related projects would pay the required sewer connection fees to further assist in offsetting their contribution to City wastewater treatment infrastructure needs. **Therefore, impacts of the Project with mitigation on the City's wastewater infrastructure would not be cumulatively considerable, and cumulative impacts would be less than significant after mitigation.**

(2) Mitigation Measures

Cumulative impacts related to wastewater treatment facility capacity were determined to be less than significant. Therefore, no mitigation measures are required.

Cumulative impacts related to wastewater infrastructure capacity would be less than significant with implementation of Mitigation Measures WW-MM-1 and WW-MM-2. No additional mitigation measures to address cumulative impacts are required.

(3) Level of Significance After Mitigation

Cumulative impacts regarding wastewater treatment facility capacity 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.

Cumulative impacts related to wastewater infrastructure capacity would be less than significant with implementation of Mitigation Measures WW-MM-1 and WW-MM-2.

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