4. ENVIRONMENTAL IMPACT ANALYSIS
M. UTILITIES AND SERVICE SYSTEMS
1. WASTEWATER

INTRODUCTION

This section addresses the potential impacts of the Project on wastewater services and facilities. This analysis includes a description of the existing City wastewater system that would serve the Project and the proposed wastewater system for the Project. An estimation of the amount of wastewater that would be generated by the Project is also included.

ENVIRONMENTAL SETTING

Regulatory Framework

City of Lomita

General Plan Land Use Element

Sewer service in Lomita is provided by the Los Angeles County Sanitation District No 5. Sewage from the City is conveyed in sewer lines maintained by the County Department of Public Works, which in turn is directed into sewer mains located in Lomita Boulevard, Narbonne Avenue, Western Avenue and Crenshaw toward the Joint Water Pollution Control Plant (JWPCP) in the City of Carson. The JWPCP has a design capacity of 400 million gallons per day (mgd) and currently processes approximately 280 mgd. Treated wastewater is disposed into an outfall in the Pacific Ocean located two miles offshore and 200 feet below sea. Sludge from the JWPCP is composted on-site or transported to the Puente Hills Landfill.

Wastewater Conveyance Facilities

Los Angeles Regional Water Quality Control Board (LARWQCB) enforces Section 122.41(m) of part 40 of the Code of Federal Regulations (CFR), which prohibits the bypassing of water treatment facilities and sanitary sewer overflows, and South Coast Air Quality Management District (SCAQMD) regulates the sewer conveyance system, in addition to CFR, and responds to odor claims.

2 http://www.lacsd.org/wastewater/wwfacilities/jwpcp/default.asp
Joint Water Pollution Control Plant

The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the Sanitation Districts' wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 280 million gallons of wastewater per day (mgd), and has a total permitted capacity of 400 mgd. Solids collected in Primary Treatment and Secondary Treatment are processed in anaerobic digestion tanks where bacteria break down organic material and produce methane gas. After digestion, the solids are dewatered at Solids Processing and hauled off-site to composting, land application, and landfill disposal. Methane gas generated in the anaerobic digestion process is used to produce power and digester heating steam in a Total Energy Facility that utilizes gas turbines and waste-heat recovery steam generators. The on-site generation of electricity permits the JWPCP to produce most of its electricity.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Appendix G of the State CEQA Guidelines

In accordance with guidance provided in Appendix G of the CEQA Guidelines, a project would have a potentially significant wastewater impact if it were to result in one or more of the following:

(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

(b) Require or result in the construction of a new wastewater treatment facility or expansion of existing facilities, the construction of which could cause significant environmental effects;

(c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

(d) Result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.

Methodology

The analysis below establishes existing baseline wastewater volumes and describes the sewage disposal system serving the Project Site, including physical infrastructure characteristics and existing wastewater treatment plant capacities. It then calculates the additional wastewater generation rates and volumes created by the Project and evaluates that data in comparison to available wastewater treatment plant.
Project Impacts

Analysis

Construction

During construction, a negligible amount of wastewater would be generated by construction employees. It is anticipated that portable toilets would be provided by a private company and the waste disposed of off-site. No new connections to the public sewer system would be required for the construction employees. The limited potential impacts on sewer facilities would not cause an increase in flows beyond the available capacity of the existing conveyance and treatment systems. Construction impacts would be less than significant. The required sewer connection and related infrastructure upgrades would not be expected to create a significant impact to the physical environment because: (1) existing service would not be disrupted; (2) replacement of the sewer lines, if required, would be within public and private rights-of-way; and (3) the existing infrastructure (sewer lines and connectors) would be replaced with improved infrastructure in areas that have already been significantly disturbed. However, the replacement or addition of infrastructure could potentially result in temporary road closures. Therefore, to reduce this potential impact, the Project would coordinate traffic flow during construction activities and would facilitate the flow of traffic during the potential wastewater upgrade activities near the Project Site.

Operation

Wastewater Generation

As shown on Table 4.M.1-2, Project Estimated Wastewater Generation, it is estimated the Project would generate a net total of approximately 32,630 gallons per day (gpd) (or 0.032 mgd) of wastewater. The net generation of wastewater from the Project is determined by subtracting the volume of wastewater generated by existing uses, which would be removed.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Size</th>
<th>Wastewater Generation Rates</th>
<th>Total (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Rental (to be removed)</td>
<td>8,200 sf</td>
<td>100 gallons / 1,000 sf</td>
<td>(820)</td>
</tr>
<tr>
<td>Residential</td>
<td>223 units</td>
<td>150 gallons / unit</td>
<td>33,450</td>
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<tr>
<td>Total (Proposed – Existing)</td>
<td></td>
<td></td>
<td>32,630</td>
</tr>
</tbody>
</table>

Note: sf = square feet; gpd = gallons per day
Table: CAJA Environmental Services, September 2016.
Treatment Facilities and Infrastructure

The Project Site is currently developed and adequately served by the existing wastewater conveyance system. As part of the building permit process, the lead agency would confirm and ensure that there is sufficient capacity in the local and trunk lines to accommodate the Project’s wastewater flows. Further detailed gauging and evaluation would be needed as part of the permit process to identify specific sewer connection points. If the public sewer has insufficient capacity, then the applicant would be required to build the necessary improvements to convey the wastewater to a point with sufficient capacity.

The Sanitation Districts issue permits for the direct connection of 6-inch diameter or smaller private sewer laterals to Sanitation Districts' trunk sewers. The Sanitation Districts also review sewer plans for private developments or public (e.g., City) improvement projects involving construction of 8-inch diameter or larger sewers that connect directly or indirectly to the Sanitation Districts' sewer system.3

The construction of upsizing, or connection, would not result in significant impacts as the construction would be of short duration and with the implementation of best practices, such as the use of a flagman during work in the public right of way, during construction, would not significantly impact traffic or emergency access.

The wastewater generated by the Project would be similar to residential uses in the area. No industrial discharge into the wastewater or drainage system would occur. The JWPCP provides both primary and secondary treatment for approximately 280 million gallons of wastewater per day (mgd), and has a total permitted capacity of 400 mgd. Thus, the increase in wastewater generation would not have a significant impact on treatment plant capacity.

Stormwater

Stormwater drainage in the Lomita area generally flows from west to east in roadway gutters and county storm drains. The area north of Pacific Coast Highway drains into the Lomita Drain which runs along 250th Street in Lomita. At the City's eastern boundary, the Lomita Drain is located in Lomita Boulevard and is connected to the Wilmington Drain, which in turn runs south into Harbor Park and Machado Lake. The area south of Pacific Coast Highway drains into the line in 259th Street which turns south just east of Normandie Avenue and then east into Harbor Park and Machado Lake. There are debris retention basins at these storm drains ends to reduce sill and sediments that enter Machado Lake. Also, a pump located north of Pacific Coast Highway near the Wilmington drain prevents spill from entering the lake. Stormwater runoff that enters the lake is ponded at the upper lake. When water levels reach seven feet or higher, the water flows over the dam and spillway and goes into the lower lake. Water at the lower lake flows into the Harbor outflow, which goes from the lower lake, south into the West Basin of the Los Angeles Harbor at John Gibson Boulevard. A number of deficiencies in the storm drain system, as experienced by historic street flooding, have been identified in the City. These deficiencies represent areas where storm drains are needed.

3 http://www.lacsd.org/wastewater/default.asp#sewerreview
The Project would be required to obtain a NPDES water quality permit from the LARWQCB. Implementation of appropriate project design features and compliance with the local, state, and federal regulations, code requirements, and permit provisions would prevent significant impacts related to the release of potentially polluted discharge into surface water. Construction activities associated with the Project are subject to City inspection and implementation of storm water BMPs to eliminate potential effects on the environment. As such, the Project would not require construction of new storm water drainage facilities or expansion of existing facilities. The Project Applicant shall comply with all mandatory storm water permit requirements (including, but not limited to NPDES, Stormwater pollution prevent plan (SWPPP), and SUSMP) at the federal, state and local level. The Project would also comply with the California Building Standards Commission requirements for irrigation systems. Those measures would ensure that impacts are less than significant.

Conclusion

The Project would not result in the potential expansion of existing facilities, the construction of which could cause significant environmental effects or 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 amendments. The Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Further detailed gauging and evaluation would be needed as part of the permit process to identify a specific sewer connection point. If the public sewer has insufficient capacity, then the Applicant shall be required to build improvements to convey wastewater to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit would be made at that time. The Project would not result in the requirement of construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

CUMULATIVE IMPACTS

A total of 15 cumulative projects were identified in the study area (4 in the City of Lomita, 10 in the City of Torrance, and 1 in the City of Rolling Hills Estates). Torrance is served by the Torrance Wastewater Program.4 Rolling Hills Estates is served by its own utilities division.5 Therefore, the analysis below only considers the related projects in the City of Lomita.

As shown in Table 4.M.1-2, Cumulative Estimated Wastewater Generation, the related projects in the City of Lomita combination with the Project would generate approximately 41,672 gpd of wastewater. The related projects would rely on the wastewater treatment services provided by the JWPCP. The capacity is 400 million gallons per day and the current average wastewater flow is 280 million gpd. Therefore, the JWPCP has a remaining capacity of approximately 120 million gpd. The cumulative sewage generation would be well within the design capacity, representing about 0.03 percent of the

4  http://www.torranceca.gov/3521.htm
remaining capacity.\(^6\) As such, the Project’s incremental effect on cumulative impacts to wastewater treatment capacity would not be cumulatively considerable.

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\text{Table 4.M.1-2}
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**Cumulative Estimated Wastewater Generation**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Total sizes</th>
<th>Unit</th>
<th>Wastewater Generation Rates</th>
<th>Total (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential - Lomita</td>
<td>53</td>
<td>units</td>
<td>150 gallons / unit</td>
<td>7,950</td>
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<tr>
<td>Retail</td>
<td>1,035</td>
<td>sf</td>
<td>25 gallons / 1,000 sf</td>
<td>26</td>
</tr>
<tr>
<td>Office</td>
<td>1,528</td>
<td>sf</td>
<td>120 gallons / 1,000 sf</td>
<td>183</td>
</tr>
<tr>
<td>Restaurant</td>
<td>1,030</td>
<td>sf</td>
<td>300 gallons / 1,000 sf</td>
<td>309</td>
</tr>
<tr>
<td>Warehouse</td>
<td>4,281</td>
<td>sf</td>
<td>120 gallons / 1,000 sf</td>
<td>514</td>
</tr>
<tr>
<td>Market</td>
<td>507</td>
<td>sf</td>
<td>120 gallons / 1,000 sf</td>
<td>60</td>
</tr>
<tr>
<td><strong>Related Projects Subtotal</strong></td>
<td><strong>9,042</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project Total</strong></td>
<td><strong>32,630</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (Related Projects + Project)</strong></td>
<td><strong>41,672</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: sf = square feet; DU = dwelling unit, gpd = gallons per day


In the absence of bedroom breakdowns for residential related projects, the 2-bedroom rate will be used for apartment and condominiums, which provides a conservative estimate to overcompensate for studio and 1-bedroom units.

Table: CAJA Environmental Services, September 2016.

**MITIGATION MEASURES**

None required.

**LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Impacts with respect to stormwater and the sewer system capacity and infrastructure would be less than significant. Cumulative impacts would be less than significant.

\[^6\] 41,672 gpd / 120 mgd x 100% = 0.03%