

Appendix IS-7

Wastewater Report



Wastewater Report

Violet Street Tower

Los Angeles, California



July 23, 2021

Prepared for

Hines

Prepared by



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Executive Summary

This Wastewater Report presents an analysis of the potential impact of the proposed Violet Street Tower project on the existing wastewater infrastructure system. The proposed project is located at 2045 East Violet Street, in the City of Los Angeles, California, and consists of office space and restaurant space. The site is currently occupied by two warehouse buildings, an office building, and surface parking. There are existing interconnected City-owned sewer mains within the rights of way of the surrounding streets, including an 8-inch sewer main in Violet Street, an 8-inch sewer main in 7th Place, and a 10-inch sewer main in Santa Fe Avenue.

Based on Wastewater Services Information provided by the City of Los Angeles Bureau of Sanitation, and the amount of wastewater estimated to be generated by the proposed project, it appears that adequate capacity exists in the sewer system to accommodate the total flow of the proposed project. Wastewater flow from the proposed project will ultimately be conveyed to the Hyperion Water Reclamation Plant, which has sufficient capacity to serve the proposed project.

Introduction

Project Description

Hines is proposing a unified development project on an approximately 6.24-acre site located northwest of the intersection of Violet Street and Santa Fe Avenue within the Central City North Community Plan area of the City of Los Angeles. The proposed project (hereafter referred to as the Project) consists of two lots (Lots 1 and 4 of Tentative Tract Map No. 83382), totaling approximately 2.94 acres, that are proposed to be demolished and redeveloped into a unified development with two previously developed lots (Lots 2 and 3 of Tentative Tract Map No. 83382), totaling approximately 3.3 acres, which will maintain their current uses. Figure 1 provides an aerial perspective of the existing site and illustrates the location of Lots 1-4 of Tentative Tract Map No. 83382.

Lot 1 of the Project will consist of 435,100 square feet of office building with cooling tower; 15,499 square feet of restaurant space; and 74,018 square feet of open space (inclusive of 20,418 square feet of balconies and roof decks for office tenants and their users, and 53,601 square feet of shared open space situated on both roof decks and the covered ground floor area surrounding the tenants). Lot 4 of the Project will consist of 211,201 square feet of office building with cooling tower, proposed as part of a future expansion phase of the development.

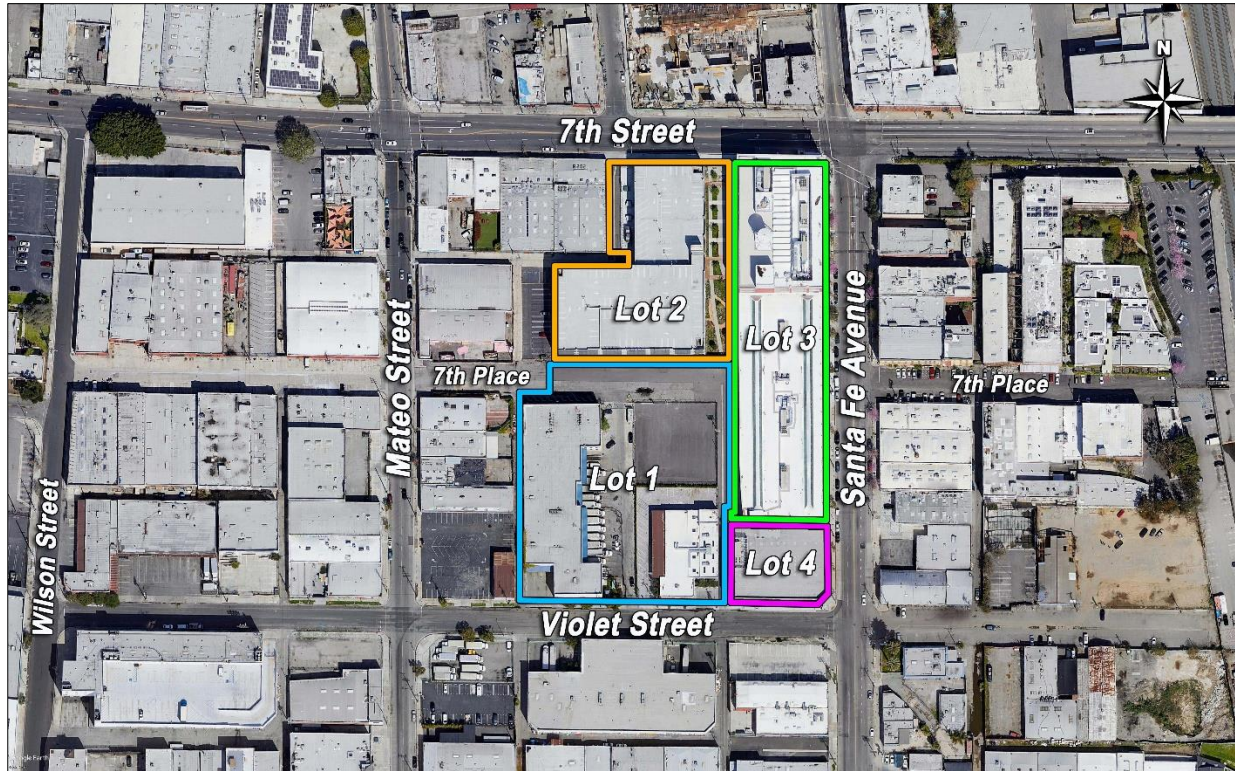


Figure 1 – Aerial Perspective of Existing Project Site

Scope of Work

As a portion of the overall Environmental Impact Report (EIR) for the Project, this report serves to analyze the potential impact that the Project would have on the existing wastewater infrastructure system.

Methodology

The *City of Los Angeles CEQA Thresholds Guide* is utilized in determining the significance of a project's impact on the wastewater collection and treatment infrastructure. Included in this process is a review of the environmental setting surrounding the Project, determination of Project impacts and cumulative impacts, and provision of mitigation measures, if any are deemed necessary.

Within the review of the environmental setting is a description of the existing wastewater infrastructure, including location, capacity, and current flows. The Project Impacts section evaluates the Project's wastewater needs and compares the Project's wastewater needs to the appropriate sewer's capacity.

A request for Wastewater Services Information (WWSI) was submitted to the City of Los Angeles Bureau of Sanitation (LASAN), Wastewater Engineering Services Division (WESD). In

response, LASAN WESD conducted a preliminary analysis to assess if the existing sewer system has available capacity to handle the flow generated by the proposed Project, in conjunction with future developments and forecasted growth within the City. The WWSI letter from LASAN WESD is included in Appendix A of this report. The wastewater services information provided in the WWSI letter was utilized in this report to analyze the potential impacts of the Project by comparing the estimated overall Project wastewater generation with the capacity of existing facilities.

Wastewater Service & Existing Conditions

Wastewater service for the Project site is provided by LASAN through a sanitary sewer main system in the surrounding streets. Record data provided by the City reflects that there is an existing 8-inch vitrified clay pipe (VCP) sewer main at the centerline in Violet Street, commencing at a terminal manhole located approximately 179 feet west of Santa Fe Avenue, which discharges into an existing 38-inch trunk sewer main at the centerline in Wilson Street. There is an existing 8-inch VCP sewer main at the centerline in 7th Place, commencing at a terminal manhole at the alley terminus, which discharges into the existing 38-inch trunk sewer main at the centerline in Wilson Street. There is an existing 10-inch VCP sewer main at the centerline in Santa Fe Avenue, which discharges into an existing 60-inch trunk main in Santa Fe Avenue R/W. There is also an existing 132-inch reinforced concrete pipe (RCP) North Outfall Sewer – East Central Interceptor Sewer to the east of and parallel to the existing 10-inch VCP sewer main in Santa Fe Avenue. The Sewer Wye Maps for the Project vicinity are included in Appendix B of this report.

The initial phase of the Project (Lot 1) is proposing to connect to both the existing 8-inch sewer main in Violet Street and the existing 8-inch sewer main in 7th Place, while the future expansion phase (Lot 4) is proposing to connect to the 10-inch sewer main in Santa Fe Avenue.

Tables 1, 2 and 3, Flow Level & Design Capacities, show the approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system serving the Project according to the WWSI letter provided by LASAN WESD, dated July 12, 2021.

Table 1
Flow Level & Design Capacities
Lot 1 – Proposed Connection on Violet Street

Pipe Diameter (in)	Pipe Location	Gauging d/D (%) as of July 2021	50% Design Capacity
8	Violet Street	*	229,300 gpd
38	Bay Street	18	10.08 mgd
40	Alameda Street	27	13.51 mgd

* No gauging available.

Table 2
Flow Level & Design Capacities
Lot 1 – Proposed Connection on 7th Place

Pipe Diameter (in)	Pipe Location	Gauging d/D (%) as of July 2021	50% Design Capacity
8	7 th Place	*	283,200 gpd
38	Bay Street	18	10.08 mgd
40	Alameda Street	27	13.51 mgd

* No gauging available.

Table 3
Flow Level & Design Capacities
Lot 4 – Proposed Connection on Santa Fe Avenue

Pipe Diameter (in)	Pipe Location	Gauging d/D (%) as of July 2021	50% Design Capacity
10	Santa Fe Avenue	*	416,000 gpd
60	Santa Fe Avenue R/W	38	31.26 mgd

* No gauging available.

Table 4, Estimated Existing Wastewater Generation, shows estimated existing wastewater generation for the Project site, based on LASAN's sewage generation factors.

Table 4
Estimated Existing Wastewater Generation

Land Use	Units	Generation Factor (gpd) ¹	Average Daily Flow (gpd)
Existing			
Warehouse (Lot 1)	25,798 sf	(30/1,000 gr sf)	774
Office (Lot 1)	9,940 sf	(120/1,000 gr sf)	1,193
Warehouse (Lot 4)	21,880 sf	(30/1,000 gr sf)	656
Subtotal Existing			2,623

Project Impacts

Factors that determine the flow for wastewater include wastewater flow created during the construction of the Project itself, as well as wastewater flow once construction of the proposed Project has been completed.

¹ City of Los Angeles, Sewage Generation Factor for Residential and Commercial Categories, Effective April 6, 2012. <https://engpermitmanual.lacity.org/sites/default/files/documents/Sewage%20Generation%20Factors%20Chart.pdf>

Construction

Construction activities as a result of the Project would generate a negligible amount of wastewater as a result of construction workers on-site. It is anticipated that construction workers would utilize portable restrooms, which would not increase wastewater flows to the City's sewer system. Wastewater generation from the Project's construction activities are not anticipated to create a measureable impact to existing wastewater flows.

Installation of new sewer laterals will be required to serve the Project's new buildings. Existing sewer laterals, if appropriately sized and in a good state of repair, can be reutilized by the Project. The impacts associated with installation of new sewer laterals or upgrades to existing sewer laterals would include trenching to place new lines below ground. While no improvements to existing off-site public mains are anticipated, there will be minor work performed off-site to connect to public mains. A Construction Management Plan would be created and put in place to reduce pedestrian and vehicular traffic impacts, including safe pedestrian access around the site, safe vehicular travel, and access for emergency vehicles. The Construction Management Plan would incorporate input from the contractor, and would be implemented by the contractor once construction has commenced. Overall Project impacts to the wastewater system as a result of construction activities would be less than significant.

Operation Wastewater Generation

Estimated wastewater generation for the Project is based on the Sewage Generation Factors for Residential and Commercial Categories chart provided by LASAN in accordance with the City's *CEQA Thresholds Guide*.² As shown in Table 5, Estimated Proposed Wastewater Generation, the Project's estimated wastewater generation upon completion will be approximately 136,822 gallons per day (gpd). After deducting the wastewater generated by the existing warehouse and office buildings to be removed, the total Project estimated net wastewater generation will be approximately 134,199 gpd.

A request for Wastewater Services Information (WWSI) was submitted to LASAN to determine if the existing public infrastructure can accommodate additional flows from the Project. In response, LASAN has analyzed the local sewer conditions based on available gauging information and forecasted growth to evaluate if available wastewater capacity exists for the Project. According to the WWSI letter (included in Appendix A of this report), based on the estimated flows for the Project of 136,822 gpd (excluding the deduction for wastewater generated by the existing warehouse and office buildings to be removed), "it appears the sewer system might be able to accommodate the total flow" for the Project. Therefore, wastewater impacts are expected to be less than significant.

Wastewater flows within the City's existing sewer system are ultimately conveyed to the Hyperion Water Reclamation Plant (HWRP) in the Playa Del Rey district of the City before entering the Pacific Ocean. The HWRP treats an average of 250 million gallons per day (mgd)

² City of Los Angeles, Sewage Generation Factor for Residential and Commercial Categories, Effective April 6, 2012. <https://engpermitmanual.lacity.org/sites/default/files/documents/Sewage%20Generation%20Factors%20Chart.pdf>

on a dry weather day and was designed to accommodate a maximum daily dry weather flow of 450 mgd.³ This leaves a remaining capacity of 200 mgd of wastewater that can be treated by this facility. As shown in Table 5, Estimated Proposed Wastewater Generation, the Project would generate a net increase of 134,199 gpd (after deducting the existing warehouse and office buildings to be removed), which is 0.067% of the remaining treatment capacity.⁴ The HWRP has sufficient remaining capacity to serve the Project; therefore, wastewater impacts would be less than significant.

**Table 5
Estimated Proposed Wastewater Generation**

Land Use	Units	Generation Factor (gpd) ⁵	Average Daily Flow (gpd)
Existing			
Warehouse (Lot 1)	25,798 sf	(30/1,000 gr sf)	774
Office (Lot 1)	9,940 sf	(120/1,000 gr sf)	1,193
Warehouse (Lot 4)	21,880 sf	(30/1,000 gr sf)	656
Subtotal Existing			2,623
Proposed			
Office (Lot 1)	435,100 sf	(170/1,000 gr sf)	73,967
Restaurant (Lot 1)	775 seats	(30/seat)	23,250
Open Space (Lot 1)	74,018 sf	(50/1,000 gr sf)	3,701
Office (Lot 4)	211,201 sf	(170/1,000 gr sf)	35,904
Subtotal Proposed			136,822
Existing Use to be Removed			(2,623)
PROJECT NET WASTEWATER GENERATION			134,199

Infrastructure Capacity

According to the WWSI letter, the 8-inch VCP sewer in Violet Street has a 50% design capacity of 229,300 gpd; the 8-inch VCP sewer in 7th Place has a 50% design capacity of 283,200 gpd; and the 10-inch VCP sewer in Santa Fe Avenue has a 50% design capacity of 416,000 gpd. The current flow level (d/D) is not available for the 8-inch sewer in Violet Street, the 8-inch sewer in 7th Place, or the 10-inch sewer in Santa Fe Avenue. However, it should be noted that the 8-inch sewer in Violet Street commences at a terminus manhole adjacent the Project and flows westerly for a distance of approximately 1,042 feet prior to discharging into a 38-inch sewer in Wilson Street.⁶ This 8-inch sewer in Violet Street receives additional flows from approximately 257 feet of 8-inch sewer in Mateo Street, north of Violet Street. Similarly, the 8-

³ City of Los Angeles Department of Public Works, Bureau of Sanitation, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, January 2018, pg. ES-15.

⁴ $(0.134,199 \text{ mgd} / 200 \text{ mgd}) \times 100\% = 0.067\%$

⁵ City of Los Angeles, Sewage Generation Factor for Residential and Commercial Categories, Effective April 6, 2012. <https://engpermitmanual.lacity.org/sites/default/files/documents/Sewage%20Generation%20Factors%20Chart.pdf>

⁶ City of Los Angeles Department of Public Works, Bureau of Engineering, NavigateLA. <https://navigate.lacity.org/navigate/>

inch sewer in 7th Place commences at a terminus manhole adjacent the Project and flows westerly for a distance of approximately 979 feet prior to discharging into the 38-inch sewer in Wilson Street.⁷ This 8-inch sewer in 7th Place receives additional flows from approximately 152 feet of 8-inch sewer in Mateo Street, north of 7th Place. The 38-inch sewer in Wilson Street feeds into a 38-inch sewer in Bay Street, which has a 50% design capacity of 10.08 mgd and a current approximate flow level of 18%. Of the total wastewater flows from Lot 1 of the Project (approximately 98,951 gpd, inclusive of deduction for existing uses to be removed), a portion will discharge to the 8-inch sewer in Violet Street, while the remainder will discharge to the 8-inch sewer in 7th Place.

The 10-inch sewer in Santa Fe Avenue commences at a terminus manhole located approximately 610 feet north of Violet Street, and receives additional flows from approximately 478 feet of 8-inch sewer on 7th Place, east of Santa Fe Avenue.⁸ The 10-inch sewer in Santa Fe Avenue feeds into a 60-inch sewer in Santa Fe Avenue R/W, which has a 50% design capacity of 31.26 mgd and a current approximate flow level of 38%. Lot 4 of the Project proposes to discharge approximately 35,248 gpd (inclusive of deduction for existing uses to be removed) to the 10-inch sewer in Santa Fe Avenue.

As noted above, the WWSI letter provided by LASAN WESD indicates that, based on the estimated flows, it appears the sewer system might be able to accommodate the total flow for the Project. As part of the permit process, further detailed gauging and evaluation will be required, including identifying exact points of connection and confirming available capacity via a Sewer Capacity Availability Request (SCAR). A SCAR analyzes the existing sewer collection system to determine if adequate capacity exists in the sewer collection system to safely convey the newly generated sewage to the appropriate sewage treatment plant. The results of the SCAR are valid for 180 days from the date of the sewer capacity approval from LASAN. The SCAR serves as a clearance process required for sewer connection permits. Given the information provided and analysis performed, impacts to wastewater infrastructure are expected to be less than significant.

Cumulative Impacts

The proposed Project will result in the generation of additional wastewater flows. Based on the Project's estimated wastewater flows and the WWSI analysis performed by LASAN WESD, it appears sufficient capacity might be available within the existing wastewater infrastructure. The Project will be required to obtain a sewer connection permit through the City for work associated with the proposed Project. Similarly, a sewer connection permit will be required for related projects in the area connecting to the sewer system. If it is determined during the permit process that the public sewer lacks sufficient capacity to accommodate a particular project's additional

⁷ City of Los Angeles Department of Public Works, Bureau of Engineering, NavigateLA.
<https://navigatea.lacity.org/navigatea/>

⁸ City of Los Angeles Department of Public Works, Bureau of Engineering, NavigateLA.
<https://navigatea.lacity.org/navigatea/>

wastewater flow, that project would be required to build sewer lines to a point in the sewer system with sufficient capacity.

There are currently four proposed related projects within the nearby vicinity of the Project, consisting of live/work units, commercial space, and office space,⁹ which are estimated to generate a total net increase in wastewater of 239,671 gpd. Appendix C provides a breakdown of the proposed related projects and associated wastewater generation. Combined with the Project, the net increase in wastewater generation is approximately 373,870 gpd. Wastewater flows generated by the Project, as well as wastewater flows generated by the proposed related projects, would ultimately be conveyed via the existing sewer system to the HWRP for treatment.

The City of Los Angeles has prepared the One Water LA 2040 Plan to increase sustainable water management for the City. The Wastewater Facilities Plan (WWFP), Volume 2 of the One Water LA 2040 Plan, includes projections of wastewater flows and wastewater treatment capacity through the year 2040. The flow model projections created as part of the WWFP indicate that the average daily dry weather flow for the HWRP by 2040 will be 283 mgd.¹⁰ Based on both the existing design capacity and the anticipated flow of 283 mgd, the remaining available treatment capacity of the HWRP is projected to be 167 mgd by the year 2040. As presented above, the Project is anticipated to generate 134,199 gpd (inclusive of deduction for existing uses to be removed), which is approximately 0.030% of the total design capacity¹¹ of the HWRP (0.080% of the projected remaining treatment capacity¹²), while the Project combined with the nearby proposed related projects would generate approximately 373,870 gpd, which is approximately 0.083% of the total design capacity¹³ of the HWRP (0.224% of the projected remaining treatment capacity¹⁴).

The Project's increase in flow, as well as the potential increase in flow from the nearby proposed related projects, combined with the projected forecast for the HRWP by the year 2040, indicates that the Project and related projects would increase the flow significantly less than the 167 mgd of remaining projected capacity. As a result, cumulative impacts on existing wastewater treatment facilities would be less than significant.

Level of Significance

Based on analysis of the wastewater infrastructure system performed for this report, no significant wastewater impacts have been identified as a result of the Project.

⁹ Los Angeles Department of City Planning, Major Projects.

<https://ladcp.maps.arcgis.com/apps/MapJournal/index.html?appid=b06f97ccf94741fdaad27443013eead1>

¹⁰City of Los Angeles Department of Public Works, Bureau of Sanitation, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, January 2018, pg. ES-8.

¹¹ $(0.134,199 \text{ mgd} / 450 \text{ mgd}) \times 100\% = 0.030\%$

¹² $(0.134,199 \text{ mgd} / 167 \text{ mgd}) \times 100\% = 0.080\%$

¹³ $(0.373,870 \text{ mgd} / 450 \text{ mgd}) \times 100\% = 0.083\%$

¹⁴ $(0.373,870 \text{ mgd} / 167 \text{ mgd}) \times 100\% = 0.224\%$

Appendix

Appendix A – Wastewater Services Information Letter

CITY OF LOS ANGELES
CALIFORNIA



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MAYOR

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July 12, 2021

Ms. Jennifer Pierce
KHR Associates
17530 Von Karman Avenue, Suite 200
Irvine, CA 92614

Dear Ms. Pierce,

VIOLET STREET TOWER - REQUEST FOR WASTEWATER SERVICES INFORMATION

This is in response to your July 7, 2021 letter requesting a review of your proposed mixed-use project located at 2045 E. Violet St, Los Angeles, CA 90021. The project will consist of office space and restaurants. LA Sanitation has conducted a preliminary evaluation of the potential impacts to the wastewater and stormwater systems for the proposed project.

WASTEWATER REQUIREMENT

LA Sanitation, Wastewater Engineering Services Division (WESD) is charged with the task of evaluating the local sewer conditions and to determine if available wastewater capacity exists for future developments. The evaluation will determine cumulative sewer impacts and guide the planning process for any future sewer improvement projects needed to provide future capacity as the City grows and develops.

Projected Wastewater Discharges for the Proposed Project:

Type Description	Average Daily Flow per Type Description (GPD/UNIT)	Proposed No. of Units	Average Daily Flow (GPD)
<i>Proposed</i>			
Office Building/Cooling Tower	170 GPD/1000 SQ.FT	646,301 SQ.FT	109,871
Restaurant	30 GPD/SEAT	775 SEATS	23,250
Open Space	50 GPD/1000 SQ.FT	74,018 SQ.FT	3,701
Total			136,822

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SEWER AVAILABILITY

The developer is proposing three points of discharge, on Violet Street, on 7th Pl, and on Santa Fe Ave.

For the proposed first discharge on Violet Street, the sewer infrastructure in the vicinity of the proposed project includes an existing 8-inch line on Violet Street. The sewage from the 8-inch line feeds into a 38-inch line on Bay St before discharging into a 40-inch sewer line on Alameda St. Figure 1 shows the details of the sewer system within the vicinity of the project. The current flow level (d/D) in the 8-inch line cannot be determined at this time without additional gauging.

The current approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system are as follows:

Pipe Diameter (in)	Pipe Location	Current Gauging d/D (%)	50% Design Capacity
8	Violet St.	*	229,300 GPD
38	Bay St.	18	10.08 MGD
40	Alameda St.	27	13.51 MGD

* No gauging available

For the proposed second discharge on E 7th Pl, the sewer infrastructure in the vicinity of the proposed project includes an existing 8-inch line on 7th Pl. The sewage from the 8-inch line feeds into a 38-inch line on Bay St before discharging into a 40-inch sewer line on Alameda St. Figure 2 shows the details of the sewer system within the vicinity of the project. The current flow level (d/D) in the 8-inch line cannot be determined at this time without additional gauging.

The current approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system are as follows:

Pipe Diameter (in)	Pipe Location	Current Gauging d/D (%)	50% Design Capacity
8	7th Pl.	*	283,200 GPD
38	Bay St.	18	10.08 MGD
40	Alameda St.	27	13.51 MGD

* No gauging available

For the proposed third discharge on Santa Fe Ave, the sewer infrastructure in the vicinity of the proposed project includes an existing 10-inch line on Santa Fe Ave. The sewage from the 10-inch line finally discharges into a 60-inch sewer line on Santa Fe Ave R/W. Figure 3 shows the details of the sewer system within the vicinity of the project. The current flow level (d/D) in the 10-inch line cannot be determined at this time without additional gauging.

The current approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system are as follows:

Pipe Diameter (in)	Pipe Location	Current Gauging d/D (%)	50% Design Capacity
10	Santa Fe Ave.	*	416,000 GPD
60	Santa Fe Ave. R/W	38	31.26 MGD

* No gauging available

Based on estimated flows, it appears the sewer system might be able to accommodate the total flow for your proposed project. Further detailed gauging and evaluation will be needed as part of the permit process to identify a specific sewer connection point. If the public sewer lacks sufficient capacity, then the developer will be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit will be made at the time. Ultimately, this sewage flow will be conveyed to the Hyperion Water Reclamation Plant, which has sufficient capacity for the project.

All sanitary wastewater ejectors and fire tank overflow ejectors shall be designed, operated, and maintained as separate systems. All sanitary wastewater ejectors with ejection rates greater than 30 GPM shall be reviewed and must be approved by LASAN WESD staff prior to other City plan check approvals. Lateral connection of development shall adhere to Bureau of Engineering Sewer Design Manual Section F 480.

If you have any questions, please call Christopher DeMonbrun at (323) 342-1567 or email at chris.demonbrun@lacity.org.

STORMWATER REQUIREMENTS

LA Sanitation, Stormwater Program is charged with the task of ensuring the implementation of the Municipal Stormwater Permit requirements within the City of Los Angeles. We anticipate the following requirements would apply for this project.

POST-CONSTRUCTION MITIGATION REQUIREMENTS

In accordance with the Municipal Separate Storm Sewer (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (Order No. R4-2012-0175, NPDES No. CAS004001) and the City of Los Angeles Stormwater and Urban Runoff Pollution Control requirements (Chapter VI, Article 4.4, of the Los Angeles Municipal Code), the Project shall comply with all mandatory provisions to the Stormwater Pollution Control Measures for Development Planning (also known as Low Impact Development [LID] Ordinance). Prior to issuance of grading or building permits, the applicant shall submit a LID Plan to the City of Los Angeles, Public Works, LA Sanitation, Stormwater Program for review and approval. The LID Plan shall be prepared consistent with the requirements of the Planning and Land Development Handbook for Low Impact Development.

Current regulations prioritize infiltration, capture/use, and then biofiltration as the preferred stormwater control measures. The relevant documents can be found at: www.lacitysan.org. It is advised that input regarding LID requirements be received in the preliminary design phases of the project from plan-checking staff. Additional information regarding LID requirements can be found at: www.lacitysan.org or by visiting the stormwater public counter at 201 N. Figueroa, 2nd Fl, Suite 280.

GREEN STREETS

The City is developing a Green Street Initiative that will require projects to implement Green Street elements in the parkway areas between the roadway and sidewalk of the public right-of-way to capture and retain stormwater and urban runoff to mitigate the impact of stormwater runoff and other environmental concerns. The goals of the Green Street elements are to improve the water quality of stormwater runoff, recharge local groundwater basins, improve air quality, reduce the heat island effect of street pavement, enhance pedestrian use of sidewalks, and encourage alternate means of transportation. The Green Street elements may include infiltration systems, biofiltration swales, and permeable pavements where stormwater can be easily directed from the streets into the parkways and

can be implemented in conjunction with the LID requirements. Green Street standard plans can be found at: www.eng2.lacity.org/techdocs/stdplans/

CONSTRUCTION REQUIREMENTS

All construction sites are required to implement a minimum set of BMPs for erosion control, sediment control, non-stormwater management, and waste management. In addition, construction sites with active grading permits are required to prepare and implement a Wet Weather Erosion Control Plan during the rainy season between October 1 and April 15. Construction sites that disturb more than one-acre of land are subject to the NPDES Construction General Permit issued by the State of California, and are required to prepare, submit, and implement the Storm Water Pollution Prevention Plan (SWPPP).

If there are questions regarding the stormwater requirements, please call WPP's plan-checking counter at (213) 482-7066. WPD's plan-checking counter can also be visited at 201 N. Figueroa, 2nd Fl, Suite 280.

GROUNDWATER DEWATERING REUSE OPTIONS

The Los Angeles Department of Water and Power (LADWP) is charged with the task of supplying water and power to the residents and businesses in the City of Los Angeles. One of the sources of water includes groundwater. The majority of groundwater in the City of Los Angeles is adjudicated, and the rights of which are owned and managed by various parties. Extraction of groundwater within the City from any depth by law requires metering and regular reporting to the appropriate Court-appointed Watermaster. LADWP facilitates this reporting process, and may assess and collect associated fees for the usage of the City's water rights. The party performing the dewatering should inform the property owners about the reporting requirement and associated usage fees.

On April 22, 2016 the City of Los Angeles Council passed Ordinance 184248 amending the City of Los Angeles Building Code, requiring developers to consider beneficial reuse of groundwater as a conservation measure and alternative to the common practice of discharging groundwater to the storm drain (SEC. 99.04.305.4). It reads as follows: "Where groundwater is being extracted and discharged, a system for onsite reuse of the groundwater, shall be developed and constructed. Alternatively, the groundwater may be discharged to the sewer."

Groundwater may be beneficially used as landscape irrigation, cooling tower make-up, and construction (dust control, concrete mixing, soil compaction, etc.). Different applications may require various levels of treatment ranging from chemical additives to filtration systems. When onsite reuse is not available the groundwater may be discharged to the sewer system. This allows the water to be potentially reused as recycled water once it has been treated at a water reclamation plant. If groundwater is discharged into the storm drain it offers no potential for reuse. The onsite beneficial reuse of groundwater can reduce or eliminate costs associated with sewer and storm drain permitting and monitoring. Opting for onsite reuse or discharge to the sewer system are the preferred methods for disposing of groundwater.

To help offset costs of water conservation and reuse systems, LADWP offers a Technical Assistance Program (TAP), which provides engineering and technical assistance for qualified projects. Financial incentives are also available. Currently, LADWP provides an incentive of \$1.75 for every 1,000 gallons of water saved during the first two years of a five-year conservation project. Conservation projects that last 10 years are eligible to receive the incentive during the first four years. Other water

conservation assistance programs may be available from the Metropolitan Water District of Southern California. To learn more about available water conservation assistance programs, please contact LADWP Rebate Programs 1-888-376-3314 and LADWP TAP 1-800-544-4498, selection "3".

For more information related to beneficial reuse of groundwater, please contact Greg Reed, Manager of Water Rights and Groundwater Management, at (213)367-2117 or greg.reed@ladwp.com.

SOLID RESOURCE REQUIREMENTS

The City has a standard requirement that applies to all proposed residential developments of four or more units or where the addition of floor areas is 25 percent or more, and all other development projects where the addition of floor area is 30 percent or more. Such developments must set aside a recycling area or room for onsite recycling activities. For more details of this requirement, please contact LA Sanitation Solid Resources Recycling hotline 213-922-8300.

Sincerely,



Ali Poosti, Division Manager
Wastewater Engineering Services Division
LA Sanitation and Environment

AP/CD: ra

Attachments: Figure 1, Figure 2, Figure 3 - Sewer Map

c: Shahram Kharaghani, LASAN
Michael Scaduto, LASAN
Wing Tam, LASAN
Christopher DeMonbrun, LASAN



Legend

- Project Location
- Discharge
- Secondary Lines
- Primary Lines

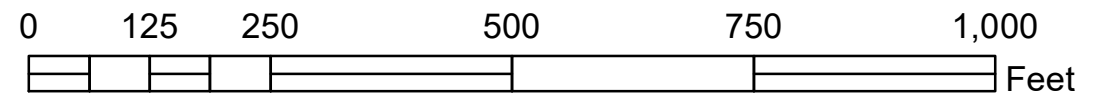
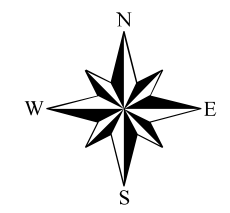
Gauges, d/D

DD

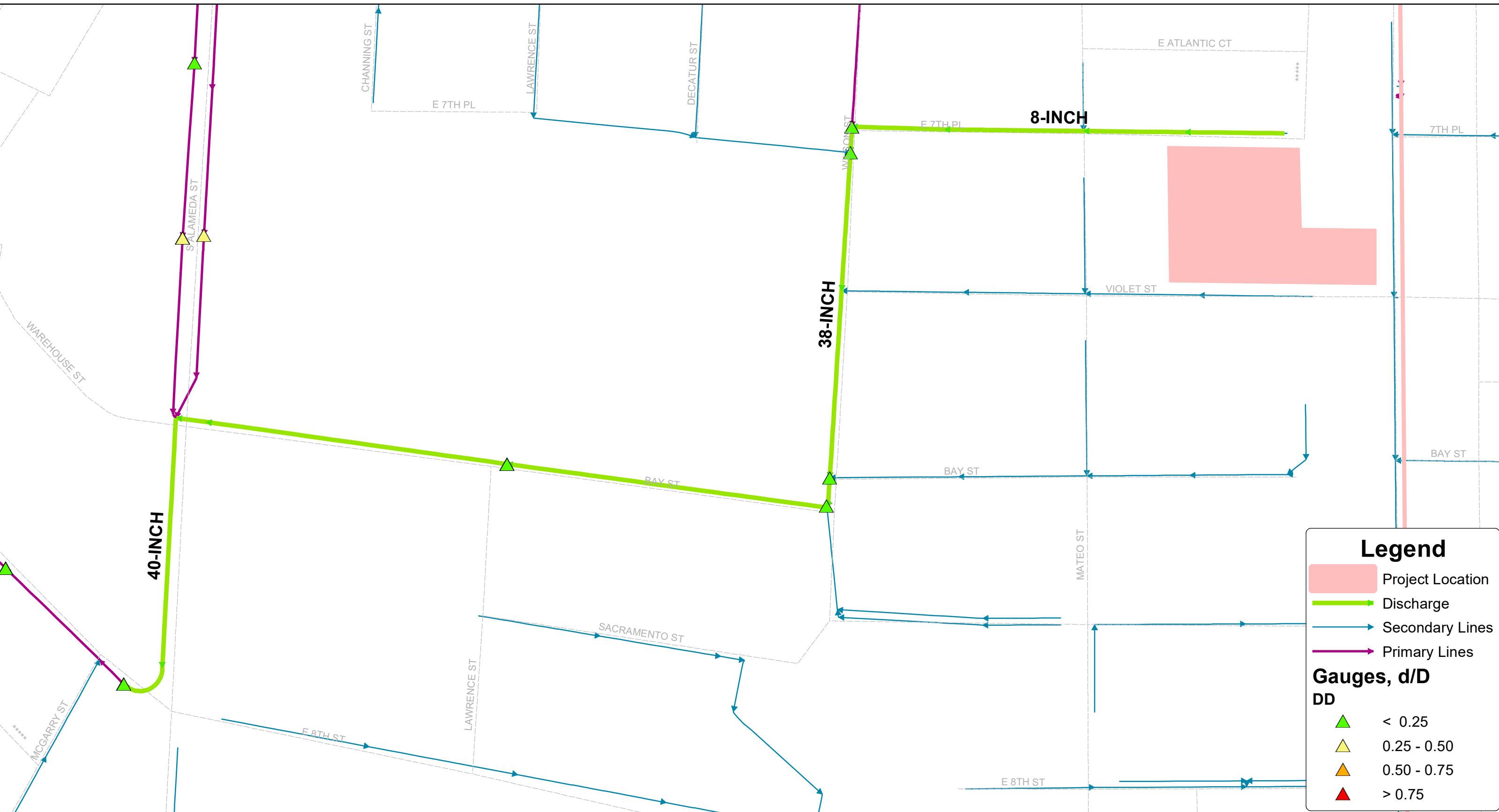
- < 0.25
- 0.25 - 0.50
- 0.50 - 0.75
- > 0.75

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City of Los Angeles

Figure 1
VIOLET STREET TOWER - VIOLET STREET ANALYSIS
Sewer Map



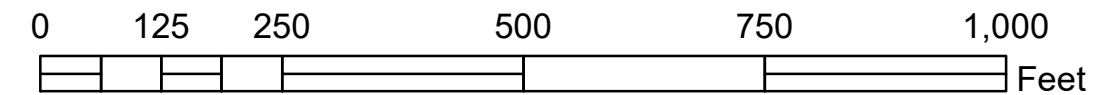
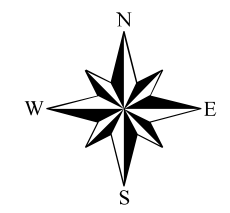
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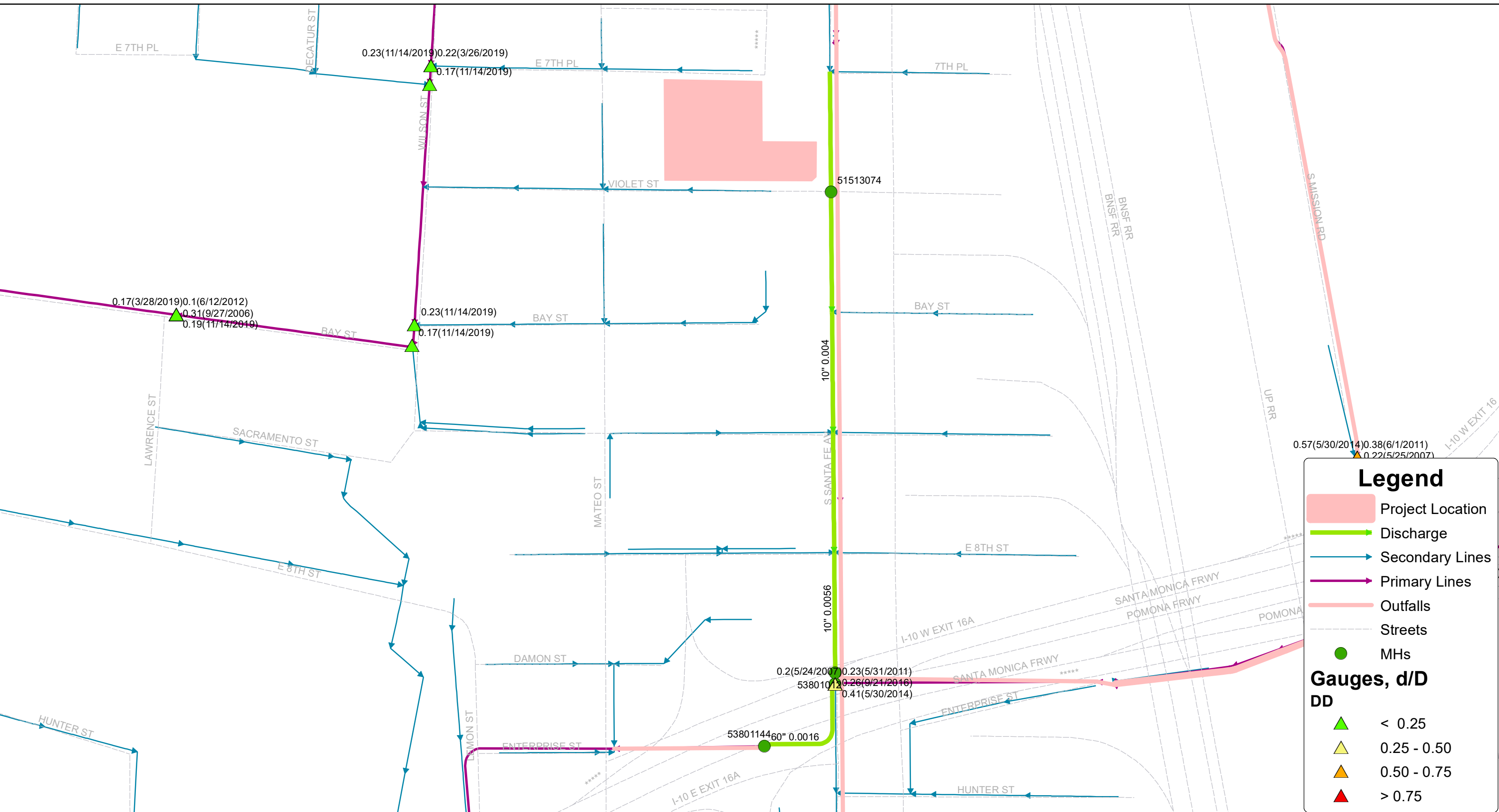
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Figure 2
VIOLET STREET TOWER - E 7TH PL ANALYSIS
Sewer Map



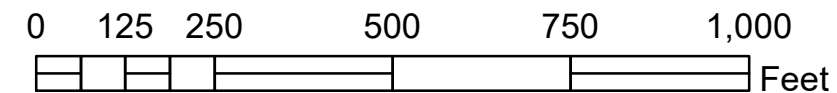
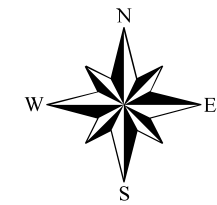
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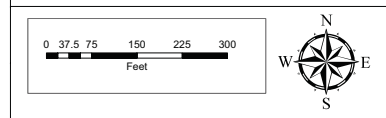
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Figure 3
VIOLET STREET TOWER - SANTA FE AVE ANALYSIS
Sewer Map



Appendix B – Sewer Wye Maps



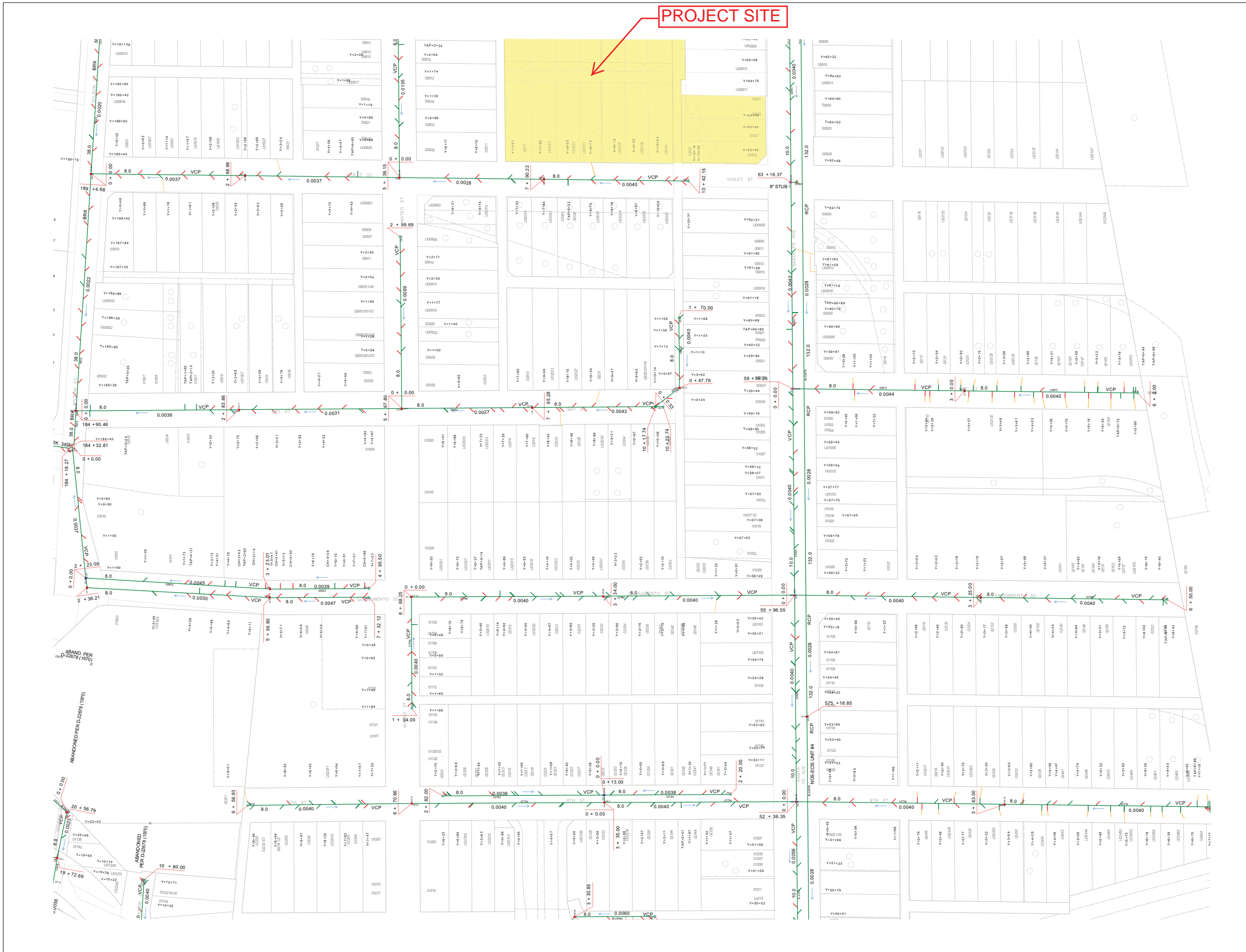
Notes:



CENTRAL DISTRICT SEWER WYE MAP

Plotted Date: 10/20/2014
 Revised :

124-5A217



PROJECT SITE



Notes:

ENGINEERING
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CENTRAL DISTRICT SEWER WYE MAP

- | | | | |
|---|---|--|--|
| <ul style="list-style-type: none"> ● Clean Out ● Lamp Well ● Sewer Cleanout ● Catchment Point ● Physical Structure Abandonment ● Wet Maintenance Hole | <ul style="list-style-type: none"> ● Gate Valve ● Other Valve ● Drop Trap Maintenance Hole ● Drop ● Relief Valve ● Slip ● Transition Structure | <ul style="list-style-type: none"> ● Other Maintenance Hole ● Other Structure ● Junction Chamber ● Special Structure ● Special Structure ● Non-Service Structure | <ul style="list-style-type: none"> ● Transition Structure ● Trap Structure ● Air Set ● Sewer Cap |
|---|---|--|--|



Plotted Date: 12/1/2016
Revised :

123A217

Appendix C – Proposed Related Projects Wastewater Generation

**Estimated Proposed Wastewater Generation for
Proposed Related Projects in Nearby Vicinity**

Project ¹	Project Description	Average Daily Flow (gpd)
676 Mateo Street ²	185 live/work units and 23,380 square feet of art production and commercial space	36,398
2143 E. Violet Street ³	347 live/work units, 187,374 square feet of office space, and 21,858 square feet of commercial space	107,959
2110 Bay Street ⁴	110 live/work units, 113,350 square feet of office space, and 50,848 square feet of retail and restaurant space, and 3,235 square feet of event and meeting space	30,426
2159 Bay Street ⁵	202,954 square feet of office space and 16,000 square feet of commercial space.	64,888
TOTAL PROPOSED NET WASTEWATER GENERATION		239,671

¹ Los Angeles Department of City Planning, Major Projects.

<https://ladcp.maps.arcgis.com/apps/MapJournal/index.html?appid=b06f97ccf94741fdaad27443013eead1>

² Los Angeles Department of City Planning, Draft Environmental Impact Report, 676 Mateo Street Project, December 2020.

³ Los Angeles Department of City Planning, Draft Environmental Impact Report, 2143 Violet Street Project, December 2020.

⁴ Los Angeles Department of City Planning, Draft Environmental Impact Report, 2110 Bay Street Mixed-Use Project, November 2018.

⁵ Los Angeles Department of City Planning, Initial Study, 2159 Bay Street Project, August 2018.