## **Appendix IS-6**

Wastewater Report



# ROMAINE AND SYCAMORE UTILITY INFRASTRUCTURE TECHNICAL MEMORANDUM: WASTEWATER OCTOBER 2022

## PREPARED BY:

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## 1. INTRODUCTION

The Project proposes a new commercial development on an 89,396-square-foot (2.05 acre) Project Site located at 948 Sycamore Avenue in the Hollywood Community Plan Area of the City of Los Angeles (the Project). The Project would include 200,990 square feet of new commercial development comprised of 194,597 square feet of office uses and 6,393 square feet of retail uses. These uses would be located in a new 14-story, 196-foot tall (216 feet to the top of the elevator penthouse) building comprised of one lobby/retail level, five levels of aboveground parking, and eight levels of office uses above four levels of subterranean parking. Upon completion, 267,894 square feet of floor area would be located within the Project Site, including the existing floor area to remain, resulting in a maximum floor area ratio (FAR) of 3:1. The Project would also provide approximately 809 vehicular parking spaces and 64 bicycle parking spaces within four subterranean parking levels and five aboveground levels

The purpose of this report is to analyze the Project's impact on the City's existing wastewater infrastructure.

#### 2. EXISTING CONDITIONS

The existing 66,904-square-foot historic Howard Hughes Headquarters Building would be retained on-site with no alterations or change in use. An existing surface parking lot and three buildings comprising 3,535 square feet would be removed to make way for the new project.

#### 3. EXISTING SEWER INFRASTRUCTURE

The Project Site is located within the Hyperion Sewer System Service Area, which is operated and maintained by the City's Bureau of Sanitation (BOS). The existing design capacity of the Hyperion Sewer System Service Area is approximately 550 million gallons per day (mgd), consisting of 450 mgd at the Hyperion Water Reclamation Plant, 80 mgd at the Donald C. Tillman Water Reclamation Plant, and 20 mgd at the Los Angeles–Glendale Water Reclamation Plant.<sup>1</sup>

The following sewer mains are located within the vicinity of the Project Site (see Exhibit 1):

• Romaine Street: There is a City owned and maintained 8-inch vitrified clay pipe (VCP) mainline in Romaine Street.

City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, January 25 2019, <a href="https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdm1/~edisp/cnt035427.pdf">https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdm1/~edisp/cnt035427.pdf</a>, accessed October 4, 2022.

- **North Sycamore Avenue:** There is a City owned and maintained 8-inch VCP mainline in North Sycamore Avenue.
- North Orange Drive: There are two City owned and maintained mainlines in North Orange Drive; one 10-inch VCP mainline and one 18-inch VCP mainline.

Capacity information is provided on the City of Los Angeles' NavigateLA website:

- Romaine Street: The capacity of the 8-inch sewer line in Romaine Street is:
  - o 0.70968 cubic feet per second (cfs) or 458,678 gallons per day (gpd) entering the system between manhole ID number 49204064 and manhole ID number 49204066.
  - o 0.70968 cfs or 458,678 gpd entering the system between manhole ID number 49204066 and manhole ID number 49204067.
- **North Sycamore Avenue:** The capacity of the 8-inch sewer line in North Sycamore Avenue is:
  - o 1.20854 cfs or 781,100 gpd entering the system between manhole ID number 49204065 and manhole ID number 49204076.
- **North Orange Drive:** The capacity of the 10-inch sewer line in North Orange Drive is:
  - o 1.28673 cfs or 831,635 gpd entering the system between manhole ID number 49204067 and manhole ID number 49204077.

The capacity of the 18-inch sewer line in North Orange Drive is:

o 9.75402 cfs or 6,304,188 gpd entering the system between manhole ID number 49204068 and manhole ID number 49204078.

#### 4. PROPOSED WASTEWATER GENERATION

To determine whether the existing municipal infrastructure can accommodate the Project, the City requires a Wastewater Service Information (WWSI) request. This was submitted to the City and is included herein as Exhibit 2.

As shown in the WWSI, the Project will increase wastewater generation. Future wastewater generation is determined by the size and type of land uses proposed. Table 1, below, shows the sewer generation factors applied for each land use proposed under the Project. As shown below, the Project will generate a net increase of approximately 34,395 gpd of wastewater.

Table 1 – Estimated Proposed Wastewater Generation				
Land Use	Units	Generation Rate (gpd/unit)	Total Wastewater Generation (gpd)	
Existing				
Office	2,913 SF	120 GPD/KGSF	350	
Storage 617 SF		30 GPD/KGSF	19	
	369			
Proposed				
Office	186,197 SF	120 GPD/KGSF	22,344	
Retail – Restaurant (Full Service Indoor)	320 Seats	30 GPD/Seat	9,600	
Fitness Center	4,000 SF	650 GPD/KGSF	2,600	
Lounge	1,200 SF	50 GPD/KGSF	60	
Lobby	3,200 SF	50 GPD/KGSF	160	
	34,764			
	369			
	34,395			

The existing sewer gauging information from BOS has been summarized in Table 2 below. Additionally, sewer capacity analysis has been performed to determine the impact of adding the Project's anticipated sewage generation as shown in the tables above.

Table 2 – Estimated Proposed Wastewater Generation							
Pipe Diameter	Pipe Location	Current Gauging d/D (%)	Current GPD as Gauged	50% Design Capacity (GPD)	75% Design Capacity (GPD)	Current plus Project	d/D with Project
	Orange						
10	Dr.	*	*	416,000	624,000	*	*
	Melrose						
24	Ave.	*	*	9,880,000	14,820,000	*	*
	Melrose						
36	Ave.	39	8,829,600	11,320,000	16,980,000	8,863,995	39.15

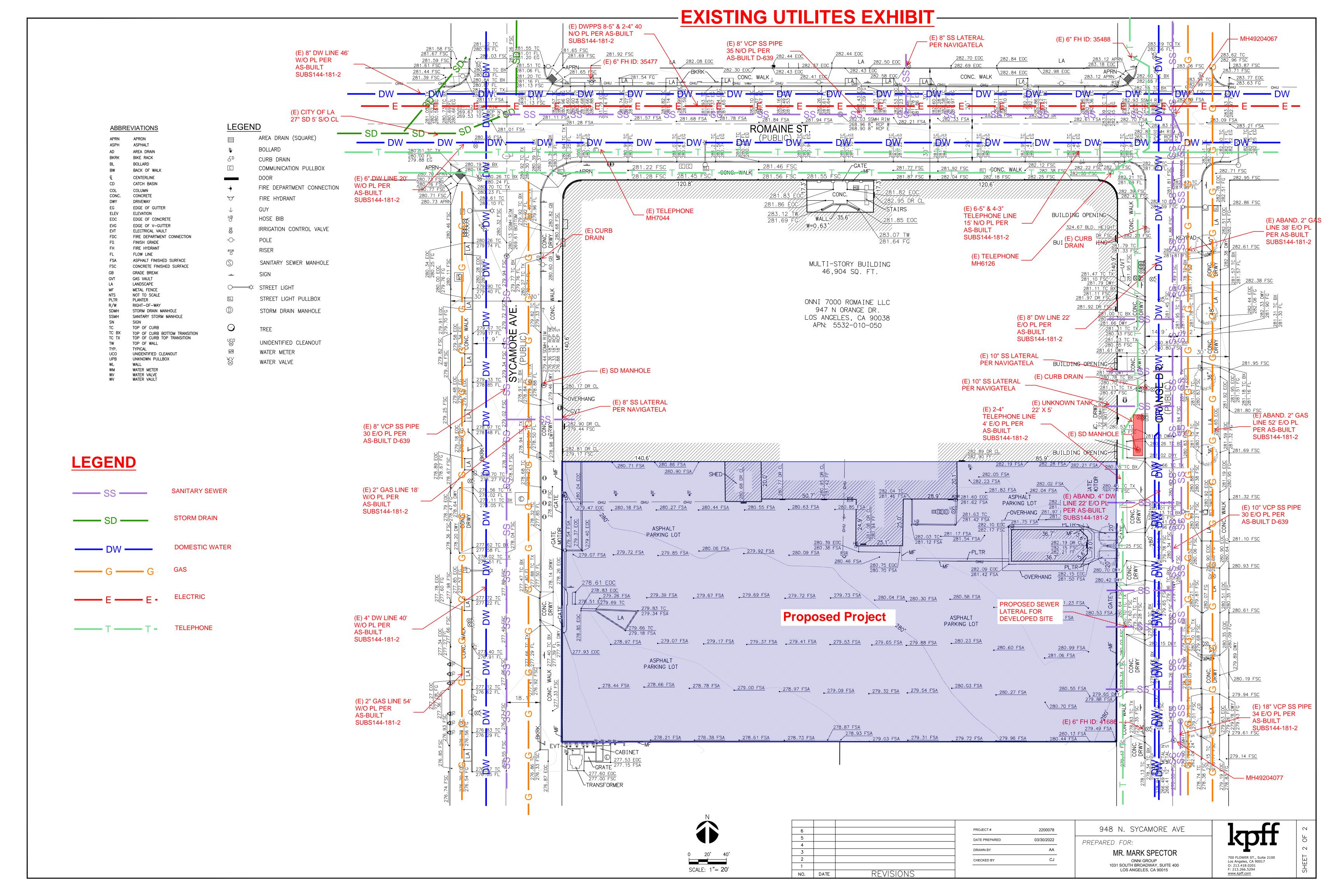
(\*) No Gauging Available.

Based on the City of Los Angeles Sewer Design Manual Part-F, the trigger flow in a sanitary sewer is the quantity of flow that, once reached, would initiate the planning for a relief or replacement sewer. Currently, this trigger flow is considered when the depth of flow reaches three-fourths of the pipe diameter, or a d/D of 75%. As shown in the above analysis, the Project's additional sewer flow is not anticipated to exceed this trigger flow in any of the sewer lines included in the WWSI. Therefore, impacts to sewer infrastructure would be less than significant.

#### 5. CONCLUSION

Based on the calculations provided above, the Project would generate net increased wastewater flow of 34,395 gpd. The BOS Wastewater Engineering Services Division (WESD) has analyzed the Project demands in conjunction with existing conditions and forecasted growth. As shown in the WWSI, the BOS has determined that the sewer system may be able to accommodate the total flow for the Project. Based further upon the calculations above, and the available data, the Project does not exceed trigger flows and impacts to sewer infrastructure would be less than significant.

## **EXHIBIT 1**



## **EXHIBIT 2**

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## CITY OF LOS ANGELES CALIFORNIA



July 19, 2022

Mr. Rickard Severinsson, EIT KPFF Consulting Engineers, 700 South Flower Street, Suite 2100

Los Angeles, CA 90038

BUREAU OF SANITATION

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> WASTEWATER ENGINEERING SERVICES DIVISION 2714 MEDIA CENTER DRIVE LOS ANGELES, CA 90065 FAX: (323) 342-6210 WWW.LACITYSAN.ORG

Dear Mr. Severinsson,

## 948 SYCAMORE - REQUEST FOR WASTEWATER SERVICES INFORMATION

This is in response to your July 15, 2022 letter requesting a review of your proposed mixed-use project located at 948 Sycamore Ave, Los Angeles, CA 90038. The project will consist of office space, restaurants, fitness centers, lounge, and lobby. 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)
Existing			
Office	120 GPD/KGSF	2,913 SF	(350)
Storage	30 GPD/KGSF	617 SF	(19)
Proposed			
Office	120 GPD/KGSF	186,197 SF	22,344

Restaurant	30 GPD/SEAT	320 SEATS	9,600
Fitness Center	650 GPD/KGSF	4,000 SF	2,600
Lounge	50 GPD/KGSF	1,200 SF	60 GPD
Lobby	50 GPD/KGSF	3,200 SF	160
	34,395 GPD		

#### SEWER AVAILABILITY

The sewer infrastructure in the vicinity of the proposed project includes an existing 10-inch line on Orange Dr. The sewage from the existing 10-inch line feeds into a 24-inch line on Melrose Ave before discharging into a 36-inch sewer line on Melrose Ave. Figure 1 shows the details of the sewer system within the vicinity of the project. The current flow levels (d/D) in the 10-inch line and the 24-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	Orange Dr.	*	416,000 GPD
24	Melrose Ave.	*	9.88 MGD
36	Melrose Ave.	39	11.32 MGD

<sup>\*</sup> 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,

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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, 2<sup>nd</sup> 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: <a href="https://eng2.lacity.org/techdocs/stdplans/index.htm">https://eng2.lacity.org/techdocs/stdplans/index.htm</a>

## 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, 2<sup>nd</sup> 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.

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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.

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## 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,

W

Rowena Lau, Division Manager Wastewater Engineering Services Division LA Sanitation and Environment

RL/CD: ra

Attachment: Figure 1 - Sewer Map

c: Julie Allen, LASAN
Michael Scaduto, LASAN
Christine Sotelo, LASAN
Christopher DeMonbrun, LASAN

