

Appendix M

Water Utility Report

**1000 SEWARD MIXED-USE PROJECT
UTILITY INFRASTRUCTURE TECHNICAL REPORT: WATER
APRIL, 2021**

PREPARED BY:

LFA Consulting Engineers
319 Main Street
El Segundo, CA 90245

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I. INTRODUCTION

I.1. PROJECT DESCRIPTION

The 1000 Seward Project (Project) would include the development of a mixed-use commercial project with a total floor area of 150,600 square feet. The Project would include 136,200 square feet of office uses, 12,200 square feet of restaurant uses (of which 6,100 square feet may be used for an entertainment use), and 2,200 square feet of retail uses. The proposed uses would be located within a single ten-story building (with an additional rooftop level for mechanical equipment) with a maximum height of 133 feet to the top habitable floor and approximately 155 feet to the top of rooftop mechanical equipment level. The Project would also provide up to 35,600 square feet of open space which would include terraces, seating, lounge areas, and landscaping. In accordance with the City of Los Angeles (City) Municipal Code (LAMC), the Project would provide 310 vehicular parking spaces and 55 bicycle parking spaces (34 long-term and 21 short-term) within four subterranean levels and four above grade fully enclosed and mechanically ventilated parking levels. The two existing buildings on the Project Site totaling 10,993 square feet along with the surface parking areas would be demolished. Overall, the Project would result in 150,600 square feet of floor area within the Project Site with an FAR of 4.4:1. Project construction is anticipated to be completed in 2025.

I.2. SCOPE OF WORK

As a part of the Environmental Impact Report for the Project, the purpose of this report is to analyze the potential impact of the Project to the existing water infrastructure systems.

2. REGULATORY FRAMEWORK

The City of Los Angeles Department of Water and Power (LADWP) is responsible for providing water supply to the City while complying with local, State, and Federal regulations.

Below are the State and Regional water supply regulations:

- California Code of Regulations (CCR), Title 20, Chapter 4, Article 4, Section 1605 establishes water efficiency standards for all new plumbing fixtures and Section 1608 prohibits the sale of fixtures that do not comply with the regulations.
- 2013 California Green Building Standards Code, CCR, Title 24, Part 11, adopted on January 1, 2014 (CALGreen), requires a water use reduction of 20% above the baseline cited in the CALGreen code book. The code applies to family homes, state buildings, health facilities, and commercial buildings.
- California Urban Water Management Planning Act of 1984 requires water suppliers to adopt an Urban Water Management Plan (UWMP).

- Metropolitan Water District (MWD) official reports and policies as outlined in its Regional UWMP, Water Surplus and Drought Management Plan, Water Supply Allocation Plan, and Integrated Resources Plan.
- LADWP's 2015 UWMP outlines the City's long-term water resources management strategy. The 2015 UWMP was approved by the LADWP Board of Water and Power Commissioners on June 7, 2016.
- Senate Bill 610 and Senate Bill 221, approved on October 9, 2001, require land use agencies to perform a detailed analysis of available water supply when approving large developments. Historically, public water suppliers (PWS) simply provided a "will serve" letter to developers. SB 610, Public Resources Code (PRC) and Section 10910-10915 of the State Water Code requires lead agencies to request a Water Supply Assessment (WSA) from the local water purveyor prior to project approval. If the projected water demand associated with a proposed development is included in the most recent UWMP, the development is considered to have sufficient water supply per California Water Code Section 10910, and a WSA is not required. All projects that meet any of the following criteria require a WSA:
 - 1) A proposed residential development of more than 500 dwelling units.
 - 2) A proposed shopping center or business establishment of more than 500,000 square feet of floor space or employing more than 1,000 persons
 - 3) A proposed commercial office building of more than 250,000 square feet of floor space or employing more than 1,000 persons
 - 4) A proposed hotel or motel of more than 500 rooms
 - 5) A proposed industrial, manufacturing, or processing plant or industrial park of more than 40 acres of land, more than 650,000 square feet of floor area, or employing more than 1,000 persons
 - 6) A mixed use project that falls in one or more of the above-identified categories
 - 7) A project not falling in one of the above-identified categories but that would demand water equal or greater than the amount required by a 500-dwelling unit project.

As this Project does not trigger any of the above thresholds, a WSA is not required for this Project.

3. EXISTING CONDITION

The Project Site is currently developed with two one story buildings totaling 10,993 square feet and surface parking areas. Specifically, the existing uses on the Project Site include a 2,551 square-foot restaurant (1006 Seward Street) and an approximately 8,442 square-foot production space and mastering studio (1000 Seward Street). The remainder of the Project Site is a surface parking lot totaling approximately 20,700 square feet.

3.1. DOMESTIC INFRASTRUCTURE

Based on available record data provided by the City, there are 8-inch water mains in Seward St., Romaine St., and Hudson Ave. Although the site is currently served by the adjacent mains there are no laterals or meters that are shown on the record drawings.

Water consumption estimates have been prepared based on 100 percent of the City of Los Angeles Bureau of Sanitation (BOS) sewerage generation factors and are summarized in Table I below.

Table I – Estimated Existing Water Consumption			
Land Use	Units	Generation Rate (gpd/unit) ^(a)	Total Water Consumption (gpd)
Existing			
Parking Lot	20,700 SF	0	0
Restaurant	100 Seats	30/Seat	3,000
Production Space and Mastering Studio	8,442 SF	50/KGSF ^(b)	422
Subtotal Existing			3,422
^{a)} The average daily flow based on 100% of City of Los Angeles BOS sewerage generation factors.			
^{b)} Average daily flow for “Studio: Film/TV – Regular Use” from the Los Angeles BOS sewerage generation factors.			

3.2. FIRE INFRASTRUCTURE

Based on a water service map provided by the City, Seward Street, Romaine Street and Hudson Avenue each have an 8-inch water main. There are existing hydrants on the southwest corner of Romaine Street and Hudson Avenue, and the northwest corner of Seward Street and Romaine Street. Additional fire hydrants are located in the greater vicinity of the Project Site.

4. SIGNIFICANCE THRESHOLDS

Appendix G of the State of California's California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines) provides a set of sample questions that address impacts with regard to water supply. These questions are as follows:

Would the project:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

In the context of the above questions from the Appendix G of the CEQA Guidelines, the City of Los Angeles CEQA Thresholds Guide (*L.A. CEQA Thresholds Guide*) states that the determination of significance with regard to impacts on water shall be made on a case-by-case basis, considering the following factors:

- The total estimated water demand for the project;
- Whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;
- The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of the project completion; and
- The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

Based on these factors, the Project would have a significant impact if the City's water supplies would not adequately serve the Project or water distribution capacity would be inadequate to serve the proposed use after appropriate infrastructure improvements have been installed.

5. METHODOLOGY

The methodology for determining the significance of a project as it relates to a project's impact on water supply and distribution infrastructure is based on the *L.A. CEQA Thresholds Guide*. This methodology involves a review of the project's environmental setting, project impacts, cumulative impacts, and mitigation measures (if required). The following has been considered as part of the determination for this Project:

Environmental Setting

- Description of major water infrastructure serving the Project Site, including the type of facilities, location and sizes, and any planned improvements.
- Description of the water conditions for the Project area and known improvement plans.

Project Impacts

- Evaluate the Project's water demand, taking into account design or operational features that would reduce or offset water demand.
- Determine what improvements would be needed, if any, to adequately serve the Project.
- Describe the degree to which presently scheduled off-site improvements offset impacts.

This report analyzes the potential impacts of the Project on the existing public water infrastructure by comparing the estimated Project demand with the calculated available capacity of the existing facilities.

The existing and proposed water demand is based upon available Project Site and Project information, and utilizes 100 percent of the BOS sewerage generation factors.

LADWP performed a hydraulic analysis of their water system to determine if adequate fire flow is available to the fire hydrants surrounding the Project Site. LADWP's approach consists of analyzing their water system model in the vicinity of the Project Site. Based on the results, LADWP determines whether they can meet the Project fire hydrant flow needs based on existing infrastructure. See Exhibit 1 for the results of the Information of Fire Flow Availability Request (IFFAR).

In addition, LADWP performed a flow test to determine if available water conveyance exists for future development. LADWP's approach consists of data ranging from available static pressure (meaning how much pressure is available at the source before applying the project's demand), to the available pressure at the maximum demand needed for the Project. Based on the results, LADWP determines whether they can meet the Project needs based on existing infrastructure. See Exhibit 2 for the results of the Service Advisory Requests (SARs).

6. PROJECT IMPACTS

6.1. CONSTRUCTION

Water demand for construction of the Project would be required for dust control, cleaning of equipment, excavation/export, removal and re-compaction, etc. Based on a review of construction projects of similar size and duration, a conservative estimate of

construction water use ranges from 1,000 to 2,000 gallons per day (gpd). Temporary construction water use would be less than the existing water consumption at the Project Site, which is approximately 3,422 gpd per Table I above. This estimated construction-period demand is significantly less than the Project's estimated operational demand, which as described below, can be accommodated by the existing infrastructure. It is therefore anticipated that the existing water infrastructure would similarly meet the limited and temporary water demand associated with construction of the Project. Impacts on the water infrastructure due to construction activity would therefore be less than significant.

The Project will require construction of new, on-site water distribution lines to serve the new building. Construction impacts associated with the installation of water distribution lines would primarily involve trenching in order to place the water distribution lines below surface and would be limited to on-site water distribution, and minor off-site work associated with connections to the public main. Prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depth of all lines. Further, LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. Although no upgrades to the public main are anticipated, minor off-site work is required in order to connect to the public main. Therefore, as part of the Project, a construction management plan would be implemented to reduce any temporary pedestrian and traffic impacts during construction, including maintaining two lanes of travel and ensuring safe pedestrian access and adequate emergency vehicle access. Overall, when considering impacts resulting from the installation of any required water distribution infrastructure, all impacts are of a relatively short-term duration (i.e., months) and would cease to occur once the installation is complete. Therefore, Project impacts on water infrastructure associated with construction activities would be less than significant.

6.2. OPERATION

6.2.1. INFRASTRUCTURE CAPACITY

When analyzing the Project for infrastructure capacity, the projected demands for both fire suppression and domestic water are considered. Although domestic water demand is the Project's main contributor to water consumption, fire flow demands have a much greater instantaneous impact on infrastructure, and therefore are the primary means for analyzing infrastructure capacity. Nevertheless, conservative analysis for both fire suppression and domestic water flows has been completed by LADWP for the Project. See Exhibit I and Exhibit 2 for the results of the IFFAR and SAR, respectively. While the SAR demonstrates that adequate water infrastructure capacity to serve the Project exists, the IFFAR shows that the required fire-flow is currently inadequate.

6.2.2. FIRE WATER DEMAND

Based on fire flow standards set forth in Section 57.507.3 of the LAMC, and as determined by the Los Angeles Fire Department (LAFD), the Project falls within the

Industrial and Commercial category, which has a required fire flow of 12,000 gallons per minute (gpm) from eight hydrants flowing simultaneously with a residual pressure of 20 pounds per square inch. This translates to a required flow of 1,500 gpm for each hydrant. An IFFAR was submitted to LADWP regarding available fire hydrant flow to demonstrate compliance. The completed IFFAR, attached as Exhibit 1, shows 8 nearby hydrants flowing simultaneously for a combined 11,700 gpm. As shown by the IFFAR, the Project Site has inadequate fire flow available to demonstrate compliance with Section 57.507.3 of the LAMC. Fire hydrant F-35522, which is located on the southwest corner of Seward St. and Eleanor Ave. is currently connected to a 6" water main in Eleanor Ave. This fire hydrant is currently able to deliver 1,200 gpm rather than the required 1,500 gpm. LADWP has informed in the IFFAR that relocating the fire hydrant connection to the 8" water main on Seward St. will allow the fire hydrant to produce the required 1,500 gpm.

Furthermore, LAMC Section 57.513, Supplemental Fire Protection, states that:

Where the Chief determines that any or all of the supplemental fire protection equipment or systems described in this section may be substituted in lieu of the requirements of this chapter with respect to any facility, structure, group of structures or premises, the person owning or having control thereof shall either conform to the requirements of this chapter or shall install such supplemental equipment or systems. Where the Chief determines that any or all of such equipment or systems is necessary in addition to the requirements of this chapter as to any facility, structure, group of structures or premises, the owner thereof shall install such required equipment or systems.

Furthermore, the Project will incorporate a fire sprinkler suppression system to reduce or eliminate the public hydrant demands, which will be subject to Fire Department review and approval during the design and permitting of the Project. Based on Section 94.2020.0 of the LAMC that adopts by reference NFPA 14-2013 including Section 7.10.1.1.5, the maximum allowable fire sprinkler demand for a fully or partially sprinklered building would be 1,250 gpm. As noted, an SAR for each of the water mains in each street surrounding the Project Site was submitted to LADWP in order to determine if the existing public water infrastructure could meet the demands of the Project. The approved SARs are attached as Exhibit 2. The SAR for the 8-inch main in Seward Street shows a static pressure of 97 pounds per square inch and that a flow of up to 2,500 gpm can be delivered to the Project Site with a residual pressure of 89 pounds per square inch, which exceeds the 20 pounds per square inch requirement for the surrounding public hydrants. The SARs for the other two water mains show similar results. As shown by the SAR, and through compliance with LAFD and LADWP requirements, the Project's fire flow impacts to water infrastructure would be less than significant.

6.2.3. DOMESTIC WATER DEMAND

Water consumption estimates have been prepared based on 100 percent of the BOS sewerage generation factors for commercial categories and are summarized in Table 2 below. The Project proposes to connect to the existing 8-inch main in Romaine Street for the domestic service. There are two types of connections that can be made to the City main. One type of connection is a combo service, which has one connection to the main and splits to serve both fire and domestic. The second type of connection is to have independent connections for fire and domestic. Refer to Exhibit 2 for the approved SARs for Seward Street, Romaine Street, and Hudson Avenue. DWP added a note that the SAR performed shows that a combo service is acceptable for this Project. In addition, the service will include backflows and be metered separately per City requirements. The approved SARs confirm that sufficient infrastructure capacity is available for the Project. Therefore, the Project's impacts on water supply would be less than significant.

Table 2 – Estimated Proposed Water Consumption			
Land Use	Units	Generation Rate (gpd/unit) ^(a)	Total Water Consumption (gpd)
Existing			
Parking Lot	20,700 SF	0	0
Restaurant	100 Seats	30/Seat	3,000
Production Space and Mastering Studio	8,442 SF	50/KGSF	422
Subtotal Existing			3,422
Proposed			
Office Space	136,200 SF	120/KGSF	16,344
Retail	2,200 SF	25/KGSF	55
Restaurant (new)	529 Seats	30/Seat	15,870
Subtotal Proposed			32,269
Net Increase			28,847
^(a) The average daily flow based on 100% of City of Los Angeles sewerage generation factors.			

6.3. CUMULATIVE IMPACTS

The geographic context for the cumulative impact analysis on water supply is the LADWP service area, which includes the entirety of the City. LADWP, as a public water service provider, is required to prepare and periodically update an Urban Water Management Plan to plan and provide for water supplies to serve existing and projected

demands. The 2015 UWMP prepared by LADWP accounts for existing development within the City, as well as projected growth through the year 2040.

Additionally, under the provisions of Senate Bill 610, LADWP is required to prepare a comprehensive water supply assessment for every new development "project" (as defined by Section 10912 of the Water Code) within its service area that reaches certain thresholds. The types of projects that are subject to the requirements of Senate Bill 610 tend to be larger projects that may or may not have been included within the growth projections of the 2015 UWMP. The water supply assessment for projects would evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed.

Furthermore, through LADWP's 2015 UWMP process and the City's Securing L.A.'s Water Supply, the City will meet all new demand for water due to projected population growth to the year of 2040, through a combination of water conservation and water recycling. These plans outline the creation of sustainable sources of water for the City of Los Angeles to reduce dependence on imported supplies. LADWP is planning to achieve these goals by expanding its water conservation program. To increase recycled water use, LADWP is expanding the recycled water distribution system to provide water for irrigation, industrial use, and groundwater recharge.

Compliance of the Project and future development projects with regulatory requirements that promote water conservation such as the LAMC, including the City's Green Building Code, as well as AB 32, would also assist in assuring that adequate water supply is available on a cumulative basis.

Based on the above, it is anticipated that LADWP would be able to supply the water demands of the Project as well as future growth. Therefore, cumulative impacts on water supply would be less than significant.

7. LEVEL OF SIGNIFICANCE

Based on the analysis contained in this report no significant impacts have been identified to water infrastructure for this Project.

EXHIBIT I



City of Los Angeles

Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement: 12,000 GPM (8 HYDRANTS)

Water Service Map No.: WSM 144-186

LAFD Signature: _____

Date Signed: _____

Applicant: WILL SMITH

Company Name: LABIB FUNK AND ASSOCIATES

Address: 319 MAIN ST., EL SEGUNDO, CA 90245

Telephone: 213.239.9700

Email Address: WILL.SMITH@LABIBFUNK.COM

	F- <u>43014</u>	F- <u>35507</u>	F- <u>35508</u>
Location:	HUDSON AVE. IN BETWEEN ROMAINE AND WILLOUGHBY	SOUTHWEST CORNER OF SEWARD AND SANTA MONICA	SOUTHWEST CORNER OF HUDSON AND SANTA MONICA
Distance from Nearest Pipe Location (feet):	<u>17'</u>	<u>24</u>	<u>23</u>
Hydrant Size:	<u>2 1/2 X 4D</u>	<u>2 1/2 X 4D</u>	<u>4D</u>
Water Main Size (in):	<u>8</u>	<u>16</u>	<u>16</u>
Static Pressure (psi):	<u>132</u>	<u>125</u>	<u>125</u>
Residual Pressure (psi):	<u>70</u>	<u>81</u>	<u>80</u>
Flow at 20 psi (gpm):	<u>1500 gpm</u>	<u>1500 gpm</u>	<u>1500 gpm</u>

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks:

ECMR No. W20210405011

NOTE: THIS IS APPLICATION 2 OF 3

8 FH's simultaneous for a maximum of 11,700 gpm. The velocities in existing 6 inch pipe on Eleanor Ave exceed max. allowable. Recommend enlarging 40 feet of 6 inch pipe to 8 inch pipe or relocate the fire hydrant to the existing 8 inch pipe on Seward St to achieve 1500 gpm from F-35522 and 12,000 gpm total

Water Purveyor: Los Angeles Department of Water & Power

Date: Revised 4/16/2021

Signature: Mark Patterson

Title: Civil Engineering Associate

Requests must be made by submitting this completed application, along with a \$255.00 check payable to:

"Los Angeles Department of Water and Power", and mailed to:

Los Angeles Department of Water and Power

Distribution Engineering Section - Water

Attn: Business Arrangements

P.O. Box 51111 - Room 1425

Los Angeles, CA 90051-5700

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* If you have any questions, please contact us at (213) 367-2130 or visit our web site at <http://www.ladwp.com>.

4/16/21



City of Los Angeles

Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement: 12,000 GPM (8 HYDRANTS)

Water Service Map No.: WSM 144-186

LAFD Signature: _____

Date Signed: _____

Applicant: WILL SMITH

Company Name: LABIB FUNK AND ASSOCIATES

Address: 319 MAIN ST., EL SEGUNDO, CA 90245

Telephone: 213.239.9700

Email Address: WILL.SMITH@LABIBFUNK.COM

	F- 35521	F- 35519	F- 35522
Location:	NORTHWEST CORNER OF SEWARD AND ROMAINE	SOUTHWEST CORNER OF HUDSON AND ROMAINE	SOUTHWEST CORNER OF SEWARD AND ELEANOR
Distance from Nearest Pipe Location (feet):	20	17	20
Hydrant Size:	2 1/2 X 4D	2 1/2 X 4D	2 1/2 X 4D
Water Main Size (in):	8	8	6
Static Pressure (psi):	129	130	127
Residual Pressure (psi):	67	68	62
Flow at 20 psi (gpm):	1500 gpm	1500 gpm	1200 gpm

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks:

ECMR No. W20210405010

NOTE: THIS IS APPLICATION 1 OF 3

8 FH's simultaneous for a maximum of 11,700 gpm. The velocities in existing 6 inch pipe on Eleanor Ave exceed max. allowable. Recommend enlarging 40 feet of 6 inch pipe to 8 inch pipe or relocate the fire hydrant to the existing 8 inch pipe on Seward St to achieve 1500 gpm from F-35522 and 12,000 gpm total

Water Purveyor: Los Angeles Department of Water & Power

Date: Revised 4/16/2021

Signature: Mark Patterson

Title: Civil Engineering Associate

Requests must be made by submitting this completed application, along with a \$255.00 check payable to:

"Los Angeles Department of Water and Power", and mailed to:

Los Angeles Department of Water and Power

Distribution Engineering Section - Water

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P.O. Box 51111 - Room 1425

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City of Los Angeles

Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement: 12,000 GPM (8 HYDRANTS)

Water Service Map No.: WSM 144-186

Applicant: WILL SMITH

Company Name: LABIB FUNK AND ASSOCIATES

Address: 319 MAIN ST., EL SEGUNDO, CA 90245

Telephone: 213.239.9700

Email Address: WILL.SMITH@LABIBFUNK.COM

LAFD Signature: _____

Date Signed: _____

	F- 35505	F- 35518	F- _____
Location:	ROMAIN ST. BETWEEN SEWARD AND LAS PALMAS	SOUTHWEST CORNER OF ROMAINE AND WILCOX	
Distance from Nearest Pipe Location (feet):	18	17	
Hydrant Size:	2 1/2 X 4D	2 1/2 S	
Water Main Size (in):	8	8	
Static Pressure (psi):	129	130	
Residual Pressure (psi):	67	70	
Flow at 20 psi (gpm):	1500 gpm	1500 gpm	

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: _____

ECMR No. W20210405012

NOTE: THIS IS APPLICATION 3 OF 3

8 FH's simultaneous for a maximum of 11,700 gpm. The velocities in existing 6inch pipe on Eleanor Ave exceed max. allowable. Recommend enlarging 40 feet of 6 inch pipe to 8 inch pipe or relocate the fire hydrant to the existing 8 inch pipe on Seward St to achieve 1500 gpm from F-35522 and 12,000 gpm total

Water Purveyor: Los Angeles Department of Water & Power

Date: Revised 4/16/2021

Signature: 

Title: Civil Engineering Associate

Requests must be made by submitting this completed application, along with a \$255.00 check payable to:

"Los Angeles Department of Water and Power", and mailed to:

Los Angeles Department of Water and Power

Distribution Engineering Section - Water

Attn: Business Arrangements

P.O. Box 51111 - Room 1425

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Cyprus

EXHIBIT 2



City of Los Angeles

Los Angeles Department of Water and Power - Water System



SAR NUMBER 82171

Fire Service Pressure Flow ReportSERVICE NUMBER **633011**For: **1000 SEWARD ST** Approved Date: **12-10-2019**Proposed Service **8 INCH** off of the**8** inch main in **HUDSON AVE** on the **WEST** side approximately**100** feet **NORTH** of **NORTH** of **ROMAINE ST** The System maximum pressure is**130** psi based on street curb elevation of **292** feet above sea level at this location.The distance from the DWP street main to the property line is **17** feet**System maximum pressure should be used only for determining class of piping and fittings.****Residual Flow/Pressure Table for water system street main at this location**

Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)
0	97				
815	96				
1185	95				
1470	94				
1720	93				
1940	92				
2140	91				
2325	90				
2500	89				

Meter Assembly Capacities**Domestic Meters**

1 inch = 56 gpm
1-1/2 inch = 96 gpm
2 inch = 160 gpm
3 inch = 220 gpm
4 inch = 400 gpm
6 inch = 700 gpm
8 inch = 1500 gpm
10 inch = 2500 gpm

Fire Service

2 inch = 250 gpm
4 inch = 600 gpm
6 inch = 1400 gpm
8 inch = 2500 gpm
10 inch = 5000 gpm

FM Services

8 inch = 2500 gpm
10 inch = 5000 gpm

These values are subject to change due to changes in system facilities or demands.

Notes: With 700 gpm simultaneous flow from 6" domestic service**This information will be sent to the Department of Building and Safety for plan checking.**

This SAR is valid for one year from 12-10-19. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

For additional information contact the Water Distribution Services Section **WESTERN (213) 367-1225**

ELIA SUN
Prepared by

ELIA SUN
Approved by

144-186
Water Service Map



City of Los Angeles

Los Angeles Department of Water and Power - Water System



SAR NUMBER 82170

Fire Service Pressure Flow ReportSERVICE NUMBER **633010**For: **1000 SEWARD ST** Approved Date: **12-10-2019**Proposed Service **8 INCH** off of the**8** inch main in **ROMAINE ST** on the **NORTH** side approximately**160** feet **EAST** of **EAST** of **SEWARD ST** The System maximum pressure is**130** psi based on street curb elevation of **292** feet above sea level at this location.The distance from the DWP street main to the property line is **34** feet**System maximum pressure should be used only for determining class of piping and fittings.****Residual Flow/Pressure Table for water system street main at this location**

Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)
0	97				
875	96				
1270	95				
1580	94				
1850	93				
2085	92				
2300	91				
2500	90				

Meter Assembly Capacities**Domestic Meters**

1 inch = 56 gpm
1-1/2 inch = 96 gpm
2 inch = 160 gpm
3 inch = 220 gpm
4 inch = 400 gpm
6 inch = 700 gpm
8 inch = 1500 gpm
10 inch = 2500 gpm

Fire Service

2 inch = 250 gpm
4 inch = 600 gpm
6 inch = 1400 gpm
8 inch = 2500 gpm
10 inch = 5000 gpm

FM Services

8 inch = 2500 gpm
10 inch = 5000 gpm

These values are subject to change due to changes in system facilities or demands.

Notes: With 700 gpm simultaneous flow from 6" domestic service**This information will be sent to the Department of Building and Safety for plan checking.**

This SAR is valid for one year from 12-10-19. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

For additional information contact the Water Distribution Services Section **WESTERN (213) 367-1225**

ELIA SUN
Prepared by

ELIA SUN
Approved by

144-186
Water Service Map



City of Los Angeles

Los Angeles Department of Water and Power - Water System



SAR NUMBER 82169

Fire Service Pressure Flow ReportSERVICE NUMBER **633009**For: **1000 SEWARD ST** Approved Date: **12-10-2019**Proposed Service **8 INCH** off of the**8** inch main in **SEWARD ST** on the **EAST** side approximately**70** feet **NORTH** of **NORTH** of **ROMAINE ST** The System maximum pressure is**130** psi based on street curb elevation of **292** feet above sea level at this location.The distance from the DWP street main to the property line is **30** feet**System maximum pressure should be used only for determining class of piping and fittings.****Residual Flow/Pressure Table for water system street main at this location**

Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)
0	97				
815	96				
1185	95				
1470	94				
1720	93				
1940	92				
2140	91				
2325	90				
2500	89				

Meter Assembly Capacities**Domestic Meters**

1 inch = 56 gpm
 1-1/2 inch = 96 gpm
 2 inch = 160 gpm
 3 inch = 220 gpm
 4 inch = 400 gpm
 6 inch = 700 gpm
 8 inch = 1500 gpm
 10 inch = 2500 gpm

Fire Service

2 inch = 250 gpm
 4 inch = 600 gpm
 6 inch = 1400 gpm
 8 inch = 2500 gpm
 10 inch = 5000 gpm

FM Services

8 inch = 2500 gpm
 10 inch = 5000 gpm

These values are subject to change due to changes in system facilities or demands.

Notes: With 700 gpm simultaneous flow from 6" domestic service**This information will be sent to the Department of Building and Safety for plan checking.**

This SAR is valid for one year from 12-10-19. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

For additional information contact the Water Distribution Services Section **WESTERN (213) 367-1225**

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144-186
Water Service Map