INITIAL STUDY

APPENDIX L: UTILITY REPORTS

INITIAL STUDY

APPENDIX L.1: UTILITY INFRASTRUCTURE TECHNICAL REPORT: WATER REPORT

ECHELON STUDIOS
UTILITY INFRASTRUCTURE TECHNICAL REPORT: WATER
APRIL 2023

PREPARED BY:

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Figures

1. INTRODUCTION

1.1. PROJECT DESCRIPTION

The Echelon Studios Project (the "Project") proposes the construction of a new approximately 510,621-square-foot production studio and creative office campus located at 5601 - 5673 West Santa Monica Boulevard, 5612 - 5672 West Virginia Avenue, and 1110 - 1118 North Wilton Place, within the Hollywood Community Plan area (the "Project Site") in the City of Los Angeles (the "City"). The Project has been designed to incorporate a variety of interconnected uses geared toward the entertainment industry in single building, standing up to six stories and 93 feet in height, that would include approximately 109,957 square feet of production studios and related support space, 388,286 square feet of creative office, and 12,378 square feet of restaurant space on a walkable campus. The Project would also include approximately 981 vehicular parking spaces on-site in a two-level subterranean parking garage and approximately 162 bicycle spaces in the first subterranean parking garage level and on the ground floor. The Project would be built on a 225,456-square-foot lot (including 11,373-square-foot alleyway), resulting in a site-wide Floor Area Ratio (FAR) of up to 2.26 to 1. The Project would require a Vesting Tentative Tract Map for the merger of an existing 11,373-square-foot public alley that runs through the Project Site, subdivision resulting in a ground lot and eight air space lots, and a waiver for all dedication and street widening requirements along Wilton Place, Santa Monica Boulevard, and along the public alley. The anticipated outbound haul route from the Project Site would be along Santa Monica Boulevard to the 101 freeway. Approximately 251,000 cubic yards of soil would be excavated and exported from the Project Site.

1.2. SCOPE OF WORK

The purpose of this report is to analyze the potential impacts of the Project to the existing water infrastructure system.

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 pertinent 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 2020 UWMP outlines the City's long-term water resources management strategy. The 2020 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 is a mixed-use development which proposes more than 250,000 square feet of floor space, a WSA was performed by LADWP.

3. EXISTING CONDITIONS

The Project Site is located within Hollywood per the Community Plan. The Project Site consists of an existing asphalt parking lot, concrete alley, and concrete building with a total area of approximately 225,456 square feet (5.18 acres). The Project fronts Santa Monica Blvd, North Wilton Place, Virginia Ave, and North Saint Andrews Place. LADWP owns and maintains the water infrastructure to the Project Site.

3.1. DOMESTIC INFRASTRUCTURE

Based on a water service map provided by LADWP (Figure 1), there is a 16-inch water main in Wilton Place and Santa Monica Blvd, a 4-inch water line in Virginia Avenue, and a 6-inch water line in Saint Andrews Place. Per discussion with LADWP, we understand that a 6-inch water line was installed in Virginia Avenue in 2021.[1] See Exhibit 5 for email correspondence with LADWP.

As described above, the Project Site is currently composed of an asphalt parking lot, concrete alley, and concrete building. Current water demands are zero as the property is vacant.

3.2. FIRE INFRASTRUCTURE

Based on a water service map provided by LADWP (Figure 1), there is a 16-inch water main in Wilton Place and Santa Monica Blvd, a 4-inch water line in Virginia Avenue, and a 6-inch water line in Saint Andrews Place. Per discussion with LADWP, we understand that a 6-inch water line was installed in Virginia Avenue in 2021.

Additionally, there are three existing public hydrants in the vicinity of the Project Site. Based on initial conversations with LAFD, three additional fire hydrants are to be installed as part of the Project: one at the corner of Santa Monica Blvd. & Wilton Pl., one mid-block on Virginia Ave., and one mid-block on Santa Monica Blvd. See Figure 1 for approximate hydrant locations to be coordinated with Los Angeles Fire Department (LAFD). See Exhibit 1 for the IFFAR Results.

[1] May 5, 2022. Amy Truong, KPFF. Elia Sun, LADWP.

4. SIGNIFICANCE THRESHOLDS

In accordance with Appendix G of the State CEQA Guidelines, a project would have a significant impact related to water infrastructure capacity if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects; or

- Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

In assessing the Project's potential impacts related to water infrastructure capacity, the City has determined to use Appendix G as the thresholds of significance. The analysis below utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in determining significance under the Appendix G Threshold questions. The L.A. CEQA Thresholds Guide identifies the following factors to evaluate water capacity infrastructure:

- 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;

This guidance is applicable to the Project and as such is used to determine if the Project would have significant water impacts.

Based on these factors, the Project would have a significant impact if the City's water infrastructure would not adequately serve the Project or if the 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 potential significance of a project's impact on water infrastructure capacity 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 significance 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 supply 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 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 near 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 submitted 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's needs based on existing infrastructure. See Exhibit 2 & 3 for the results of the Service Advisory Requests (SARs).

6. PROJECT IMPACTS

6.1. CONSTRUCTION

Water for construction of the Project would be required for dust control, cleaning of equipment, excavation/export, removal, and re-compaction, etc. Based on 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). The estimated construction-period demand would be 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.

The Project would require construction of new, on-site water distribution lines to serve the new buildings. Construction impacts associated with the installation of water distribution lines would primarily involve trenching 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. LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. Further, construction associated with new water distribution lines would occur as part of Project construction generally, which, as concluded in the MND, would result in less than significant impacts. Impacts on the water infrastructure due to construction activity would therefore be less than significant.

6.2. OPERATION

6.2.1. INFRASTRUCTURE CAPACITY

When analyzing the Project's potential impacts on existing infrastructure capacity, the Project's estimated operational demands for both fire suppression and domestic water are considered. Although domestic water demand is the Project's main contributor to water consumption in the long term, fire flow demands have a much greater instantaneous impact on infrastructure, and therefore are the primary means for analyzing infrastructure capacity. Conservative analyses for both fire suppression and domestic water flows have been completed by LADWP for the Project.

6.2.2. FIRE WATER DEMAND

Article 7 of the Fire Protection and Prevention, Section 57.507 of the LAMC sets the fire flow requirements for the Project. These guidelines, in addition to the requirements set by the City Fire Chief, will prescribe the fire flow requirements and hydrant spacing requirements for the Project. Per Section 57.513, the Fire Chief also determines the supplemental fire protection systems that will be required for the Project. Supplemental fire protection systems consist of the following:

- Fire protection signaling systems
- Fire hydrants
- Automatic fire extinguishing systems
- Smoke removal systems

- Standpipe systems

Based on fire flow standards set forth in Section 57.507.3 of the LAMC, the Project Site falls within Industrial and Commercial, which requires fire flow of 6,000 to 9,000 gallons per minute (gpm) from six hydrants flowing simultaneously. LADWP determined on June 22, 2021 that there was not sufficient pressure within the existing 4" water main in Virginia Ave., and noted that the water infrastructure would need to be upgraded to a larger size to provide the necessary flow for the Project. A 6" water main has since been installed in Virginia Ave. by LADWP. Additionally, LAFD determined that three additional fire hydrants are to be installed as part of the Project: one at the corner of Santa Monica Blvd. & Wilton Pl., one mid-block on Virginia Ave., and one mid-block on Santa Monica Blvd. Following the infrastructure upgrade and future addition of the three fire hydrants noted, LADWP determined that the water system would be capable of delivering a fire flow of 7,300 gpm from six fire hydrants running simultaneously with a minimum residual pressure of 20 pounds per square inch (psi) to the Project. See Exhibit 1 for the IFFAR results.

The Project would incorporate a fire sprinkler suppression system to reduce or eliminate the demands on public hydrants. The fire sprinkler suppression system would 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, SARs and IFFARs were submitted to LADWP to determine if the existing public water infrastructure could meet the demands of the Project. The SAR results show that 2,500 gpm can be delivered to the Project via North Wilton Place with a minimum residual pressure of 82 psi, and that 2,500 gpm can be delivered to the Project via Santa Monica Blvd with a minimum residual pressure of 80 psi. See Exhibit 1 & 2-3 for the results of the IFFARs and SARs respectively. As shown by the SARs and IFFARs, fire flow impacts to LADWP's water infrastructure capacity would be less than significant.

6.2.3. DOMESTIC WATER DEMAND

The Project water consumption estimates are based on the WSA prepared and approved by LADWP (see Exhibit 8 for WSA water demand table). LADWP based the WSA water demand on 100 percent of the LASAN sewerage generation factors for the Project's various uses and are summarized in Table 2 below. The Project proposes to connect to the existing 16-inch main in Santa Monica Blvd and the existing 16-inch main in North Wilton Place with two 4-inch laterals for domestic water and two 8-inch laterals for fire water. The SAR results show that these connections would be adequately sized to simultaneously accommodate fire demand and domestic demand. There are two types of connections that could be made to the City main. One type of connection would be a combo service, which has one connection to the main and splits to serve both fire and

domestic. The second type of connection would be to have independent connections for fire and domestic. Lastly, the services would include backflow preventers and would be metered separately per City requirements. Therefore, the Project's impacts on water infrastructure capacity would be less than significant.

Table 1 – Estimated Proposed Water Demand[a]					
Land Use[a]	**Units**	**Generation Rate (gpd/unit)[b]**	**Base Demand (gpd)**	**Required Ordinances Water Savings[c]**	**Proposed Water Demand (gpd)**
Office & Production Office[d] (P1, Level 1, 2, 3,4, 5, 6)	394,905 sf	0.12	47,389		
Sound Stages (Level 1)	77,756 sf	0.05	3,888		
Mill (Level 1)	11,468 sf	0.05	573		
Flex Stage (Level 1)	14,113 sf	0.05	706		
Restaurant Seating Area (Indoor) [e] (Level 1 and 3)	545 seats	30/seat	16,350		
Restaurant Seating Area (Outdoor) [e] (Level 1 and 3)	280 seats	30/seat	85,400		
Basecamp[f]	53,505 sf	0.03	1,605		
Base Demand Adjustment[g]			1,366		
Commercial Total			**80,277**	**4,923**	**75,354**
Landscaping and Pools[h]	19,751 sf		1,896	1,043	853
Covered Parking[i]	489,092 sf	0.02	322	0	322
Cooling Tower - Weekday	250 ton	16.30	4,074		
Cooling Tower - Weekend	50 ton	6.52	326		
Cooling Tower Total[j]			**4,400**	**880**	**3,520**
Proposed Subtotal			**86,895**	**6,846**	**80,049**
Less Existing to be Removed Total					0
Less Additional Conservation[k]					-138
Net Additional Water Demand					**79,911**

(a) Provided by City of Los Angeles Department of City Planning in the Request for Water Supply Assessment letter and Scope Confirmation e-mail. See Appendix A. Proposed Uses that do not have additional water demands are not shown here.

(b) Indoor water uses are based on 2012 City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table available at https://engpermitmanual.lacity.org/sewer-s-permits/technical-procedures/sewage-generation-factors-chart

(c) The proposed development land uses will conform to City of Los Angeles Ordinance No. 186488, 184248, 2020 Los Angeles Plumbing Code, and 2020 Los Angeles Green Building Code.

(d) Office area consists of 388,286 square feet (sf) of general offices and 6,619 sf of Production Office.

(e) Restaurant Space. Total Indoor Restaurant Floor Area is 8,172 sf. Total Outdoor Restaurant Area is 4,206 sf. A factor of 1 seat for every 15 sf was applied to determine the total number of seats for the indoor and outdoor space.

(f) Basecamp areas are dedicated to media production uses, parking, loading, and storage, where mobile facilities related to production are temporarily staged. Basecamp areas are not included in the total floor area.

(g) Base Demand Adjustment is the estimated savings due to Ordinance No. 180822 accounted for in the current version of Bureau of Sanitation Sewer Generation Rates.

(h) Landscaping & water features' water use is estimated per California Code of Regulations Title 23. Division 2. Chapter 2.7. Model Water Efficient Landscape Ordinance. Water feature has an 8' diameter and surface area of 50 sf. Total landscaping is 19,701 sf.

(i) Auto parking water uses are based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table, and 12 times/year cleaning assumption.

(j) The 250 ton cooling tower services the bungalow offices and will operate 10 to 12 hours/day from Monday through Friday throughout the year. For the weekend cooling load of intermittent operations, 20 percent of the weekday cooling load is assumed for a conservative estimate of 50 tons. The others areas of the building will be served by air-cooled systems.

(k) Water conservation due to additional conservation commitments agreed by the Applicant. See Table II.

6.3. CUMULATIVE IMPACTS

The geographic context for the cumulative impact analysis on water infrastructure 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 (UWMP) to plan and provide for water infrastructure to serve existing and projected demands. The 2020 UWMP prepared by LADWP accounts for existing development within the City, as well as projected growth through the year 2045. Demographic projections for the LADWP service area are based on the Southern California Association of Governments' (SCAG) demographic growth forecast for their 2020 Regional Transportation Plan (RTP)[2]. LADWP adopted these demographic

[2] https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzyy/~edisp/opladwpccb762836.pdf

projections for water demand forecast in their respective UWMPs for projecting future water demand and, therefore, future water infrastructure needs.[3] The MND concludes that the Project is consistent with the SCAG 2020 RTP/SCS. Therefore, the Project is consistent with LADWP's 2020 UWMP.

In addition, there are 7 related projects, which consist of, but are not limited to, residential, restaurants, office, pharmacy, and retail. The total increase in water demand for the related projects would be approximately 2.8 million gallons per day (mgd). Combined with the Project, the increase in water demand would be approximately 3.24 mgd. Refer to Exhibit 4 for a breakdown of the related projects and associated water consumption. The 2020 UWMP has estimated a water demand of 475 mgd in the City of Los Angeles by the year 2025, which means the Project combined with the related projects would account for approximately 0.68 percent of the total daily demand.

Based on the above, it is anticipated that LADWP would have adequate infrastructure to accommodate the Project as well as related Projects. Therefore, impacts on water infrastructure capacity 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.

[3] "Los Angeles Department of Water and Power Urban Water Management Plan." *Water*, LADWP, https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzyy/~edisp/opladwpccb762836.pdf. P. ES-6

EXHIBIT 1

EXHIBIT 1: LADWP INFORMATION OF FIRE FLOW AVAILABILITY RESULTS (IFFAR)

City of Los Angeles

Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

Water Service Map No.: W144-192

LAFD Fire Flow Requirement: 6,000 to 9,000 GPM from 4 to 6 hydrants flowing simultaneously

LAFD Signature:

Date Signed:

Applicant: Amy Truong

Company Name: KPFF Consulting Engineers

Address: 700 S Flower Street, Suite 2100, Los Angeles 90017

Telephone: (213) 418-0201

Email Address: amy.truong@kpff.com

	FH1 (Proposed)	FH2 (Proposed)	FH-3 (Proposed)
Location:	North East corner of Santa Monica Blvd and Wilton Place	North of Santa Monica Blvd	South of Virginia Ave
Distance from Neareast Pipe Location (feet):	20'	57.5'	22'
Hydrant Size:	2 1/2 x 4" D	2 1/2 x 4" D	2 1/2 x 4" D
Water Main Size (in):	16"	16"	6"
Static Pressure (psi):	112 psi	114 psi	114 psi
Residual Pressure (psi):	86 psi	84 psi	83 psi
*Flow at 20 psi (gpm):	1,500 gpm	1,500 gpm	1,100 gpm

NOTE: Data obtained from hydraulic analysis using peak hour. *Six fire hydrants flowing simultaneously

Remarks: 6 inch ML in Virginia Ave (PLR 109523, 2021) ECMR No. W20220317013

Based on a conversation with LAFD, we expect 3 new hydrants to be installed at the following locations: one at the corner of Santa Monica Blvd & Wilton Place, one at the midblock of Virginia Avenue, and one at the midblock of Santa Monica Blvd. We have also submited SAR applications with the proposed Fire Hydraints noted above.

Water Purveyor: **Los Angeles Department of Water & Power**
Water Distribution - Western District

Date: March 29, 2022

Signtature:

Title: CE Associate

Requests must be made by submitting this completed application, along with a $271.00 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
111 North Hope Street - Room 1425
Los Angeles, CA 90012

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

City of Los Angeles
Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

Water Service Map No.: W144-192

LAFD Fire Flow Requirement: 6,000 to 9,000 GPM from 4 to 6 hydrants flowing simultaneously

LAFD Signature: _____

Date Signed: _____

Applicant: Amy Truong

Company Name: KPFF Consulting Engineers

Address: 700 S Flower Street, Suite 2100, Los Angeles 90017

Telephone: (213) 418-0201

Email Address: amy.truong@kpff.com

	F- 35559	F-35557	F - 41679
Location:	North West corner of St Andrews PL and Virginia Ave	South West corner of Virginia Ave and Wilton PL	North Western corner of Santa Monica Blvd and St
Distance from Neareast Pipe Location (feet):	20'	22'	16'
Hydrant Size:	2 1/2 x 4D	2 1/2 x 4D	2 1/2 x 4D
Water Main Size (in):	6"	6"	6"
Static Pressure (psi):	115 psi	114 psi	112 psi
Residual Pressure (psi):	82 psi	85 psi	84 psi
* Flow at 20 psi (gpm):	1,000 gpm	1,500 gpm	700 gpm

NOTE: Data obtained from hydraulic analysis using peak hour. * Six fire hydrants flowing simultaneously.

Remarks: 6 inch ML in Virginia Ave (PLR 109523. 2021)

ECMR No. W20220322007

Based on a conversation with LAFD, we expect 3 new hydrants to be installed at the following locations: one at the corner of Santa Monica Blvd & Wilton Place, one at the midblock of Virginia Avenue, and one at the midblock of Santa Monica Blvd. We have also submited SAR applications with the proposed Fire Hydraints noted above.

Water Purveyor: **Los Angeles Department of Water & Power**
Water Distribution- Western District

Date: March 29, 2022

Signtature: _____

Title: CE Associate

Requests must be made by submitting this completed application, along with a $271.00 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
111 North Hope Street - Room 1425
Los Angeles, CA 90012

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

EXHIBIT 2

EXHIBIT 2: LADWP RESULTS (WILTON PLACE)

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **96192**

Fire Service Pressure Flow Report

SERVICE NUMBER **638499**

For: **5601 SANTA MONICA BLVD** Approved Date: **2-7-2022**

Proposed Service **8 INCH** off of the

16 inch main in **WILTON PL** on the **EAST** side approximately

50 feet **NORTH** of **NORTH** of **SANTA MONICA BLVD** The System maximum pressure is

115 psi based on street curb elevation of **326** feet above sea level at this location.

The distance from the DWP street main to the property line is **40** 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	84				
1720	83				
2500	82				

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

Notes: With 400 gpm simujltaneous flow from 4" domestic service

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

This information will be sent to the Department of Building and Safety for plan checking.

This SAR is valid for one year from 02-07-22. 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	**ELIA SUN**	**144-192**
Prepared by	**Approved by**	**Water Service Map**

EXHIBIT 3

EXHIBIT 3: LADWP RESULTS (SANTA MONICA BLVD)

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **96259**

Fire Service Pressure Flow Report

SERVICE NUMBER **638536**

For: **5601 SANTA MONICA BLVD** Approved Date: **2-10-2022**

Proposed Service **8 INCH** off of the

16 inch main in **SANTA MONICA BLVD** on the **NORTH** side approximately

45 feet **WEST** of **WEST** of **ST. ANDREWS PL** The System maximum pressure is

114 psi based on street curb elevation of **328** feet above sea level at this location.

The distance from the DWP street main to the property line is **61** 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	83				
1380	82				
2010	81				
2500	80				

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 400 gpm simultaneous flow from 4" 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 02-10-22. 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	ELIA SUN	144-192
Prepared by	**Approved by**	**Water Service Map**

EXHIBIT 4

Related Projects - Estimated Water Consumption Table			
Land Use	Units	Consumption Rate[(2)] (gpd/unit)	Total Consumption (gpd)
Retail	51,674	50/1000 SF	2,583,700
Office	180,073	120/1000 SF	21,609
Apartment	1,307	150/DU[(1)]	196,050
		TOTAL	2,801,359

SF= SQUARE FEET, GPD = GALLONS PER DAY, DU= DWELLING UNIT

[1] For calculation purposes all units assumed as 2-Bedroom

[2] Consumption rates based on 100% of Bureau of Sanitation Sewer Generation Factors for Residential and Commercial Categories. https://engpermitmanual.lacity.org/sewer-s-permits/technical-procedures/sewage-generation-factors-chart

EXHBIT 5

Matthew Gooden

From: Sun, Elia <Elia.Sun@ladwp.com>
Sent: Thursday, May 5, 2022 12:42 PM
To: Amy Truong
Cc: Matthew Gooden; Miriam Huston
Subject: RE: [EXTERNAL] RE: LAFD Fire Flow Reports for Santa Monica Virginia Wilton Pl

Dear applicant,

In Virginia Ave from Western Ave to Van Ness Ave, we installed a 6 inch water main in 2021. The PLR refers to unofficial as built drawing number.

Thank you

Vielen Dank
Elia Sun
BSME, Civil PE
Western District
Water Distribution. LADWP
213-367-1224

From: Amy Truong <amy.truong@kpff.com>
Sent: Friday, April 29, 2022 8:54 AM
To: Sun, Elia <Elia.Sun@ladwp.com>
Cc: Matthew Gooden <matthew.gooden@kpff.com>; Miriam Huston <miriam.huston@kpff.com>
Subject: [EXTERNAL] RE: LAFD Fire Flow Reports for Santa Monica Virginia Wilton Pl

Hi Elia,

Thanks for providing the IFFARs. Under the remarks, you had noted a “6 inch ML in Virginia Ave (PLR 109523, 2021)”. Can you please confirm what document the PLR is referring to?

In addition, we had previously submitted a SAR to LADWP which stated there was a 4 inch ML in Virginia. Does the PLR document listed above show the main line upgrade in Virginia?

Thanks!

Amy Truong, PE (she/her)

O 213.418.0201 D 213.266.5206
700 South Flower Street Suite 2100
Los Angeles, CA 90017
Amy.truong@kpff.com
Civil| Structural| Survey| Protective Design| Transportation & Infrastructure

From: Sun, Elia <Elia.Sun@ladwp.com>
Sent: Tuesday, March 29, 2022 11:56 AM
To: Amy Truong <amy.truong@kpff.com>
Subject: RE: LAFD Fire Flow Reports for Santa Monica Virginia Wilton Pl

Dear applicant,

Attached are LAFD Fire Flow reports and receipt for above location. Please let us know if you require additional info.

Thank you very much

Best regards

Elia Sun
BSME, Civil PE
Western District
Water Distribution. LADWP
213-367-1224

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FIGURE 1

FIGURE 1 - LADWP WATER MAP & FIRE HYDRANT EXHIBIT