APPENDIX P
Utilities Documentation

P-1 Utility Infrastructure Technical Report

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HOLLYWOOD CENTER

UTILITY INFRASTRUCTURE TECHNICAL REPORT: WATER, WASTEWATER AND ENERGY

APRIL 1, 2020

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1. INTRODUCTION

1.1. PROJECT DESCRIPTION

MCAF Vine LLC, 1750 North Vine LLC, 1749 North Vine Street LLC, 1770 Ivar LLC, 1733 North Argyle LLC, and 1720 North Vine LLC (collectively, the Applicant) proposes a new mixed-use development (Project) on an approximately 4.46-acre (194,495 square feet) site (Project Site) in the Hollywood Community Plan Area of the City of Los Angeles (City). The Project Site is bounded by Yucca Street on the north, Ivar Avenue on the west, Argyle Avenue on the east, and Hollywood Boulevard on the south, and is bifurcated by Vine Street. The portion of the Project located between Ivar Avenue and Vine Street is identified as the "West Site," and the portion located between Vine Street and Argyle Avenue is identified as the "East Site." The Project Site includes 10 individual parcels, and is currently occupied by a building leased by American Musical and Dramatic Academy (AMDA) and surface parking lot on the West Site, and the Capitol Records Building and Gogerty Building occupied by Capitol Records (the Capitol Records Complex) and a surface parking lot that serves the Capitol Records Complex and general public parking on the East Site.

The Capitol Records Complex would be preserved, although portions of its supporting parking area, along with some existing parking not adjacent to the Capitol Records Complex, would be reconfigured and relocated to the East Site five-floor subterranean and grade-level parking garage. The remaining surface parking uses on the Project Site would be removed in order to develop a mix of land uses, including residential uses (market-rate and senior affordable housing units), commercial uses, parking, and associated landscape and open space amenities. Four new buildings are proposed, including a 35-story building on the West Site (West Building), a 46-story building on the East Site (East Building), and two 11-story senior housing buildings (West Senior Building and East Senior Building) set aside for extremely-low and very-low income households (one senior housing building on each site). The Project would develop approximately 1,287,150 square feet of developed floor area, including 1,005 residential housing units (872 market-rate units and 133 senior affordable housing units) totaling approximately 1,256,974 square feet of residential floor area, approximately 30,176 square feet of commercial floor area (retail and restaurant uses), approximately 160,707 square feet of open space and amenities, approximately 1,521 vehicle parking spaces, and approximately 551 bicycle parking spaces. The Project would have a floor-area ratio (FAR) of 6.975:1 which includes the existing 114,303 square-foot Capitol Records Complex (consisting of the 92,664 square-foot Capitol Records Building and 21,639 square-foot Gogerty Building). The total buildable area for the Project Site would be 1,401,453 square feet.

Under a proposed Hotel Option associated with the East Site, the Project would replace 104 residential units within East Building levels 3 through 12 with a 220-room hotel, with no change to building heights and massing. The number of affordable residential units within the East Senior Building would be reduced by 17 units and the height of the building would be reduced from 11 stories to 9 stories. Overall, under the East Site Hotel Option there would be approximately 1,272,741 square feet of developed floor area, including 884 residential housing units (768 market-rate units and 116 senior affordable housing units)

totaling approximately 1,112,287 square feet of residential floor area, a 220-room hotel with approximately 130,278 square feet of floor area, approximately 30,176 square feet of other commercial floor area, approximately 147,366 square feet of open space and amenities, 1,521 vehicle parking spaces, and 554 bicycle parking spaces. The East Site Hotel Option would have a FAR of 6.903:1 which includes the existing Capitol Records Complex, for a total buildable area for the Project Site would be 1,387,044 square feet.

Assuming the two sites are built one after another, construction of the Project would be completed over an approximately six-year period. Activities would be phased, beginning on the West Site as early as 2021 and on the East Site in approximately 2024. Construction timing could vary for both sites and could potentially overlap on the West and East Sites, and the Environmental Impact Report (EIR) will analyze the most conservative construction schedule. Project construction would require grading and excavation activities down to a maximum depth of 82 feet below existing grade for building foundations and five levels of subterranean parking. The Project would export approximately 542,300 cubic yards of soil and generate approximately 1,616 cubic yards of demolition debris (asphalt, interior and exterior building demolition, and general demolition debris). No import of soil is proposed.

1.2. SCOPE OF WORK

As a part of the EIR for the Project, the purpose of this report is to analyze the potential impact of the Project to the existing water, wastewater, and energy infrastructure system.

2. EXISTING CONDITION

The majority of the site is currently surface parking. While there is an existing 1,237 square-foot storage building on the Project Site that would be demolished, it is currently leased by AMDA as a work space, and there is minimal regular water use. Additionally, the 114,303 square-foot Capitol Records Complex would not be affected by the Project. Therefore, for conservative purposes, it is assumed that there are no existing water demand, sewer flows, and energy demand on the portions of the Project Site that would be demolished for the Project. All new water demand, sewer flows, and energy demand associated with the Project would be an increase.

2.1. WATER

EXISTING WATER INFRASTRUCTURE

The Los Angeles Department of Water and Power (LADWP) maintains water infrastructure to the Project Site. The following information is based on water service maps provided by LADWP:

- **Yucca Street:** There is a northerly 12-inch water line in Yucca Street between Argyle Avenue and Vine Street. There are two water lines between Vine Street and Ivar Street; the northerly water line is 8-inches and the southerly water line is 24-inches.

- **Ivar Avenue:** There is a westerly 16-inch water line in Ivar Avenue between Yucca Street and Hollywood Boulevard.

- **Vine Street:** There is a westerly 24-inch water line in Vine Street between Yucca Street and Hollywood Boulevard.

- **Argyle Avenue:** There is a westerly 8-inch water line in Argyle Avenue between Yucca Street and Hollywood Boulevard.

EXISTING FIRE INFRASTRUCTURE

Based on information provided on the City's NavigateLA website, there are several existing fire hydrants in the immediate vicinity of the Project Site. The locations of the fire hydrants are described below:

- **Yucca Street:** There are four existing fire hydrants located along Yucca Street: one at the intersection of Yucca Street and Ivar Avenue, two at the intersection of Yucca Street and Vine Street, and one at the intersection of Yucca Street and Argyle Ave.

- **Ivar Avenue:** There is a fire hydrant located approximately 410 feet south of Yucca Street.

- **Vine Street:** Two fire hydrants are located along Vine Street approximately 315 and 390 feet south of Yucca Street.

- **Argyle Avenue:** There is a fire hydrant located approximately 375 feet south of Yucca Street.

2.2. WASTEWATER

The Project Site is located within the Hyperion Sewer System Service Area, which is operated and maintained by the City's Bureau of Sanitation (LASAN). 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 Treatment Plant, 80 mgd at the Donald C. Tillman Water Reclamation Plant, and 20 mgd at the Los Angeles–Glendale Water Reclamation Plant.[1] The sewerage generated at the Site will be treated within the Hyperion Sewer System Service Area.

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[1] City of Los Angeles Department of Public Works, Bureau of Sanitation, Water Reclamation Plants, https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p?_adf.ctrl-state=oep8lwkld_4&_afrLoop=28344654751341747#, accessed August 6, 2018.

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

- **Yucca Street:** There is a 12-inch VCP sewer line between Ivar Avenue and Argyle Avenue that flows westward. There is an 8-inch VCP sewer line between Vine Street and Argyle Avenue that flows westward[2].

- **Ivar Avenue:** There are two sewer lines in Ivar Avenue between Yucca Street and Hollywood Boulevard.

    - The easterly line is an 8-inch VCP sewer line between Yucca Street and Hollywood Boulevard that flows southward.

    - The westerly line is a 12-inch VCP sewer line between Yucca Street and Hollywood Boulevard that flows southward.

- **Vine Street:** There is an 8-inch vitrified clay pipe (VCP) sewer line in Vine Street between Yucca Street and Hollywood Boulevard that flows southward.

- **Argyle Avenue:** There are two sewer lines in Argyle Avenue between Yucca Street and Hollywood Boulevard.

    - The westerly line is an 8-inch VCP sewer line with a terminal point located south of Yucca Street which flows south towards Hollywood Boulevard.

    - The easterly line is an 8-inch VCP sewer line which collects flow from the sewer line in Carlos Avenue to the east. The line flows south to connect to the westerly 8-inch VCP line at manhole ID number 46914202.

Per capacity information provided on the City's NavigateLA website:

- **Yucca Street:** The capacity of the 12-inch VCP sewer line is:

    - 2.092 cfs or 1,352,094 gpd entering the system between manhole ID number 46910234 and 46909315.

- **Ivar Avenue:**

    The capacity of the easterly 8-inch VCP sewer line in Ivar Avenue is:

    - 1.276 cfs or 824,700 gpd entering the system between manhole ID number 46909314 and 46909333.

[2] The 12 and 8-inch VCP sewer mains that are located in Yucca Street north of the Capitol Records Complex Site (to be protected in place) between Vine Street and Argyle Avenue is not included in the capacity discussion due to the sewer mains in this section being too far from the East Site improvements and any potential wye connections.

- 1.679 cfs or 1,085,166 gpd entering the system between manhole ID number 46909333 and 46913018.

The capacity of the westerly 12-inch VCP sewer line in Ivar Avenue is:

- 5.806 cfs or 3,752,515 gpd entering the system between manhole ID number 46909315 and 46909332.
- 5.125 cfs or 3,312,374 gpd entering the system between manhole ID number 46909332 and 46913017.

- **Vine Street:** The capacity of the 8-inch VCP sewer line in Vine Street is:
  - 2.244 cubic feet per second (cfs) or 1,450,335 gallons per day (gpd) entering the system between manhole ID number 46910236 and manhole ID number 46914001.
  - 1.538 cfs or 994,035 gpd entering the system between manhole ID number 46914001 and 46914015.
- **Argyle Avenue:**

  The capacity of the westerly 8-inch VCP sewer line in Argyle Avenue is:

  - 2.882 cfs or 1,862,685 gpd entering the system between manhole ID number 46910259 and 46914002.
  - 1.836 cfs or 1,186,637 gpd entering the system between manhole ID number 46914002 and 46914017.

  The capacity of the easterly 8-inch VCP sewer line in Argyle Avenue is:

  - 0 cfs/gpd entering the system between manhole ID number 46914204 and 46914203.
  - 0 cfs/gpd entering the system between manhole ID number 46914203 and 46914202.

2.3. ENERGY

ELECTRICITY

LADWP is responsible for providing power supply to the City while complying with Local, State, and Federal regulations.

LADWP's Power system is the nation's largest municipal electric utility, and serves a 465-square-mile area in Los Angeles and much of the Owens Valley. The system supplies more than 26 million megawatt-hours (MWh) of electricity a year for the City of Los Angeles'

1.4 million residential and business customers as well as over 5,000 customers in the Owens Valley. LADWP has over 7,460 megawatts (MW) of generation capacity from a diverse mix of energy sources including Renewable energy, Natural Gas, Nuclear, Large Hydro, coal and other sources. The distribution network includes 6,800 miles of overhead distribution lines and 3,597 miles of underground distribution cables.[3]

NATURAL GAS

Southern California Gas Company (SoCalGas) is responsible for providing natural gas supply to the City and is regulated by the California Public Utilities Commission and other state and federal agencies.

SoCalGas is the principal distributor of natural gas in Southern California, providing retail and wholesale customers with transportation, exchange and storage services and also procurement services to most retail core customers. SoCalGas is a gas-only utility and, in addition to serving the residential, commercial, and industrial markets, provides gas for enhanced oil recovery (EOR) and electric generation (EG) customers in Southern California. SoCalGas's natural gas system is the nation's largest natural gas distribution utility, and serves a 20,000 square-mile area in Central and Southern California. The system supplies natural gas to 21.6 million customers through 5.9 million meters in more than 500 communities.[4]

3. PROJECT

3.1 CONSTRUCTION

3.1.1. WATER

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). Considering temporary construction water use will be less than the Project water consumption during operation, it is anticipated that the existing water infrastructure would meet the limited and temporary water demand associated with construction of the Project.

The Project will 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 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.

[3] LADWP, 2015 Power Integrated Resource Plan, December 2015.
[4] California Gas and Electric Utilities, 2016 California Gas Report, 2016.

Further, LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service.

3.1.2. WASTEWATER

Wastewater generation would occur incrementally throughout construction of the Project as a result of construction workers on-site. However, such use would be temporary and nominal when compared with the wastewater generated by the Project during operation. In addition, construction workers would typically utilize portable restrooms, which would not contribute directly to the wastewater system that serves the site but would eventually be deposited to the Hyperion Treatment Plant. Thus, wastewater generation from Project construction activities is not anticipated to cause a measurable increase in wastewater flows.

3.1.3. ENERGY

Electrical power would be consumed to construct the new buildings and facilities of the proposed Project. Typical uses include temporary power for lighting, equipment, construction trailers, etc. The demand would be supplied from existing electrical services within the Project Site and would not affect other services. Overall, demolition and construction activities would require minimal electricity consumption and would not be expected to have any adverse impact on available electricity supplies and infrastructure. No natural gas usage is expected to occur during construction.

Construction impacts associated with the Project's electrical and gas infrastructure upgrades would primarily be confined to trenching. Infrastructure improvements will comply with all applicable LADWP, SoCalGas, and City requirements, which are expected to and would in fact mitigate impact to existing energy systems and adjacent properties. To reduce any temporary pedestrian access and traffic impacts during any necessary off-site energy infrastructure improvements, a construction management plan would be implemented to ensure safe pedestrian and vehicular travel.

3.2. OPERATION

3.2.1. WATER

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.

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 2 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 3 for the results of the Service Advisory Request (SAR).

FIRE WATER DEMAND

Based on fire flow standards set forth in Section 57.507.3 of the Los Angeles Municipal Code (LAMC), and as determined by the Los Angeles Fire Department (LAFD), the Project falls within the Commercial Regional Center Neighborhood category; therefore, the required fire flow for the project is 6,000-9,000 gallons per minute (gpm) from four to six hydrants running simultaneously. An IFFAR was submitted to LADWP regarding available fire hydrant flow to demonstrate compliance. The completed IFFAR, attached as Exhibit 4, shows six nearby hydrants in the vicinity of the Project Site flowing simultaneously for a combined 9,000 gpm. As shown by the IFFAR, the Project Site has adequate fire flow available to demonstrate compliance with Section 57.507.3 of the LAMC.

Furthermore, the Section 57.513 of the LAMC, 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.

The Project will incorporate a fire sprinkler suppression system to reduce the public hydrant demands, which will be subject to LAFD review and approval during the design and permitting of the Project. Based on Section 94.2020.0 of the LAMC that adopts by reference the National Fire Protection Association (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, four SARs (two for each site) were submitted to LADWP in order to determine if the existing public water infrastructure could meet the demands of the Project. The approved SARs can be found in Exhibit 3 and the results are summarized below.

- **East Site**
  - The SAR for the domestic and fire water service off Vine Street shows that a static pressure of 65 pounds per square inch (psi) and a flow of up to 2,500 gpm can be delivered with a residual pressure of 61 psi.
  - The SAR for the redundant fire water service off Argyle Street shows that a static pressure of 56 psi and a flow of up to 2,500 gpm can be delivered with a residual pressure of 37 psi.

- **West Site**
  - The SAR for the domestic and fire water service off Vine Street shows that a static pressure of 62 psi and a flow of up to 2,500 gpm can be delivered to the Project Site with a residual pressure of 61 psi.
  - The SAR for the redundant fire water service off Ivar Street shows that a static pressure of 55 psi and a flow of up to 2,500 gpm can be delivered with a residual pressure of 54 psi.

The SARs show that the fire and domestic water demands of the Project can be accommodated and the 20 psi requirement for the surrounding public hydrants is exceeded.

DOMESTIC WATER DEMAND

The Board of Water and Power Commissioners approved the Project's WSA on December 11, 2018. The Project water consumption estimates are based on the WSA prepared and approved by LADWP. LADWP based the WSA water demand on 100 percent of the LASAN sewerage generation factors for the Project's various uses. Both the Project and the East Site Hotel Option were considered when estimating the domestic water demand. It was determined in the WSA that the water demand of the East Site Hotel Option was greater than the Project and is therefore the more conservative option. The Project Option water generation can be found in the WSA table I-A. The more conservative estimated water generation based on the WSA for the East Site Hotel Option is summarized in Table 1 below.

Table 1 – Estimated Proposed Water Demand – East Site Hotel Option[5]					
Land Use	**Units**	**Generation Rate (gpd/unit)[6]**	**Base Demand (gpd)**	**Required Ordinances Water Savings[7]**	**Proposed Water Demand (gpd)**
West Site					
Residential: Apt – 1 Bdrm.	195 dwelling units (du)	110/ du	21,450		
Residential: Apt – 2 Bdrms.	198 du	150/ du	29,700		
Residential: Apt – 3 Bdrms.	56 du	190/ du	10,640		
Residential: Apt – 1 Bdrms Senior Affordable	59 du	110/ du	6,490		
Residential: Apt – 2 Bdrms Senior Affordable	9 du	150/ du	1,350		
East Site					
Residential: Apt – 1 Bdrm.	117 du	110/ du	12,870		
Residential: Apt – 2 Bdrms.	132 du	150/ du	19,800		
Residential: Apt – 3 Bdrms.	70 du	190/ du	13,300		
Residential: Apt – 1 Bdrms Senior Affordable	40 du	110/ du	4,400		
Residential: Apt – 2 Bdrms Senior Affordable	8 du	150/ du	1,200		
Base Demand Adjustment[8]			14,690		
Residential Units Total	**884 du**		**135,890**	**32,232**	**103,658**
West Site					
Market-rate					
Lobby	7,535 sf	0.05	377		
Health Club	5,784 sf	0.65	3,760		
Office	3,957 sf	0.12	475		
Lounge	14,047 sf	0.05	702		
Bar Cocktail	2,470 sf	0.72	1,778		
Senior Affordable					
Lobby	1,287 sf	0.05	64		

Lounge	1,895 sf	0.05	95		
East Site					
Market-rate					
Hotel Lobby	3,227 sf	0.05	161		
Residential Lobby	3,021 sf	0.05	151		
Hotel Back of the House	1,956 sf				
Hotel Health Club	1,150 sf	0.65	748		
Residential Health Club	6,807 sf	0.65	4,425		
Hotel Conference Rooms	2,907 sf	0.12	349		
Residential Lounge[9]	4,389 sf	0.05	220		
Senior Affordable					
Lobby	1,839 sf	0.05	92		
Lounge	2,000 sf	0.05	100		
Indoor Amenities Total			**13,497**	**4,215**	**9,062**
Hotel Room	220	room	26,400		
Base Demand Adjustment (Hotel Room)[10]			2,392		
Hotel Room Total			**28,792**	**3,143**	**25,649**
Restaurant	1,232 seats	30/seat	36,960		
Commercial Total			**36,960**	**4,890**	**32,070**
West Site					
Spa	240 sf		23		
Pool	2,240 sf		210		
East Site					
Spa	125 sf		12		
Pool	2,125 sf		200		
Outdoor Common Space			**444**	**0**	**444**

[5] The water demand estimate is based on the more conservative East Site Hotel Option from the WSA.
[6] The average daily flow rates are based on the WSA, which are then based on 100% of the LASAN sewerage generation factors.
[7] Required ordinance savings per the WSA.
[8] Base demand adjustment per WSA.
[9] Per correspondence with LADWP on December 27, 2018, the net additional water demand for the East Site Hotel Option is still 205 afy. Therefore, it does not qualify as a substantial increase in water per Water Code 10910. The WSA does not need to be amended.
[10] Base demand adjustment per WSA.

Landscaping	**23,844 sf**		**2,227**	**1,029**	**1,198**
Covered Parking	**676,111 sf**	**0.02**	**445**	**0**	**445**
Cooling Tower Total	**3,000 Ton**	**21.64**	**64,911**	**48,192**	**16,719**
Proposed Subtotal			**283,166**	**93,701**	**189,465**
Less Existing to be Removed Total					0
Less Additional Conservation					-6,568
Net Additional Water Demand					**182,897 gpd**

3.2.2. WASTEWATER

The potential impacts of the Project on the existing public sewer infrastructure are analyzed by comparing the estimated Project wastewater generation with the calculated available capacity of the existing facilities.

Pursuant to LAMC Section 64.15 LASAN Wastewater Engineering Division (WED) made a preliminary analysis of the local and regional sewer conditions to determine if available wastewater conveyance and treatment capacity exists for future development of the Project Site. LASAN's approach consisted of the study of a worst-case scenario envisioning peak demands from the relevant facilities occurring simultaneously on the wastewater system. A combination of flow gauging data and computed results from the City's hydrodynamic model were used to project current and future impacts due to additional sewer discharge. The data used in this report are based on the findings of the LASAN preliminary analysis. Refer to Exhibit 4 for the Sewer Capacity Availability Report (SCAR) prepared for the Project, which contains the results of the LASAN preliminary analysis.

In accordance with the *L.A. CEQA Thresholds Guide*, the future wastewater generation was estimated based on the proposed project size and types of land uses and the LASAN sewerage generation factors. Therefore, as outlined in Table 1 below, the more conservative East Site Hotel Option will generate approximately 322,067 gallons per day (gpd) of wastewater.

Table 1 – Estimated Proposed Wastewater Generation – East Site Hotel Option

Land Use	Units	Generation Rate (gpd/unit)[11]	Total Wastewater Generation (gpd)
Proposed[12]			
Residential: Apt – 1 Bdrm.	411 rooms	110/Room	45,210
Residential: Apt – 2 Bdrms.	347 rooms	150/Room	52,050

[11] The average daily flow rates are based on 100% of the LASAN sewerage generation factors.
[12] The SCAR is based on the more conservative East Site Hotel Option.

Residential: Apt – 3 Bdrms.	126 rooms	190/Room	23,940
Hotel: Use Guest Rooms Only	220 rooms	120/Room	26,400
Retail Area (>= 100,000 SF)	16,248 sf	50/1,000 sf	812
Restaurant: Full Service Indoor Seat[13]	1,232 seats	30/seat	36,960
Office Building w/ cooling tower	7,925 sf	170/1,000 sf	1,347
Lounge[14]	20,500 sf	50/1000 sf	1,025
Health Club/Spa	8,194 sf	650/1000 sf	5,326
Bar Cocktail	2,470 sf	720/1000 sf	1,778
Conference Rooms	4,082 sf	120/1000 sf	490
Swimming Pools[15]	16,941 cf	7.4805/cf	126,728
		Subtotal Proposed	**322,067**

The SCAR results indicated that no sewer system improvements are necessary. The LASAN analyzed the Project demands in conjunction with existing conditions and forecasted growth, and has approved the Project to discharge up to 322,067 gpd of wastewater. No water conservation commitments from the Applicant and as required by regulatory compliance per the WSA have been considered as part of the sewer capacity availability assessment to be more conservative. Therefore, the increase in sewer flow to the existing infrastructure is 322,067 gpd.

As further discussed above, the existing design capacity of the Hyperion Service Area is approximately 550 mgd (consisting of 450 mgd at the Hyperion Treatment Plant, 80 mgd at the Donald C. Tillman Water Reclamation Plant, and 20 mgd at the Los Angeles–Glendale Water Reclamation Plant).[16] The Project's proposed wastewater generation is approximately 0.322 mgd. This is equal to less than one percent of the Hyperion Service Area capacity where the Project's wastewater would be treated.

[13] To calculate the number of seats, 1 seat per 15 sf was assumed.
[14] The lounge use includes a library, multipurpose rooms, kid rooms and general amenity space.
[15] The Swimming Pool use includes a 21 cf Water Feature.
[16] City of Los Angeles Department of Public Works, Bureau of Sanitation, Water Reclamation Plants, https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p?_adf.ctrl-state=oep8lwkld_4&_afrLoop=28344654751341747#, accessed August 20, 2018.

3.2.3 ENERGY

ELECTRICITY

A will serve letter was sent to LADWP to determine if there is sufficient capacity to serve the Project. Based on the response from LADWP (see Exhibit 5), electrical service is available and can be served to the Project.

The Project will increase electricity consumption. Based upon the *Preliminary Annual Energy Demand Analysis* by Glumac, dated August 27, 2018 (see Exhibit 7), both the Project and the East Site Hotel Option were considered when estimating the electrical demand. It was determined that the electrical demand of the Project under the Hotel Option was greater than the Project and is therefore the more conservative option. Based on the proposed use, the estimated electrical loads are 12,366 kilo-volt-ampere (kVa) for the West Site and 12,993 kVa for the East Site Hotel Option; and the emergency electrical demand is 4,000 kVa for the West Site and 4,000 kVa for the East Site Hotel Option.

NATURAL GAS

A will serve letter was sent to the Southern California Gas Company (SoCal Gas) to determine if there is sufficient capacity to serve the Project. Based on the response from the SoCal Gas (see Exhibit 6), gas service is available and can be served to the Project.
The Project will increase the demand for natural gas resources. Based upon the *Preliminary Annual Energy Demand Analysis* by Glumac, dated August 27, 2018 (see Exhibit 7), both the Project and the East Site Hotel Option were considered when estimating the electrical demand. It was determined that the natural gas demand of the Project under the Project Option was greater than the Hotel Option and is therefore the more conservative option. Based on the proposed use, the estimated natural gas loads are 70,000,000 British thermal unit per hour (Btu/h) for the West Site and 70,000,000 Btu/hr for the East Site.

4. CONCLUSION

Based on the analysis contained in this report the existing municipal water, wastewater and energy infrastructure is adequate to meet the demand of the Project. The results from the IFFAR and the SARs completed by LADWP show that the existing water infrastructure is adequate to meet the water demand of the Project. The results of the SCAR completed by LASAN show that the existing sewer infrastructure is adequate to meet the sewerage generation of the Project. The will serve letter from LADWP shows that the existing electrical infrastructure is sufficient to meet the electrical demand of the project. The will serve letter from SoCal Gas shows that the existing gas infrastructure is sufficient to meet the gas demand of the Project.

Therefore, the existing municipal water, wastewater and energy infrastructure has sufficient capacity to accommodate the Project and no improvements will be required.

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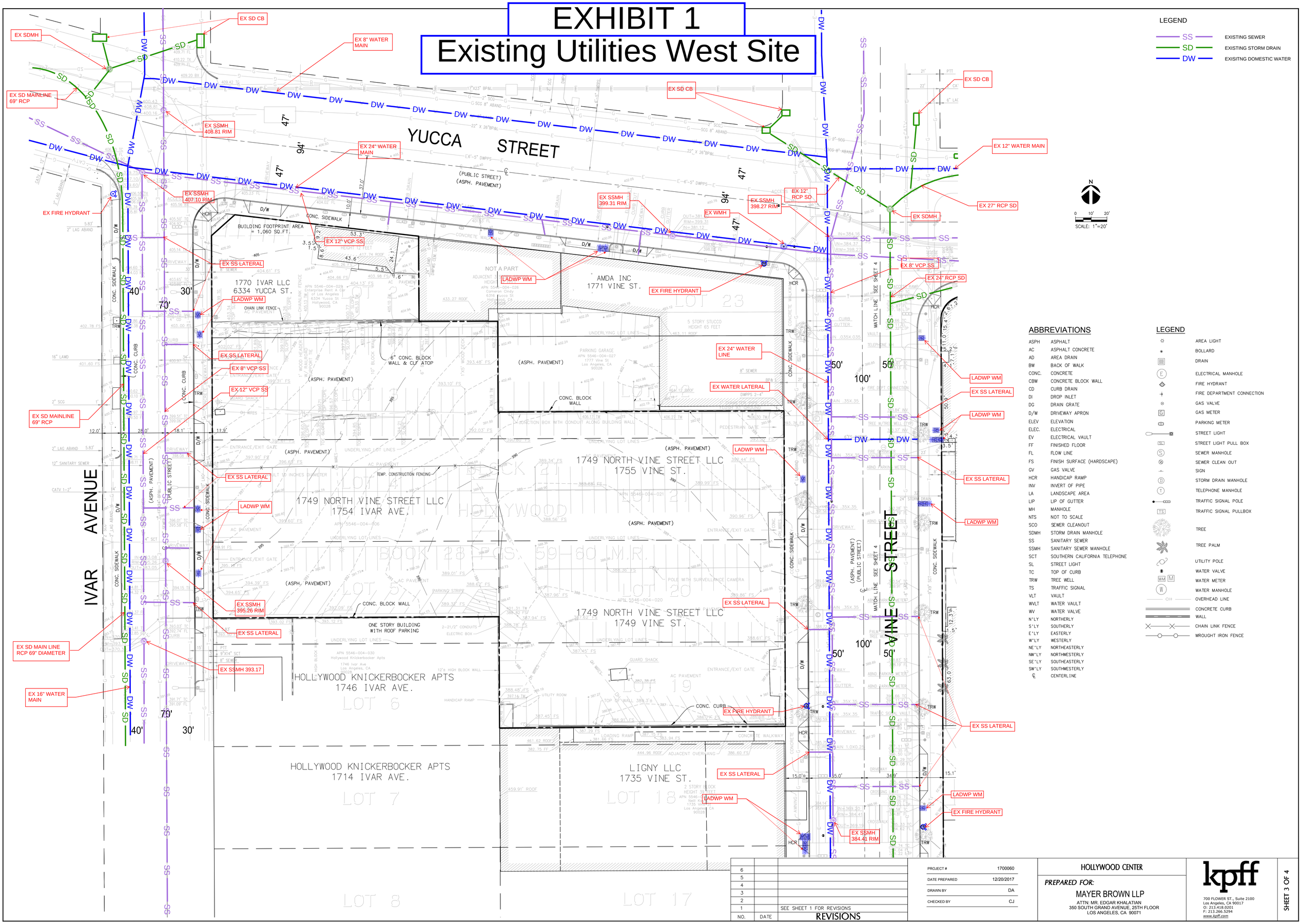
EXHIBIT 1

EXHIBIT 1

Existing Utilities West Site



LEGEND

- SS — EXISTING SEWER
- SD — EXISTING STORM DRAIN
- DW — EXISITNG DOMESTIC WATER

ABBREVIATIONS

ASPH	ASPHALT
AC	ASPHALT CONCRETE
AD	AREA DRAIN
BW	BACK OF WALK
CONC.	CONCRETE
CBW	CONCRETE BLOCK WALL
CD	CURB DRAIN
DI	DROP INLET
DG	DRAIN GRATE
D/W	DRIVEWAY APRON
ELEV	ELEVATION
ELEC.	ELECTRICAL
EV	ELECTRICAL VAULT
FF	FINISHED FLOOR
FL	FLOW LINE
FS	FINISH SURFACE (HARDSCAPE)
GV	GAS VALVE
HCR	HANDICAP RAMP
INV	INVERT OF PIPE
LA	LANDSCAPE AREA
LIP	LIP OF GUTTER
MH	MANHOLE
NTS	NOT TO SCALE
SCO	SEWER CLEANOUT
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SCT	SOUTHERN CALIFORNIA TELEPHONE
SL	STREET LIGHT
TC	TOP OF CURB
TRW	TREE WELL
TS	TRAFFIC SIGNAL
VLT	VAULT
WVLT	WATER VAULT
WV	WATER VALVE
N'LY	NORTHERLY
S'LY	SOUTHERLY
E'LY	EASTERLY
W'LY	WESTERLY
NE'LY	NORTHEASTERLY
NW'LY	NORTHWESTERLY
SE'LY	SOUTHEASTERLY
SW'LY	SOUTHWESTERLY
℄	CENTERLINE

LEGEND

- AREA LIGHT
- BOLLARD
- DRAIN
- ELECTRICAL MANHOLE
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECTION
- GAS VALVE
- GAS METER
- PARKING METER
- STREET LIGHT
- STREET LIGHT PULL BOX
- SEWER MANHOLE
- SEWER CLEAN OUT
- SIGN
- STORM DRAIN MANHOLE
- TELEPHONE MANHOLE
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL PULLBOX
- TREE
- TREE PALM
- UTILITY POLE
- WATER VALVE
- WATER METER
- WATER MANHOLE
- OVERHEAD LINE
- CONCRETE CURB
- WALL
- CHAIN LINK FENCE
- WROUGHT IRON FENCE

NO.	DATE	REVISIONS
6		
5		
4		
3		
2		
1		SEE SHEET 1 FOR REVISIONS

PROJECT #	1700060
DATE PREPARED	12/20/2017
DRAWN BY	DA
CHECKED BY	CJ

HOLLYWOOD CENTER

PREPARED FOR:

MAYER BROWN LLP
ATTN: MR. EDGAR KHALATIAN
350 SOUTH GRAND AVENUE, 25TH FLOOR
LOS ANGELES, CA 90071

kpff
700 FLOWER ST., Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
F: 213.266.5294
www.kpff.com

EXHIBIT 1

Existing Utilities East Site

YUCCA STREET
(PUBLIC STREET)
(ASPH. PAVEMENT)

VINE STREET
(PUBLIC STREET)
(ASPH. PAVEMENT)

ARGYLE AVENUE
(PUBLIC STREET)
(ASPH. PAVEMENT)

ALLEY

1750 NORTH VINE LLC LESSOR
6272 YUCCA ST.

1750 NORTH VINE LLC LESSOR
1750 VINE ST.

6230 YUCCA URBAN HOUSING LLC
LOT 15
6230 YUCCA ST.

1733 NORTH ARGYLE LLC
1733 ARGYLE AVE.

1720 NORTH VINE LLC
1720 VINE ST.

NED PAN INC.
6233 HOLLYWOOD BLVD.

CITIZEN LA HOLLYWOOD PROPERTIES
1718 VINE ST.

TRACT NO. 18237
LOT 1
LOT 2
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
CENTRAL HOLLYWOOD TRACT No. 10

EX SSMH 398.27 RIM
EX WMH
EX SDMH
EX 27" RCP SD
EX SS LINE
EX 12" WATER MAIN
EX 8" VCP SS
EX SSMH 411.47 RIM
EX 12" VCP SS
EX SSMH 405.11 RIM
EX 8" SS
EX 24" RCP SD
EX SS LATERAL
EX LADWP MW
EX 12" VCP SS
EX SSMH 411.46 RIM
EX 8" WATER LINE
EX FIRE HYDRANT
EX SD LINE
EX CB
EX FIRE HYDRANT
EX 24" WATER LINE
EX LADWP WM
EX SS LATERAL
EX SS LATERAL
EX LADWP WM
EX LADWP WM
EX SS LATERAL
EX SSMH 408.47 RIM
EX SS LATERAL
EX LADWP WM
EX SS LATERAL
EX CB
EX SS LATERAL
EX LADWP WM
EX SS LATERAL
EX 8" VCP SS
EX FIRE HYDRANT
EX SSMH 384.41 RIM
EX LADWP WM
EX FIRE HYDRANT
EX CB
EX CB
EX 12" SD
EX SDMH
EX 24" RCP SD
EX LADWP WM
EX 12" SD
EX SSMH 384.77 RIM
EX LADWP WM

ADJACENT BUILDING OVERHANG LINE
ADJACENT BUILDING LINE
CONC. CURB & GUTTER
FOUNTAIN
BUILDING FOOTPRINT AREA = 24,616 SQ.FT.
8" CONC. BLOCK WALL & IRON FENCE ATOP
8" CONC. WALL & LATTICE FENCE ATOP
UNMEASURED PEDESTRIAN DOOR AT BASEMENT LEVEL
GATE
CONC. SIDEWALK
BIKE RACK

LEGEND

- SS — EXISTING SEWER
- SD — EXISTING STORM DRAIN
- DW — EXISITNG DOMESTIC WATER

N

0 10' 20'
SCALE: 1"=20'

NO.	DATE	REVISIONS
6		
5		
4		
3		
2		
1		SEE SHEET 1 FOR REVISIONS

PROJECT #	1700060
DATE PREPARED	12/20/2017
DRAWN BY	DA
CHECKED BY	CJ

HOLLYWOOD CENTER

PREPARED FOR:

MAYER BROWN LLP
ATTN: MR. EDGAR KHALATIAN
350 SOUTH GRAND AVENUE, 25TH FLOOR
LOS ANGELES, CA 90071

kpff
700 FLOWER ST., Suite 2100
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EXHIBIT 2

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

INFORMATION OF FIRE FLOW AVAILABILITY

Water Service Map No.: 148-186 & 148-189 & 150-186

LAFD Fire Flow Requirement: 9000 GPM - (6 Hydrants)

LAFD Signature: _____

Date Signed: _____

Applicant: Rickard Severinsson

Company Name: KPFF Consulting Engineers

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

Telephone: (213) 418-0201

Email Address: rickard.severinsson@kpff.com

	F-42725	F-39726	F-39725
Location:	Southeast Corner of Yucca St and Vine St Intersection	The West side of Argyle Ave. 377 feet south of the centerline of Yucca St & Argyle Ave Intersection.	The East side of Vine St. 384 feet south of the centerline of Yucca St & Vine St Intersection.
Distance from Neareast Pipe Location (feet):	81'	25'	72'
Hydrant Size:	2 1/2 X4D	4D	4D
Water Main Size (in):	24	8	12
Static Pressure (psi):	81 psi	86 psi	88 psi
Residual Pressure (psi):	58 psi	62 psi	64 psi
Flow at 20 psi (gpm):	1500	1500	1500

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: ECMR No. W2018081002 6

This is the first of 2 requests for a new project located at 1720-1724, 1745-1753 Vine Street Los Angeles, CA 90028

6 PH. COMBINED FLOW OF 9000 GPM SIMULTANEOUSLY.

Water Purveyor: **Los Angeles Department of Water & Power** *Date:* 8/29/18

Signtature: _____ *Title:* CE ASSOCIATE

Requests must be made by submitting this completed application, along with a $215.00 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

*** 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

LAFD Fire Flow Requirement: 9000 GPM - (6 Hydrants)

Water Service Map No.: 148-186 & 150-186

LAFD Signature:

Date Signed:

Applicant: Rickard Severinsson

Company Name: KPFF Consulting Engineers

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

Telephone: (213) 418-0201

Email Address: rickard.severinsson@kpff.com

	F-42692	F-36096	F-36095
Location:	West side of Vine St. 312 feet south of the centerline of the Yucca & Vine St Intersection.	Southwest side of Yucca St and Vine St. intersection.	Southwest side of Yucca St and Ivar Ave. intersection.
Distance from Neareast Pipe Location (feet):	28'	22'	16'
Hydrant Size:	4D	4D	4D
Water Main Size (in):	24	24	24
Static Pressure (psi):	87psi	82 PSi	78
Residual Pressure (psi):	63 psi	59 PSi	55 PSi
Flow at 20 psi (gpm):	1500	1500	1500

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks:

ECMR No. W20180810026

This is the second of 2 requests for a new project located at 1720-1724, 1745-1753 Vine Street Los Angeles, CA 90028

6 FH - COMBINED FLOW OF 9000 GPM SIMULTANEOSLY.

Water Purveyor: **Los Angeles Department of Water & Power** *Date:* 8/29/18

Signtature: *Title:* CE ASSOCIATE

Requests must be made by submitting this completed application, along with a $215.00 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

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

700 South Flower St., Suite 2100 Los Angeles, CA 90017 213.418.0201 kpff.com

EXHIBIT 3

EAST SITE

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **84269**

Fire Service Pressure Flow Report

SERVICE NUMBER **633920**

For: **1720 VINE ST** Approved Date: **3-31-2020**

Proposed Service **8 INCH** off of the

24 inch main in **VINE ST** on the **EAST** side approximately

410 feet **SOUTH** of **SOUTH** of **YUCCA ST** The System maximum pressure is

89 psi based on street curb elevation of **385** feet above sea level at this location.

The distance from the DWP street main to the property line is **72** 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	65				
2500	64				

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

Notes: Do not sell combo. The 10" domestic service will have the same residual pressure as 8" FS.

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 03-31-20. 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**	**148-186**
Prepared by	**Approved by**	**Water Service Map**

EAST SITE

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **84288**

Fire Service Pressure Flow Report

SERVICE NUMBER **633922**

For: **1733 ARGYLE AVE** Approved Date: **4-1-2020**

Proposed Service **8 INCH** off of the

8 inch main in **ARGYLE AVE** on the **WEST** side approximately

300 feet **SOUTH** of **SOUTH** of **YUCCA ST** The System maximum pressure is

84 psi based on street curb elevation of **396** feet above sea level at this location.

The distance from the DWP street main to the property line is **25** 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	56	2430	38		
510	55	2500	37		
740	54				
925	53				
1080	52				
1215	51				
1340	50				
1460	49				
1565	48				
1670	47				
1770	46				
1860	45				
1950	44				
2035	43				
2120	42				
2200	41				
2280	40				
2355	39				

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

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

Notes: With 1500 gpm simultaneous flow from 8" 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 04-01-20. 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**	**148-189**
Prepared by	**Approved by**	**Water Service Map**

WEST SITE

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **84268**

Fire Service Pressure Flow Report

SERVICE NUMBER **633919**

For: **1745 VINE ST** Approved Date: **3-31-2020**

Proposed Service **8 INCH** off of the

24 inch main in **VINE ST** on the **WEST** side approximately

220 feet **SOUTH** of **SOUTH** of **YUCCA ST** The System maximum pressure is

86 psi based on street curb elevation of **393** feet above sea level at this location.

The distance from the DWP street main to the property line is **28** 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	62				
2500	61				

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

Notes: Do not sell combo. 10" domestic service will have the same residual pressure as 8" FS.

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 03-31-20. 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**	**148-186**
Prepared by	**Approved by**	**Water Service Map**

WEST SITE

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **84270**

Fire Service Pressure Flow Report

SERVICE NUMBER **633921**

For: **1746 IVAR AVE** Approved Date: **4-1-2020**

Proposed Service **8 INCH** off of the **24** inch main in **YUCCA ST** on the **SOUTH** side approximately **100** feet **EAST** of **EAST** of **IVAR AVE** The System maximum pressure is **80** psi based on street curb elevation of **406** feet above sea level at this location.

The distance from the DWP street main to the property line is **22** 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	55				
2500	54				

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

Notes: With 1500 gpm simultaneous flow from 8" 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 04-01-20. 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**	**150-186**
Prepared by	**Approved by**	**Water Service Map**

EXHIBIT 4

City of Los Angeles
Bureau of Engineering

Sewer Capacity Availability Request (SCAR)

To: Bureau of Sanitation
The following request is submitted to you on behalf of the applicant requesting to connect to the public sewer system. Please verify that the capacity exists at the requested location for the proposed developments shown below. The results are good for 180 days from the date the sewer capacity approval from the Bureau of Sanitation. Lateral connection of development shall adhere to Bureau of Engineering Sewer Design Manual Section F 480.

Job Address:	**1720-1724 VINE ST, 1746-1764 IVAR AVE, 6334 YUCCA ST, 1733-1741 ARGYLE**	Sanitation Scar ID:	**64-5048-0220**
Date Submitted	02/27/2020	Request Will Serve Letter?	Yes
BOE District:	Central District		
Applicant:	RICKARD SERVERINSSON, KPFF CONSULTING ENGINEERS		
Address:	700 S FLOWER ST, SUITE 2100	City :	LOS ANGELES
State:	CA	Zip:	90017
Phone:	213.418.0201	Fax:	
Email:	RICKARD.SEVERINSSON@KPFF.COM	BPA No.	
S-Map:	469	Wye Map:	4755-2

SIMM Map - Maintenance Hole Locations

No.	Street Name	U/S MH	D/S MH	Diam. (in)	Approved Flow %	Notes
1	VINE ST	46914001	46914015	8	48.00	154,592 GPD
2	YUCCA ST	46910234	46909315	12	5.00	16,103 GPD
3	IVAR AVE	46909314	46909333	8	26.00	83,737 GPD
4	ARGYLE AVE	46910259	46914211	8	21.00	67,634 GPD

Proposed Facility Description

No.	Proposed Use Description	Sewage Generation (GPD)	Unit	Qty	GPD
1	RESIDENTIAL: APT - 1 BDRM. *6	110	DU	411	45,210
2	RESIDENTIAL: APT - 2 BDRMS *6	150	DU	347	52,050
3	RESIDENTIAL: APT - 3 BDRMS *6	190	DU	126	23,940
4	RESTAURANT: FULL SERVICE INDOOR SEAT	30	SEAT	1,232	36,960
5	LOBBY OF RETAIL AREA *1	50	KGSF	16,248	812
6	OFFICE BUILDING W/COOLING TOWER	170	KGSF	7,925	1,347
7	LOUNGE *1	50	KGSF	20,500	1,025
8	SWIMMING POOL (COMMERCIAL WITH BACKWASH FILTERS)		GPD	126,728	126,728
9	HEALTH CLUB/SPA *10	650	KGSF	8,194	5,326
10	HOTEL: USE GUEST ROOMS ONLY	120	ROOM	220	26,400
11	CONFERENCE ROOM OF OFFICE BLDG.		GPD	490	490
12	BAR: COCKTAIL, PUBLIC TABLE AREA *4	720	KGSF	2,470	1,778

Scar Request Number: 3407

Proposed Total Flow (gpd): 322,067

Remarks: 1): This SCAR will supersede previous SCAR IDs # 63-4267-0818. 2): Approved for the maximum allowable capacity of 322,067 GPD (223.66 gpm). 3): Discharge as indicated on SCAR notes. 4): IWP required.

Note: Results are good for 180 days from the date of approval by the Bureau of Sanitation

Date Processed: 03/10/2020

Expires On: 09/06/2020

Processed by: CHRIS DEMONBRUN
Bureau of Sanitation
Phone: 323-342-6207
Sanitation Status: Approved
Reviewed by: Sunbula Azieh
on 03/02/2020

Submitted by: Thomas Lang
Bureau of Engineering
Central District
Phone: 213-482-7041

Fees Collected: Yes

SCAR FEE (W:37 / QC:707): $2,568.50

Date Collected: 02/27/2020

SCAR Status: **Completed**

Scar Request Number: 3407

City of Los Angeles
Bureau of Engineering

SEWER CAPACITY AVAILABILITY REVIEW FEE (SCARF) - Frequently Asked Questions

SCAR stands for Sewer Capacity Availability Review that is performed by the Department of Public Works, Bureau of Sanitation. This review evaluates the existing sewer system to determine if there is adequate capacity to safely convey sewage from proposed development projects, proposed construction projects, proposed groundwater dewatering projects and proposed increases of sewage from existing facilities. The SCAR Fee (SCARF) recovers the cost, incurred by the City, in performing the review for any SCAR request that is expected to generate 10,000 gallons per day (gpd) of sewage.

The SCARF is based on the effort required to perform data collection and engineering analysis in completing a SCAR. A brief summary of that effort includes, but is not limited to, the following:

1. Research and trace sewer flow levels upstream and downstream of the point of connection.
2. Conduct field surveys to observe and record flow levels. Coordinate with maintenance staff to inspect sewer maintenance holes and conduct smoke and dye testing if necessary.
3. Review recent gauging data and in some cases closed circuit TV inspection (CCTV) videos.
4. Perform gauging and CCTV inspection if recent data is not available.
5. Research the project location area for other recently approved SCARs to evaluate the cumulated impact of all known SCARs on the sewer system.
6. Calculate the impact of the proposed additional sewage discharge on the existing sewer system as it will be impacted from the approved SCARs from Item 6 above. This includes tracing the cumulative impacts of all known SCARs, along with the subject SCAR, downstream to insure sufficient capacity exist throughout the system.
7. Correspond with the applicant for additional information and project and clarification as necessary.
8. Work with the applicant to find alternative sewer connection points and solutions if sufficient capacity does not exist at the desired point of connection.

Questions and Answers:

1. **When is the SCARF applied, or charged?**
   It applies to all applicants seeking a Sewer Capacity Availability Review (SCAR). SCARs are generally required for Sewer Facility Certificate applications exceeding 10,000 gpd, or request from a property owner seeking to increase their discharge thru their existing connection by 10,000 gpd or more, or any groundwater related project that discharges 10,000 gpd or more, or any proposed or future development for a project that could result in a discharge of 10,000 gpd.
2. **Why is the SCARF being charged now when it has not been in the past?**
   The City has seen a dramatic increase in the number of SCARs over 10,000 gpd in the last few years and has needed to increase its resources, i.e., staff and gauging efforts, to respond to them. The funds collected thru SCARF will help the City pay for these additional resources and will be paid by developers and property owners that receive the benefit from the SCAR effort.
3. **Where does the SCARF get paid?**
   The Department of Public Works, Bureau of Engineering (BOE) collects the fee at its public counters. Once the fee is paid then BOE prepares a SCAR request and forwards it to the BOS where it is reviewed and then returned to BOE. BOE then informs the applicant of the result. In some cases, BOS works directly with the applicant during the review of the SCAR to seek additional information and work out alternative solutions

Scar Request Number: 3407

CITY OF LOS ANGELES
CALIFORNIA

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ENGINEERING

GARY LEE MOORE, PE, ENV SP
CITY ENGINEER

1149 S BROADWAY, SUITE 700
LOS ANGELES, CA 90015-2213

http://eng.lacity.org

03/10/2020

RICKARD SERVERINSSON, KPFF CONSULTING ENGINEERS
700 S FLOWER ST, SUITE 2100
LOS ANGELES, CA, 90017

Dear RICKARD SERVERINSSON, KPFF CONSULTING ENGINEERS,

SEWER AVAILABILITY: 1720-1724 VINE ST, 1746-1764 IVAR AVE, 6334 YUCCA ST, 1733-1741 ARGYLE

The Bureau of Sanitation has reviewed your request of 02/27/2020 for sewer availability at **1720-1724 VINE ST, 1746-1764 IVAR AVE, 6334 YUCCA ST, 1733-1741 ARGYLE**. Based on their analysis, it has been determined on 03/10/2020 that there is capacity available to handle the anticipated discharge from your proposed project(s) as indicated in the attached copy of the Sewer Capacity Availability Request (SCAR) .

This determination is valid for 180 days from the date shown on the Sewer Capacity Availability request (SCAR) approved by the Bureau of Sanitation.

While there is hydraulic capacity available in the local sewer system at this time, availability of sewer treatment capacity will be determined at the Bureau of Engineering Public Counter upon presentation of this letter. A Sewer Connection Permit may also be obtained at the same counter provided treatment capacity is available at the time of application.

A Sewerage Facilities Charge is due on all new buildings constructed within the City. The amount of this charge will be determined when application is made for your building permit and the Bureau of Engineering has the opportunity to review the building plans. To facilitate this determination a preliminary set of plans should be submitted to Bureau of Engineering District Office, Public Counter.

Provision for a clean out structure and/or a sewer trap satisfactory to the Department of Building and Safety may be required as part of the sewer connection permit.

Lateral connection of development shall adhere to Bureau of Engineering Sewer Design Manual Section F 480.

Sincerely,

Thomas Lang

Central District, Bureau of Engineering

EXHIBIT 5

October 1, 2018

Rickard Severinsson
kpff
700 South Flower Street, Suite 2100
Los Angeles, CA 90017

Subject: 1720-1770 N Vine St; 1746-1760 N Ivar Ave; 1733 & 1741 Argyle Ave; 6236, 6270, 6334 W Yucca St, Los Angeles, California 90028

Dear Mr. Severinsson,

This is in response to your submittal regarding electric service for the proposed project located at the above address.

Electric Service is available and will be provided in accordance with the Los Angeles Department of Water and Power's Rules Governing Water and Electric Service. The availability of electricity is dependent upon adequate generating capacity and adequate fuel supplies. The estimated power requirement for this proposed project is part of the total load growth forecast for the City of Los Angeles and has been taken into account in the planned growth of the City's power system.

If you have any questions regarding this matter, please contact me at (213) 367-4290.

Sincerely,

RALPH JARAMILLO
Engineer of Customer Station Design

RJ:ac

C/enc:
ENGR: Mr. Ralph Jaramillo
FileNet

111 N. Hope Street, Los Angeles, California 90012-2607 *Mailing address:* Box 51111, Los Angeles, CA 90051-5700
Telephone: (213) 367-4211 www.LADWP.com

EXHIBIT 6

WEST SITE

SoCalGas
A Sempra Energy utility®

October 11, 2018

Attn: Rickard Severinsson
KPFF
700 S. Flower St. Suite 2100
Los Angeles, CA. 90018

RE: Will Serve Letter Request for – Job ID# 43-2018-08-00067: 5546-004-020; 5546-004-021; 5546-004-032; 5546-004-029; 5546-004-006

Dear Sir/Madam:

Thank you for inquiring about the availability of natural gas service for your project. We are pleased to inform you that Southern California Gas Company (SoCalGas) has facilities in the area where the above named project is being proposed. The service would be in accordance with SoCalGas' policies and extension rules on file with the California Public Utilities Commission (Commission) at the time contractual arrangements are made.

This letter should not be considered a contractual commitment to serve the proposed project, and is only provided for informational purposes only. The availability of natural gas service is based upon natural gas supply conditions and is subject to changes in law or regulation. As a public utility, SoCalGas is under the jurisdiction of the Commission and certain federal regulatory agencies, and gas service will be provided in accordance with the rules and regulations in effect at the time service is provided. Natural gas service is also subject to environmental regulations, which could affect the construction of a main or service line extension (for example, if hazardous wastes were encountered in the process of installing the line). Applicable regulations will be determined once a contract with SoCalGas is executed.

If you need assistance choosing the appropriate gas equipment for your project, or would like to discuss the most effective applications of energy efficiency techniques, please contact our area Service Center at 800-427-2200.

Thank you again for choosing clean, reliable, and safe natural gas, your best energy value.

Sincerely,

Pedro Reyes

Pipeline Planning Associate

Compton Headquarters

EAST SITE

SoCalGas
A Sempra Energy utility®

October 8, 2018

Attn: Rickard Severinsson
KPFF
700 S. Flower St. Suite 2100
Los Angeles, CA. 90018

RE: Will Serve Letter Request for – Job ID# 43-2018-08-00068: 5546-030-034; 5546-030-028; 5546-030-032; 5546-030-031; 5546-030-033

Dear Sir/Madam:

Thank you for inquiring about the availability of natural gas service for your project. We are pleased to inform you that Southern California Gas Company (SoCalGas) has facilities in the area where the above named project is being proposed. The service would be in accordance with SoCalGas' policies and extension rules on file with the California Public Utilities Commission (Commission) at the time contractual arrangements are made.

This letter should not be considered a contractual commitment to serve the proposed project, and is only provided for informational purposes only. The availability of natural gas service is based upon natural gas supply conditions and is subject to changes in law or regulation. As a public utility, SoCalGas is under the jurisdiction of the Commission and certain federal regulatory agencies, and gas service will be provided in accordance with the rules and regulations in effect at the time service is provided. Natural gas service is also subject to environmental regulations, which could affect the construction of a main or service line extension (for example, if hazardous wastes were encountered in the process of installing the line). Applicable regulations will be determined once a contract with SoCalGas is executed.

If you need assistance choosing the appropriate gas equipment for your project, or would like to discuss the most effective applications of energy efficiency techniques, please contact our area Service Center at 800-427-2200.

Thank you again for choosing clean, reliable, and safe natural gas, your best energy value.

Sincerely,

Pedro Reyes

Pipeline Planning Associate

Compton Headquarters

EXHIBIT 7

GLUMAC
A TETRA TECH COMPANY
engineers for a sustainable future™

MEMORANDUM

To: Addie Farrell
Jessie Fan
80 South Lake Avenue, Suite 570
Pasadena, CA 91101
626.204.6170
afarrell@esassoc.com; jfan@esassoc.com

Date: August 27, 2018
From: Carlos Tolentino
cc: Michael Adams - GLUMAC
Carlos Tolentino – GLUMAC
Eric Wong – GLUMAC
Manuel Eshaghof - GLUMAC
Nicholas Gallucci - GLUMAC

Project Name: Millennium Hollywood Center Entitlement
Project Number: 06.18.00916
Subject: Preliminary Annual Energy Demand Analysis

This memo summarizes Glumac's preliminary demand estimates at the Hollywood Center East & West site. This estimate was generated using the following:

- *Hollywood Center Entitlement Resubmission, April 2018*
- *Glumac past & current projects (local, scalable)*

PRELIMINARY ENERGY USAGE ESTIMATES

A preliminary estimate of energy demand was requested for the project's East & West site, which estimates all demand associated with the residential areas, hotel, retail/restaurant, parking garages and outdoor areas. The below table shows electricity and natural gas demand estimates for the West, East and East (Hotel Included).

Hollywood Center - Preliminary Energy Demand			
Utility	**West Site**	**East Site**	**East Site (w/ Hotel)**
Electricity [kVA]	12,366	11,650	12,993
Electricity (Emergency) [kVA]	4,000	4,000	4,000
Natural Gas [Btu/h]	70,000,000	70,000,000	60,000,000

Please note these preliminary estimates are based on the below listed assumptions and will vary depending on project design, HVAC system, lighting design, and façade layout & performance. These preliminary estimates were developed for the purposes of high level demand estimations for this stage in entitlements, and could differ from actual demand calculated from the projects' final design. Supporting calculations are also provided below.

ASSUMPTIONS AND METHODOLOGY

Energy demand was calculated using 2014 National Electrical Code, various benchmarking databases and Glumac's internal project database. These energy demand calculations were applied on a per square foot basis based on space type.

- Title 24-2016 compliant envelope systems
- Title 24-2016 compliant HVAC, electrical, and plumbing systems
- 50% of "retail" area assumed as restaurant energy usage
- Typical breakdown of electricity/natural gas utilities consistent with comparable projects
- Typical window-wall ratio (WWR) percentage consistent with comparable projects
- Typical envelope performance characteristics consistent with comparable projects
- All lighting is compliant with Title 24-2016 prescriptive lighting requirements
- All parking garages are mechanically ventilated
- No renewable or combined heat & power systems

This analysis was based on the following square footages outlined below:

Hollywood Center - Building Area Used in Energy Demand Calculations			
Building Area	**West Site**	**East Site**	**East Site (w/ Hotel)**
Residential	636,052	620,922	476,235
Retail/Restaurant	12,690	17,486	17,486
Hotel	-	-	130,278
Amenity Space	80,354	80,354	67,013
Parking	389,264	342,460	342,460

SUPPORTING CALCULATIONS – RESI/HOTEL GAS SERVICE

RESI-HOTEL SCHEME - GAS SERVICE		
Description	**Total Estimated Gas Demand (BTU/H)**	
WEST SITE		
See Calculations Below	59,120,000	
Space Heating	7,000,000	
Pool WH	500,000	
Miscellaneous	600,000	
TOTAL	**67,220,000**	**Round to 70,000,000**
EAST SITE		
See Calculations Below	45,270,400	
Space Heating	7,000,000	
Pool WH	500,000	
Miscellaneous	600,000	
TOTAL	**53,370,400**	**Round to 60,000,000**

Resi-Hotel Scheme			
WEST	**Gas Range**	**Clothes Dryer (resi)**	**Gas Demand (BTU/H)**
West Tower			
1 BR	195	195	
2BR	198	198	
3BR	56	56	
GWH			1,300,000
GR	449		29,185,000
CLD		449	15,715,000
West Affordable			
1 BR			
2 BR			
GWH			150,000
West Deck Level			
Single Occ. Mens Restroom (sm)			
Single Occ. Womens Restroom (sm)			
Multi-Occ. Mens Restroom (lg)			
Multi-Occ. Womens Restroom (lg)			
Amenity Drink Bar			3,000,000
Affordable Multipurpose room?			
Affordable Support Services			
GWH			120,000
West Mezz.			
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
Restaurant Kitchen			3,000,000
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
Kitchen Restaurant (sm)			3,000,000
Mens Locker			
Womens Locker			
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
GWH			400,000
West Ground Level			
Single Occ. Unisex Restroom			
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			

Resi-Hotel Scheme			
WEST	**Gas Range**	**Clothes Dryer (resi)**	**Gas Demand (BTU/H)**
Kitchen Restaurant (lg)			3,000,000
West B1			
Mens Bike Showers			
Womens Bike Showers			
Bldg Staff BOH?			
Management Offices?			
GWH			250,000
West B2			
Single Occ. Unisex Restroom			
TOTAL GAS DEMAND (PLBG)			**59,120,000**

Resi-Hotel Scheme			
EAST	**Gas Range**	**Clothes Dryer (resi)**	**Gas Demand (BTU/H)**
East Tower			
1 BR	117	117	
2 BR	132	132	
3 BR	70	70	
GWH			920,000
GR	319		20,735,000
CLD		319	11,165,000
East Affordable			
1 BR			
2 BR			
GWH			150,000
Hotel Guest Rooms			
Rooms		0	
East Deck Level			
Multi Occ. Mens Restroom (sm)			
Multi Occ. Womens Restroom (sm)			
Multi Occ. Mens Restroom (sm)			
Multi Occ. Womens Restroom (sm)			
Lounge (additional bathrooms?)			
Affordable Multipurpose Room?			
Affordable Support Services			
GWH			400
East Mezz Level			
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
Restaurant Kitchen (lg)			3,000,000
Single Occ. Unisex Restroom			
BOH Unisex Restroom			
Restaurant (No Kitchen?)			3,000,000
East Ground Level			

Resi-Hotel Scheme			
EAST	**Gas Range**	**Clothes Dryer (resi)**	**Gas Demand (BTU/H)**
Multi-Occ. Mens Restroom (lg)			
Multi-Occ. Womens Restroom (lg)			
Restaurant Kitchen			3,000,000
Single Occ. Mens Restroom (sm)			
Single Occ. Womens Restroom (sm)			
Restaurant (No Kitchen?)			3,000,000
Additional Restrooms, (locations tbd)			
East B1 Level			
Bldg Staff BOH?			
Management Offices?			
East B2 Level			
Valet Unisex Restroom			
East B5 Level			
Mens Locker			
Womens Locker			
GWH			300,000
TOTAL GAS DEMAND (PLBG)			**45,270,400**

SUPPORTING CALCULATIONS – ALL RESI GAS SERVICE

ALL RESI SCHEME - GAS SERVICE		
Description	**Total Estimated Gas Demand (BTU/H)**	
WEST SITE		
See Calculations Below	59,120,000	
Space Heating	7,000,000	
Pool WH	500,000	
Miscellaneous	600,000	
TOTAL	**67,220,000**	**Round to 70,000,000**
EAST SITE		
See Calculations Below	55,670,400	
Space Heating	7,000,000	
Pool WH	500,000	
Miscellaneous	600,000	
TOTAL	**63,770,400**	**Round to 70,000,000**

All Resi Scheme			
WEST	**Gas Range**	**Clothes Dryer (resi)**	**Gas Demand (BTU/H)**
West Tower			
1 BR	195	195	
2BR	198	198	
3BR	56	56	
GWH	449	449	1,300,000
GR			29,185,000
CLD			15,715,000
West Affordable			
1 BR			
2 BR			
GWH			150,000
West Deck Level			
Single Occ. Mens Restroom (sm)			
Single Occ. Womens Restroom (sm)			
Multi-Occ. Mens Restroom (lg)			

All Resi Scheme			
WEST	**Gas Range**	**Clothes Dryer (resi)**	**Gas Demand (BTU/H)**
Multi-Occ. Womens Restroom (lg)			
Amenity Drink Bar			3,000,000
Affordable Multipurpose room?			
Affordable Support Services			
GWH			120,000
West Mezz.			
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
Restaurant Kitchen			3,000,000
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
Kitchen Restaurant (sm)			3,000,000
Mens Locker			
Womens Locker			
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
GWH			400,000
West Ground Level			
Single Occ. Unisex Restroom			
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
Kitchen Restaurant (lg)			3,000,000
West B1			
Mens Bike Showers			
Womens Bike Showers			
Bldg Staff BOH?			
Management Offices?			
GWH			250,000
West B2			
Single Occ. Unisex Restroom			
TOTAL GAS DEMAND (PLBG)			**59,120,000**

All Resi Scheme			
EAST	**Gas Range**	**Clothes Dryer (resi)**	**Gas Demand (BTU/H)**
East Tower			
1 BR	175	175	
2 BR	172	172	
3 BR	76	76	
GWH	423	423	920,000
GR			27,495,000
CLD			14,805,000
East Affordable			
1 BR			
2 BR			
GWH			150,000
Hotel Guest Rooms			
Rooms		0	
East Deck Level			
Multi Occ. Mens Restroom (sm)			
Multi Occ. Womens Restroom (sm)			
Multi Occ. Mens Restroom (sm)			
Multi Occ. Womens Restroom (sm)			
Lounge (additional bathrooms?)			
Affordable Multipurpose Room?			
Affordable Support Services			
GWH			400
East Mezz Level			
Multi-Occ. Mens Restroom (md)			
Multi-Occ. Womens Restroom (md)			
Restaurant Kitchen (lg)			3,000,000
Single Occ. Unisex Restroom			
BOH Unisex Restroom			
Restaurant (No Kitchen?)			3,000,000
East Ground Level			
Multi-Occ. Mens Restroom (lg)			

All Resi Scheme			
EAST	**Gas Range**	**Clothes Dryer (resi)**	**Gas Demand (BTU/H)**
Multi-Occ. Womens Restroom (lg)			
Restaurant Kitchen			3,000,000
Single Occ. Mens Restroom (sm)			
Single Occ. Womens Restroom (sm)			
Restaurant (No Kitchen?)			3,000,000
East B1 Level			
Bldg Staff BOH?			
Management Offices?			
East B2 Level			
Valet Unisex Restroom			
East B5 Level			
Mens Locker			
Womens Locker			
GWH			300,000
TOTAL GAS DEMAND (PLBG)			**55,670,400**

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LOAD SUMMARY CALCULATIONS

PROJECT: **MILLENNIUM HOLLWOOD CENTER - EAST SITE WITH HOTEL**

SUBJECT: **LOAD ESTIMATE**

OCCUPANCY: **COMMERCIAL**

1.1 ENTER NAME HERE — **ENTER MORE DESCRIPTION HERE**

LOAD SERVED	LIGHTING LOADS SQ.FT.	LIGHTING LOADS VA/ SQ.FT.	LIGHTING LOADS KVA	RECEPTACLE LOADS SQ.FT.	RECEPTACLE LOADS VA/ SQ.FT.	RECEPTACLE LOADS KVA	MOTOR LOADS QTY.	MOTOR LOADS HP.	MOTOR LOADS KVA	CONTINUOUS LOADS QTY or SQFT.	CONTINUOUS LOADS KVA or KVA/SF	CONTINUOUS LOADS TOTAL LOAD	NON-CONTIN. KVA	KITCHEN LOADS KVA	TOTAL CONN. KVA	TOTAL AMPS
EAST SENIOR BUILDING																
RESIDENTIAL AMENITY, LOBBIES, BOH	3,497	2.00	7.0	3,497	3.00	10.5									17	21
MECH PN	2,000	1.00	2.0	2,000	3.00	6.0									8	10
MECHANICAL LOADS																
STAIR PRESSURIZATION FAN							2	10	23.2						23	28
CORRIDOR EXHAUST FAN							1	3	4.0						4	5
TRASH R `							1	3	4.0						4	5
RESIDENTIAL EXHAUST							7	3	28.0						28	34
COOLING TOWER + PUMPS							1	200	199.0						199	239
COMMON AREA																
LAUNDRY										9	3.000	27.0			27	32
ELECTRIC DRYERS										9	11.000	99.0			99	119
ELEVATORS							4	40	172.8						173	208
OUTDOOR COMMON OPEN SPACE																
SENIOR AFFORDABLE ROOF DECK	4,800	0.50	2.4	4,800	1.00	4.8									7	9
SENIOR RESIDENTIAL LOAD													350		350	421
EAST BUILDING																
BM (ARGYLE)																
RETAIL/RESTAURANT	7,580	2.00	15.2	7,580	2.00	15.2								265	296	356
VINE GROUND																
RETAIL / RESTAURANT	9,905	2.00	19.8	9,905	2.00	19.8								347	386	465
MECH PH	4,585	1.00	4.6	4,585	2.00	9.2									14	17
MECH LOADS																
STAIR PRESSURIZATION FANS							2	15	35.0						35	42
CORRIDOR EXHAUSTS FAN							1	5	6.3						6	8
TRASH ROOM EXHAUST							1	3	4.0						4	5
RESIDENTIAL EXHAUST							12	3	48.0						48	58
COOLING TOWER + PUMPS							1	350	344.0						344	414
HVAC COOLING LOAD FOR ELEVATOR, FIRE PUMP ROOM, ETC. (40 TONS OF COOLING)														80	80	96
EV CHARGING STATIONS																
ELEVATORS							7	100	721.7						722	868
ELEVATORS							3	40	129.6						130	156
OUTDOOR COMMON OPEN SPACE																
LEVEL 1 VINE/ARGYLE STREET	22,300	0.50	11.2	22,300	1.00	22.3									33	40
LEVEL 2 AMENITY DECT	8,200	0.50	4.1	8,200	1.00	8.2									12	15
SENIOR AFFORDABLE ROOF DECK	4,800	0.50	2.4	4,800	1.00	4.8									7	9
INDOOR AMENITY SPACES	16,420	2.00	32.8	16,420	3.00	49.3									82	99
HOTEL LOAD	130,278	2.00	260.6	130,278	3.00	390.8				130,278	0.008	1,042.2			1,694	2,037
RESIDENTIAL LOAD													2,315		2,315	2,785
OUTDOOR COMMON OPEN SPACE	38,651	0.50	19.3	38,651	1.00	38.7									58	70
INDOOR COMMON OPEN SPACE	8,151	2.00	16.3	8,151	3.00	24.5									41	49
PRIVATE BALCONIES	18,700	0.50	9.4	18,700	1.00	18.7									28	34
POOLS																
EAST SITE SPA - 125 SQ FT												58.2			58	70
EAST SITE KIDS POOL - 350 SQ FT												58.2			58	70
EAST SITE POOL - 1275 SQ FT												124.7			125	150
WATER FEATURE WALL												83.1			83	100
PARKING GARAGE	317,284	0.50	158.6	317,284	0.30	95.2									254	305
SUMP PUMPS							2	5	12.6						13	15
SEWAGE EJECTOR PUMPS							2	10	23.2						23	28
BOOSTER PUMPS							3	30	99.6						100	120
PARKING EXHAUST FANS							10	40	432.0						432	520
PARKING SUPPLY FANS							10	40	432.0						432	520
LADWP VAULT							2	10	23.2						23	28
EV CHARGING STATIONS										69	9.600	662.4			662	797
FIRE PUMPS (2) 200HP							2	200	398.0						398	479
SITE AREAS	117,133	0.50	58.6	117,133	1.00	117.1									176	211
CONN. KVA TOTALS ---->			624			835			3,140			2,155	2,665	692	10,111	12,162
							ALL @ 100%:							DEMAND		
				1ST 10KVA@100%:		10	LARGEST				TOTAL kVA:	2154.7		FACTOR	----	----
CODE DEMAND	TOTAL kVA:		624.2	REMAIN @ 50%:		412	MOTOR x 25%:		1.0		+ 25% CONT. LOAD	538.7		100%	----	----
FACTORS ---------->	+ 25% CONT. LOAD		156.0												----	----
DEMAND KVA TOTALS ---------->			780			422			3,141			2,693	2,665	692	10,394	12,502
SPARE CAPACITY ---------->			**25%**			**25%**			**25%**			**25%**	**25%**	**25%**		
TOTAL DESIGN KVA LOAD -->			**975**			**528**			**3,927**			**3,367**	**3,331**	**865**	**12,993**	**15,628**
VA. / SQ.FT. ---------->	**1,046,952**	SQ.FT.	*0.9*			*0.5*			*3.8*			*3.2*	*3.2*	*0.8*	*12.4*	

QTY	XFMR. SIZE		O.L. RATING		FAN COOLING		MAX. KVA	MAX. AMPS.
1	**????**	X	100%	X	100%	=	**#VALUE!**	**#VALUE!**

80%

USE **??? AMP SWITCHBOARD**

USE **??? AMP FEEDER**

USE **??? KAIC RATING**

USE

480V, 3P

GLUMAC 503.227.5280 FAX: 503.274.7674

8/22/18 10:57 AM

engineers for a sustainable future™ GLUMAC

LOAD SUMMARY CALCULATIONS

PROJECT: **MILLENNIUM HOLLWOOD CENTER - EAST SITE**
SUBJECT: **LOAD ESTIMATE**

OCCUPANCY: **COMMERCIAL**

1.1 ENTER NAME HERE — **ENTER MORE DESCRIPTION HERE**

LOAD SERVED	LIGHTING LOADS SQ.FT.	LIGHTING LOADS VA/ SQ.FT.	LIGHTING LOADS KVA	RECEPTACLE LOADS SQ.FT.	RECEPTACLE LOADS VA/ SQ.FT.	RECEPTACLE LOADS KVA	MOTOR LOADS QTY.	MOTOR LOADS HP.	MOTOR LOADS KVA	CONTINUOUS LOADS QTY or SQFT.	CONTINUOUS LOADS KVA or KVA/SF	CONTINUOUS LOADS TOTAL LOAD	NON-CONTIN. KVA	KITCHEN LOADS KVA	TOTAL CONN. KVA	TOTAL AMPS
EAST SENIOR BUILDING																
RESIDENTIAL AMENITY, LOBBIES, BOH	3,875	2.00	7.8	3,875	3.00	11.6									19	23
MECH PN	2,000	1.00	2.0	2,000	3.00	6.0									8	10
MECHANICAL LOADS																
STAIR PRESSURIZATION FAN							2	10	23.2						23	28
CORRIDOR EXHAUST FAN							1	3	4.0						4	5
TRASH ROOM EXHAUST							1	3	4.0						4	5
RESIDENTIAL EXHAUST							7	3	28.0						28	34
COOLING TOWER + PUMPS							1	200	199.0						199	239
COMMON AREA																
LAUNDRY										9	3.000	27.0			27	32
ELECTRIC DRYERS										9	11.000	99.0			99	119
ELEVATORS							4	40	172.8						173	208
OUTDOOR COMMON OPEN SPACE																
SENIOR AFFORDABLE ROOF DECK	4,800	0.50	2.4	4,800	1.00	4.8									7	9
SENIOR RESIDENTIAL LOAD													350		350	421
EAST BUILDING																
BM (ARGYLE)																
RETAIL/RESTAURANT	7,580	2.00	15.2	7,580	2.00	15.2								265	296	356
VINE GROUND																
RETAIL / RESTAURANT	9,905	2.00	19.8	9,905	2.00	19.8								347	386	465
MECH PH	4,585	1.00	4.6	4,585	2.00	9.2									14	17
MECH LOADS																
STAIR PRESSURIZATION FANS							2	15	35.0						35	42
CORRIDOR EXHAUSTS FAN							1	5	6.3						6	8
TRASH ROOM EXHAUST							1	3	4.0						4	5
RESIDENTIAL EXHAUST							12	3	48.0						48	58
COOLING TOWER + PUMPS							1	350	344.0						344	414
HVAC COOLING LOAD FOR ELEVATOR, FIRE PUMP ROOM, ETC. (40 TONS OF COOLING)														80	80	96
EV CHARGING STATIONS																
ELEVATORS							7	100	721.7						722	868
ELEVATORS							3	40	129.6						130	156
INDOOR AMENITY SPACES	26,178	2.00	52.4	26,178	3.00	78.5									131	157
RESIDENTIAL LOAD													3,040		3,040	3,657
OUTDOOR COMMON OPEN SPACE	43,575	0.50	21.8	43,575	1.00	43.6									65	79
INDOOR COMMON OPEN SPACE	11,068	2.00	22.1	11,068	3.00	33.2									55	67
PRIVATE BALCONIES	24,200	0.50	12.1	24,200	1.00	24.2									36	44
POOLS																
EAST SITE SPA - 125 SQ FT												58.2			58	70
EAST SITE KIDS POOL - 350 SQ FT												58.2			58	70
EAST SITE POOL - 1275 SQ FT												124.7			125	150
WATER FEATURE WALL												83.1			83	100
PARKING GARAGE	317,284	0.50	158.6	317,284	0.30	95.2									254	305
SUMP PUMPS							2	5	12.6						13	15
SEWAGE EJECTOR PUMPS							2	10	23.2						23	28
BOOSTER PUMPS							3	30	99.6						100	120
PARKING EXHAUST FANS							10	40	432.0						432	520
PARKING SUPPLY FANS							10	40	432.0						432	520
LADWP VAULT							2	10	23.2						23	28
EV CHARGING STATIONS										69	9.600	662.4			662	797
FIRE PUMPS (2) 200HP							2	200	398.0						398	479
SITE AREA	117,133	0.50	58.6	117,133	1.00	117.1									176	211
CONN. KVA TOTALS ---->			377			458			3,140			1,112	3,390	692	9,170	11,030
								ALL @ 100%:						DEMAND		
					1ST 10KVA@100%:	10		LARGEST				TOTAL kVA:	1112.5		FACTOR	----	----
CODE DEMAND		TOTAL kVA:	377.3		REMAIN @ 50%:	224		MOTOR x 25%:	1.0		+ 25% CONT. LOAD	278.1		100%	----	----
FACTORS ---------->		+ 25% CONT. LOAD	94.3												----	----
DEMAND KVA TOTALS ---------->			472			234			3,141			1,391	3,390	692	9,320	11,210
SPARE CAPACITY ---------->			**25%**			**25%**			**25%**			**25%**	**25%**	**25%**		
TOTAL DESIGN KVA LOAD -->			**590**			**293**			**3,927**			**1,738**	**4,238**	**865**	**11,650**	**14,012**

VA. / SQ.FT. ----------> **1,046,952** SQ.FT. *0.6* *0.3* *3.8* *1.7* *4.0* *0.8* *11.1*

QTY	XFMR. SIZE		O.L. RATING		FAN COOLING		MAX. KVA	MAX. AMPS.
1	**????**	X	100%	X	100%	=	**#VALUE!**	**#VALUE!**

80%

USE **??? AMP SWITCHBOARD**
USE **??? AMP FEEDER**
USE **??? KAIC RATING**
USE

480V, 3P

GLUMAC 503.227.5280 FAX: 503.274.7674

8/22/18 10:57 AM

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LOAD SUMMARY CALCULATIONS

PROJECT: **MILLENNIUM HOLLYWOOD CENTER - WEST SITE**

SUBJECT: **LOAD ESTIMATE**

OCCUPANCY: **COMMERCIAL**

1.1 WEST SIDE SITE

LOAD SERVED	LIGHTING LOADS SQ.FT.	LIGHTING LOADS VA/ SQ.FT.	LIGHTING LOADS KVA	RECEPTACLE LOADS SQ.FT.	RECEPTACLE LOADS VA/ SQ.FT.	RECEPTACLE LOADS KVA	MOTOR LOADS QTY.	MOTOR LOADS HP.	MOTOR LOADS KVA	CONTINUOUS LOADS QTY or SQFT.	CONTINUOUS LOADS KVA or KVA/SF	CONTINUOUS LOADS TOTAL LOAD	NON-CONTIN. KVA	KITCHEN LOADS KVA	TOTAL CONN. KVA	TOTAL AMPS
WEST SENIOR BUILDING																
RESIDENTIAL AMENITY, LOBBIES, BOH	3,815	2.00	7.6	3,815	3.00	11.4									19	23
MECH PN	2,000	1.00	2.0	2,000	2.00	4.0									6	7
MECH LOADS																
STAIR PRESSURIZATION FAN							2	10	23.2						23	28
CORRIDOR EXHAUST FAN							1	3	4.0						4	5
TRASH ROOM EXHAUST							1	3	4.0						4	5
RESIDENTIAL EXHAUST							7	3	28.0						28	34
COOLING TOWER + PUMPS							1	200	199.0						199	239
COMMON AREA																
LAUNDRY										9	3.000	27.0			27	32
ELECTRIC DRYERS										9	11.000	99.0			99	119
ELVATORS							4	40	172.8						173	208
OUTDOOR COMMON OPEN SPACE																
LEVEL 2 SENIOR AFFORDABLE AMENITY DECK	1,080	0.50	0.5	1,080	1.00	1.1									2	2
SENIOR AFFORDABLE ROOF DECK	4,050	0.50	2.0	4,050	1.00	4.1									6	7
SENIOR RESIDENTIAL LOAD													391		391	470
WEST BUILDING																
VINE GROUND																
RETAIL/RESTAURANT	3,810	2.00	7.6	3,810	2.00	7.6								133	149	179
1M																
RETAIL / RESTAURANT	8,881	2.00	17.8	8,881	2.00	17.8								311	346	417
MECH PH	10,450	1.00	10.5	10,450	2.00	20.9									31	38
MECH LOADS																
STAIR PRESSURIZATION FANS							2	15	35.0						35	42
CORRIDOR EXHAUSTS FAN							1	5	6.3						6	8
TRASH ROOM EXHAUST							1	3	4.0						4	5
RESIDENTIAL EXHAUST							12	3	48.0						48	58
COOLING TOWER + PUMPS							1	350	344.0						344	414
HVAC COOLING LOAD FOR ELEVATOR, FIRE PUMP ROOM, ETC. (40 TONS OF COOLING)														80	80	96
ELEVATORS							7	100	721.7						722	868
ELEVATORS							3	40	129.6						130	156
INDOOR AMENITY SPACES	35,001	2.00	70.0	35,001	3.00	105.0									175	210
RESIDENTIAL LOAD													3,592		3,592	4,321
OUTDOOR COMMON OPEN SPACE	38,973	0.50	19.5	38,973	1.00	39.0									58	70
INDOOR COMMON OPEN SPACE	20,791	2.00	41.6	20,791	3.00	62.4									104	125
PRIVATE BALCONIES	22,100	0.50	11.1	22,100	1.00	22.1									33	40
POOLS																
WEST SITE SPA 240 SQ FT												58.2			58	70
WEST SITE KIDS POOL 540 SQ FT												58.2			58	70
WEST SITE POOL 1700 SQ FT												124.7			125	150
PARKING GARAGE	378,512	0.50	189.3	378,512	0.30	113.6									303	364
SUMP PUMS							2	5	12.6						13	15
SEWAGE EJECTOR							2	10	23.2						23	28
BOOSTER PUMPS							3	30	99.6						100	120
PARKING EXHAUST FANS							10	40	432.0						432	520
PARKING SUPPLY FANS							10	40	432.0						432	520
LADWP VAULT							2	10	23.2						23	28
EV CHARGING STATIONS										84	9.600	806.4			806	970
FIRE PUMPS (2) 200HP							2	200	398.0						398	479
SITE AREA	83,792	0.50	41.9	83,792	1.00	83.8									126	151
CONN. KVA TOTALS ---->			421			493			3,140			1,173	3,983	524	9,735	11,709
CODE DEMAND FACTORS	TOTAL kVA: + 25% CONT. LOAD		421.3 105.3	1ST 10KVA@100%: REMAIN @ 50%:		10 241	ALL @ 100%: LARGEST MOTOR x 25%:		1.0	TOTAL kVA: + 25% CONT. LOAD		1173.4 293.3		DEMAND FACTOR 100%	---- ----	---- ----
DEMAND KVA TOTALS ---->			527			251			3,141			1,467	3,983	524	9,893	11,900
SPARE CAPACITY ---->			**25%**			**25%**			**25%**			**25%**	**25%**	**25%**		
TOTAL DESIGN KVA LOAD -->			**658**			**314**			**3,927**			**1,833**	**4,979**	**655**	**12,366**	**14,874**
VA. / SQ.FT. ---->	**1,136,945** SQ.FT.		*0.6*			*0.3*			*3.5*			*1.6*	*4.4*	*0.6*	*10.9*	

QTY	XFMR. SIZE		O.L. RATING		FAN COOLING		MAX. KVA	MAX. AMPS.
1	**????**	X	100%	X	100%	=	**#VALUE!**	**#VALUE!**

80%

USE **??? AMP SWITCHBOARD**

USE **??? AMP FEEDER**

USE **??? KAIC RATING**

USE

480V, 3P

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LOAD SUMMARY CALCULATIONS

PROJECT: **MILLENNIUM HOLLWOOD CENTER - EAST SITE (typical for with Hotel)**

SUBJECT: **EMERGENCY + OPTIONAL LOAD CALCULATION**

OCCUPANCY: **COMMERCIAL**

1.1 ENTER NAME HERE — **ENTER MORE DESCRIPTION HERE**

LOAD SERVED	LIGHTING LOADS SQ.FT.	LIGHTING LOADS VA/ SQ.FT.	LIGHTING LOADS KVA	RECEPTACLE LOADS SQ.FT.	RECEPTACLE LOADS VA/ SQ.FT.	RECEPTACLE LOADS KVA	MOTOR LOADS QTY.	MOTOR LOADS HP.	MOTOR LOADS KVA	CONTINUOUS LOADS QTY or SQFT.	CONTINUOUS LOADS KVA or KVA/SF	CONTINUOUS LOADS TOTAL LOAD	NON-CONTIN. KVA	KITCHEN LOADS KVA	TOTAL CONN. KVA	TOTAL AMPS
EAST SENIOR BUILDING																
RESIDENTIAL AMENITY, LOBBIES, BOH	3,875	0.20	0.8												0.8	0.9
MECH PN	2,000	0.20	0.4												0.4	0.5
MECHANICAL LOADS																
STAIR PRESSURIZATION FAN							2	10	23.2						23.2	27.9
CORRIDOR EXHAUST FAN							1	3	4.0						4.0	4.8
TRASH ROOM EXHAUST							1	3	4.0						4.0	4.8
RESIDENTIAL EXHAUST							7	3	28.0						28.0	33.7
ELEVATORS							4	40	172.8						172.8	207.8
OUTDOOR COMMON OPEN SPACE																
SENIOR AFFORDABLE ROOF DECK	4,800	0.20	1.0												1.0	1.2
EAST BUILDING																
BM (ARGYLE)																
RETAIL/RESTAURANT	7,580	0.20	1.5											150	151.5	182.2
VINE GROUND																
RETAIL / RESTAURANT	9,905	0.20	2.0											250	252.0	303.1
MECH PH	4,585	0.20	0.9												0.9	1.1
MECH LOADS																
STAIR PRESSURIZATION FANS							2	15	35.0						35.0	42.1
CORRIDOR EXHAUSTS FAN							1	5	6.3						6.3	7.6
TRASH ROOM EXHAUST							1	3	4.0						4.0	4.8
RESIDENTIAL EXHAUST							12	3	48.0						48.0	57.7
HVAC COOLING LOAD FOR ELEVATOR, FIRE PUMP ROOM, ETC. (40 TONS OF COOLING)														80	80.0	96.2
ELEVATORS							7	100	721.7						721.7	868.1
ELEVATORS							3	40	129.6						129.6	155.9
OUTDOOR COMMON OPEN SPACE																
LEVEL 1 VINE/ARGYLE STREET	22,300	0.20	4.5												4.5	5.4
LEVEL 2 AMENITY DECT	8,200	0.20	1.6												1.6	2.0
SENIOR AFFORDABLE ROOF DECK	4,800	0.20	1.0												1.0	1.2
INDOOR AMENITY SPACES	26,178	0.20	5.2												5.2	6.3
OUTDOOR COMMON OPEN SPACE	43,575	0.20	8.7												8.7	10.5
INDOOR COMMON OPEN SPACE	11,068	0.20	2.2												2.2	2.7
PARKING GARAGE	317,284	0.20	63.5												63.5	76.3
SUMP PUMPS							2	5	12.6						12.6	15.2
SEWAGE EJECTOR PUMPS							2	10	23.2						23.2	27.9
PARKING EXHAUST FANS							10	40	432.0						432.0	519.6
PARKING SUPPLY FANS							10	40	432.0						432.0	519.6
LADWP VAULT							2	10	23.2						23.2	27.9
FIRE PUMPS (2) 200HP							2	200	398.0						398.0	478.7
SITE AREA	117,133	0.20	23.4												23.4	28.2
CONN. KVA TOTALS ----->			117						2,498					480	3,094	3,722
CODE DEMAND FACTORS ----------->	TOTAL kVA: + 25% CONT. LOAD		116.7 29.2	1ST 10KVA@100%: REMAIN @ 50%:			ALL @ 100%: LARGEST MOTOR x 25%:		1.0	TOTAL kVA: + 25% CONT. LOAD				DEMAND FACTOR 100%	---- ----	---- ----
DEMAND KVA TOTALS ----------->			146						2,499					480	3,124	3,758
SPARE CAPACITY ----------->			**25%**			**25%**			**25%**			**25%**	**25%**	**25%**		
TOTAL DESIGN KVA LOAD -->			**182**						**3,123**					**600**	**3,906**	**4,698**

VA. / SQ.FT. -----------> **1,046,952** SQ.FT. *0.2* *3.0* *0.6* *3.7*

QTY	XFMR. SIZE		O.L. RATING		FAN COOLING		MAX. KVA	MAX. AMPS.
1	**????**	X	100%	X	100%	=	**#VALUE!**	**#VALUE!**

80%

USE **??? AMP SWITCHBOARD**

USE **??? AMP FEEDER**

USE **??? KAIC RATING**

USE

480V, 3P

GLUMAC 503.227.5280 FAX: 503.274.7674

8/22/18 11:01 AM

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LOAD SUMMARY CALCULATIONS

PROJECT: **MILLENNIUM HOLLYWOOD CENTER - WEST SITE**

SUBJECT: **EMERGENCY + OPTIONAL LOAD CALCULATION**

OCCUPANCY: **COMMERCIAL**

1.1 WEST SIDE SITE

LOAD SERVED	LIGHTING LOADS SQ.FT.	LIGHTING LOADS VA/ SQ.FT.	LIGHTING LOADS KVA	RECEPTACLE LOADS SQ.FT.	RECEPTACLE LOADS VA/ SQ.FT.	RECEPTACLE LOADS KVA	MOTOR LOADS QTY.	MOTOR LOADS HP.	MOTOR LOADS KVA	CONTINUOUS LOADS QTY or SQFT.	CONTINUOUS LOADS KVA or KVA/SF	CONTINUOUS LOADS TOTAL LOAD	NON-CONTIN. KVA	KITCHEN LOADS KVA	TOTAL CONN. KVA	TOTAL AMPS
WEST SENIOR BUILDING																
RESIDENTIAL AMENITY, LOBBIES, BOH	3,815	0.20	0.8												0.8	0.9
MECH PN	2,000	0.20	0.4												0.4	0.5
MECH LOADS																
STAIR PRESSURIZATION FAN							2	10	23.2						23.2	27.9
CORRIDOR EXHAUST FAN							1	3	4.0						4.0	4.8
TRASH ROOM EXHAUST							1	3	4.0						4.0	4.8
RESIDENTIAL EXHAUST							7	3	28.0						28.0	33.7
ELVATORS							4	40	172.8						172.8	207.8
OUTDOOR COMMON OPEN SPACE																
LEVEL 2 SENIOR AFFORDABLE AMENITY DECK	1,080	0.20	0.2												0.2	0.3
SENIOR AFFORDABLE ROOF DECK	4,050	0.20	0.8												0.8	1.0
WEST BUILDING																
VINE GROUND																
RETAIL/RESTAURANT	3,810	0.20	0.8											150	150.8	181.3
1M																
RETAIL / RESTAURANT	8,881	0.20	1.8											250	251.8	302.8
MECH PH	10,450	0.20	2.1												2.1	2.5
MECH LOADS																
STAIR PRESSURIZATION FANS							2	15	35.0						35.0	42.1
CORRIDOR EXHAUSTS FAN							1	5	6.3						6.3	7.6
TRASH ROOM EXHAUST							1	3	4.0						4.0	4.8
RESIDENTIAL EXHAUST							12	3	48.0						48.0	57.7
HVAC COOLING LOAD FOR ELEVATOR, FIRE PUMP ROOM, ETC. (40 TONS OF COOLING)														80	80.0	96.2
ELEVATORS							7	100	721.7						721.7	868.1
ELEVATORS							3	40	129.6						129.6	155.9
INDOOR AMENITY SPACES	35,001	0.20	7.0												7.0	8.4
OUTDOOR COMMON OPEN SPACE	38,973	0.20	7.8												7.8	9.4
INDOOR COMMON OPEN SPACE	20,791	0.20	4.2												4.2	5.0
PARKING GARAGE	378,512	0.20	75.7												75.7	91.1
SUMP PUMPS							2	5	12.6						12.6	15.2
SEWAGE EJECTOR							2	10	23.2						23.2	27.9
PARKING EXHAUST FANS							10	40	432.0						432.0	519.6
PARKING SUPPLY FANS							10	40	432.0						432.0	519.6
LADWP VAULT							2	10	23.2						23.2	27.9
FIRE PUMPS (2) 200HP							2	200	398.0						398.0	478.7
SITE AREA	83,792	0.20	16.8												16.8	20.2
CONN. KVA TOTALS ---->			118						2,498					480	3,096	3,724
					1ST 10KVA@100%:			ALL @ 100%: LARGEST			TOTAL kVA:			DEMAND FACTOR	----	----
CODE DEMAND FACTORS ---->	TOTAL kVA: + 25% CONT. LOAD		118.2 29.6		REMAIN @ 50%:			MOTOR x 25%:	1.0		+ 25% CONT. LOAD			100%	----	----
DEMAND KVA TOTALS ---->			148						2,499					480	3,126	3,760
SPARE CAPACITY ---->			**25%**			**25%**			**25%**			**25%**	**25%**	**25%**		
TOTAL DESIGN KVA LOAD -->			**185**						**3,123**					**600**	**3,908**	**4,701**
VA. / SQ.FT. ---->	**1,136,945** SQ.FT.		*0.2*						*2.7*					*0.5*	*3.4*	

QTY	XFMR. SIZE		O.L. RATING		FAN COOLING		MAX. KVA	MAX. AMPS.
1	**????**	X	100%	X	100%	=	**#VALUE!**	**#VALUE!**

80%

USE **??? AMP SWITCHBOARD**

USE **??? AMP FEEDER**

USE **??? KAIC RATING**

USE

480V, 3P