

Attachment J

Utility Infrastructure Report



**UTILITY INFRASTRUCTURE REPORT FOR
1917-2005 ½ West 3rd Street Development**

1917-2005 ½ West 3rd Street

Los Angeles, CA 90057

July 7, 2020

Prepared By:

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1. INTRODUCTION

1.1. PROJECT DESCRIPTION

Miramar Development, LP has proposed a new affordable multi-family residential development (Project) located at 1917-2005 ½ 3rd Street in the City of Los Angeles (Site). The Site is bounded by an eight-story residential apartment building, Miramar Towers, on the north, a four-story apartment on the west, a single-story residential property on the east, and 3rd Street on the south. The Site is approximately 0.70-acres (30,432 square feet) and consists of a fire lane, parking lot consisting of seven parking spaces, outdoor seating, walkway, and landscape area that serves the existing Miramar Towers.

The new development will include one seven-story building, basement level tenant amenities, ADA compliant walkways, a fire lane, and several landscaped areas. The Project would redevelop the entire 0.70-acre site.

1.2. SCOPE OF WORK

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 UTILITY INFRASTRUCTURE

The Site currently provides access for gas, electrical, sewer, water, and storm drainage utilities associated with the existing Miramar Towers. The existing gas, electrical, and storm drain utilities will be relocated to other areas of the Site, but will continue to service the existing building. The existing water and sewer line will remain protected in place.

2.1. WATER

2.1.1. EXISTING WATER INFRASTRUCTURE

The Los Angeles Department of Water and Power (LADWP) maintains water infrastructure to the Site. Per LADWP Water Service Map 134-204, there is an existing 12-inch Delavaud cast iron (DEL) water main located along 3rd Street fronting the Site.

2.1.2. EXISTING FIRE INFRASTRUCTURE

Based on information provided on the City of Los Angeles NavigatELA website (<https://navigatela.lacity.org/navigatela/>), the nearest fire hydrant is located

across 3rd Street approximately 200 feet from the Site.

The ALTA survey for the Site also shows an existing onsite fire department connection (FDC) located near 3rd Street.

2.2. WASTEWATER

The 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 Treatment Plant is 450 million gallons per day (mgd). The sewerage generated at the Site will be treated within the Hyperion Sewer System Service Area. Based on information provided on the City of Los Angeles NavigateLA website (<https://navigatea.lacity.org/navigatea/>), there is an 8-inch vitrified clay pipe (VCP) which runs along 3rd Street fronting the Site.

2.3. STORM WATER

Based on the ALTA survey for the Site, the existing storm water from the Site is collected in onsite gutters and catch basins, and discharged to the street gutter via two parkway drains on 3rd Street, one located on the east of the Site and the other on the west of the Site. Storm water runoff from the existing Miramar Towers site is also conveyed to the onsite gutters.

2.4. ENERGY

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.

2.5. 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 24,000 square-mile area in Central and Southern California. The system supplies natural gas to 21.8 million customers through 5.9 million meters in more than 500 communities.

3. PROPOSED UTILITY INFRASTRUCTURE

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 200 to 350 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.

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 Project. LADWP can serve temporary power with an overhead 4.8kV circuit that is available in the alley south of the project site in between Westlake Ave and Bonnie Brae Street. During construction, the existing transformer for Miramar Tower will be relocated from the center of the project site to the Southeast corner of the Miramar Tower Site. This will be the utility yard for the existing building, which be on an unexcavated area open to sky. Typical uses include temporary power for lighting, equipment, construction trailers, etc. The demand would be supplied from existing electrical services within the 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. INFRASTRUCTURE CAPACITY

3.2.1.1. WATER

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 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 1 for the results of the Service Advisory Request (SAR).

DOMESTIC WATER

A new 3-inch equivalent water line is proposed based on the estimated water demand shown in Table 1. A Service Advisory Request (SAR) was submitted to LADWP to obtain the existing pressure and flow of the main line. The approved SAR confirms that sufficient capacity is available for the Project (Exhibit 1). Per the results a static pressure of 110 pounds per square inch (psi) and a flow of up to 1440 gallons per minute (gpm) can be delivered with a residual pressure of 71 psi.

Table 1. Domestic Water Demand

1917 – 2005 ½ WEST 3RD STREET - Affordable				
WATER SUPPLY FIXTURE UNIT COUNT (COLD)				
Fixture	Tag	QTY	WSFU	TOTAL
Water	WC-1	153	2.5	382.5
Lavatory	L-1	153	1	153
Shower	SH-1	137	2	274
Clothe	WM-1	28	4	112
Kitchen	KS-1	138	1.5	207
Dishwas	DW-1	137	1.5	205.5
Refriger	R-1	137	0	0
Service	SS-1	8	3	24
Hose	HB-1	38	1	38
			TOTAL	1396.0
TOTAL				1396.0
GPM FROM			260 GPM*	

FIRE WATER

A new 6-inch water line is proposed based on the estimated water demand required by the proposed sprinkler system. A Service Advisory Request (SAR) was submitted to LADWP to obtain the existing pressure and flow of the main line. The approved SAR confirms that sufficient capacity is available for the Project (Exhibit 1). Per the results a static pressure of 110 pounds per square inch (psi) and a flow of up to 1440 gallons per minute (gpm) can be delivered with a residual pressure of 71 psi.

A new fire hydrant is also proposed along 3rd street fronting the project site.

3.2.2. WASTEWATER

The base estimated sewer flows were based on the Bureau of Sanitation (BOS) sewerage generation factors for residential categories, and are summarized in Table 2 below. The Site is anticipated to produce 13,390 gallons per day (gpd) of sewage which will require an 8-inch pipe (Table 3 and 4). Since the sewage production is over 10,000 gpd the project was required to submit a Sewer capacity Availability Request (SCAR) to the City of Los Angeles Bureau of Sanitation. The SCAR was approved by BOS establishing that the existing public infrastructure can accommodate the new development (Exhibit 2). There are no existing sewer fixtures

on-site and no Sewer Connection Certificates. The Project will require a new 8” sewer line to service the new building. The existing sewer line will be protected in place and will continue to service the existing building. Construction impact in the public right-of-way associated with the installation of the new sewer line will consist of trenching under the sidewalk and roadway on 3rd Street.

Table 2. Daily Sewer Demand

Sewer Demand				
	Proposed Use Description	Sewage Generation (GDP)	Quantity	Total GPD
1	Studio	75	64	4800
2	1 Bed	110	59	6490
3	2 Bed	150	14	2100
Total				13,390

Table 3. Sewer Pipe Sizing

1917 – 2005 ½ WEST 3RD STREET - Affordable Housing				
DRAINAGE FIXTURE UNIT COUNT				
Fixture	Tag	QTY	DFU	TOTAL DFU
Water Closet	WC-1 (FT)	153	3	459
Lavatory	L-1	153	1	153
Shower	SH-1	137	2	274
Clothe Washer	WM-1	28	4	112
Kitchen Sink	KS-1	138	2	276
Dishwasher	DW-1	137	0	0
Refrigerator	R-1	137	0	0
Service Sink	SS-1	8	3	24
Floor Sink	FS-1	4	3	12
Floor Drain	FD-1	2	2	4
Hub Drain	HD-1	2	8	16
TOTAL D.F.U.				1330.0
TOTAL GPM				665.0
TOTAL CFS				1.48

Table 4. Sewer Pipe Sizing

Pipe ID:	SEWER		1.4800	cfs
Calculations for Velocity and Discharge				
$D =$	8		0.67	ft
				Diameter of Pipe
$n =$	0.012			
				Manning's Roughness Coefficient
$S =$	0.02	ft/ft	2.00	%
				Slope of Pipe
$d =$	6	inches	0.50	ft
				Flow Depth
$d/D =$	0.75			
				Proportional Depth of Flow
$\theta =$	4.1888	radians		
				Angle of Flow
$a =$	0.28	sq.ft		
				Area of Flow
$p =$	1.40	ft		
				Wetted Perimeter
$r =$	0.20	ft		
				Hydraulic Radius
<i>Using Manning's Equation, for pipe at flow depth 'd'</i>				
$v =$	6.02	fps		Flow Velocity
$Q =$	1.692	cfs		Flow Rate
* Calculation is for 75% capacity				

3.2.3. STORM WATER

The proposed development will comply with Los Angeles' current storm water treatment requirements by implementing Low Impact Development (LID) Best Management Practices (BMPs) per the Planning and Land Development handbook for Low Impact Development 5th Edition.

Storm water from the existing Miramar Towers site will not be allowed to drain onsite and instead will be collected in catch basins along the property line and piped to the street gutter on 3rd Street. Additionally a v-gutter will be located along the east property line to prevent stormwater from running on to the neighboring property. The proposed development will be required to treat the runoff produced from the 85th percentile design storm event prior to discharging it offsite. The Project will utilize a combined biofiltration and capture and reuse planter box. Runoff will be filtered through the planter soil and then stored within the planter base for reuse as passive irrigation. Runoff that exceeds the 85th design storm volume will be

collected through the planter overflow pipes and discharged to the gutter on 3rd street via parkway drains.

3.2.4. ENERGY

ELECTRICITY

An electricity will serve letter was sent to LADWP to determine if there is sufficient capacity to serve the Project. Based on the response from the LADWP (see Exhibit 3), electrical service is available and can be served to the Project. The Project will increase electricity consumption. Based on the information that is currently available, the estimated electrical load is approximately 3,000 kilo-volt-ampere (kVa). However, the actual loads will remain unknown until load calculations are completed.

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 4), gas service is available and can be served to the Project.

The Project will increase the demand for natural gas resources.

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 SARs completed by LADWP show that the existing water infrastructure is adequate to meet both the fire water and domestic water demand of the project. The results of the SCAR show that the existing sewer infrastructure is adequate to meet the sewerage generation 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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<http://eng.lacity.org>

07/13/2020

VIRGIL AOANAN
1041 S GARFIELD AVE SUITE 210
ALHAMBRA, CA, 91803

Dear Virgil Aoanan,

SEWER AVAILABILITY: 1917-2005½ 3rd Street

The Bureau of Sanitation has reviewed your request of 07/08/2020 for sewer availability at **1917-2005½ 3RD STREET**. Based on their analysis, it has been determined on 07/13/2020 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,

Jeanie Lam

Central District, Bureau of Engineering



POWER NEW BUSINESS
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METROPOLITAN EAST SERVICE PLANNING

2633 Artesian Street, Suite 210, Los Angeles, CA 90031 (213) 367-6000 FAX: (213) 367-6027

SERVICE PLANNING & CUSTOMER
SUPPORT SUBSECTION

Jeffrey T. Bergman
District Engineer

WILL SERVE

July 22, 2020

Ms. Eileen Ortega
DUEx Dry Utility Experts
17291 Irvine Boulevard, Suite 264
Tustin, CA 92780

Dear Ms. Ortega:

2000 Miramar Street
Miramar Apartments

This is in response to your letter dated July 14, 2020 regarding electric service for the proposed project at the above address.

Electric service is available and will be provided in accordance with the Los Angeles Department of Water and Power Rules and Regulations. The estimated power requirement for this proposed project is part of the total load growth forecast for the City and has been taken into account in the planned growth of the power system.

If you have any questions regarding this matter, please call Mr. Jonathan Mota at (213) 367-6082.

Sincerely,

A handwritten signature in blue ink that reads "Jeff Bergman".

Jeffrey T. Bergman
District Engineer, Metro East Service Planning

c: Jonathan Mota



701 N. Bullis Rd.
Compton, CA 90224-9099

May 28, 2020

DUEx
17291 Irvine Blvd, Suite 264
Tustin, CA 92780
Attn: Eileen Ortega

Subject: Maps & Will Serve - 2000 3rd St. Los Angeles, CA

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 (CPUC) 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.

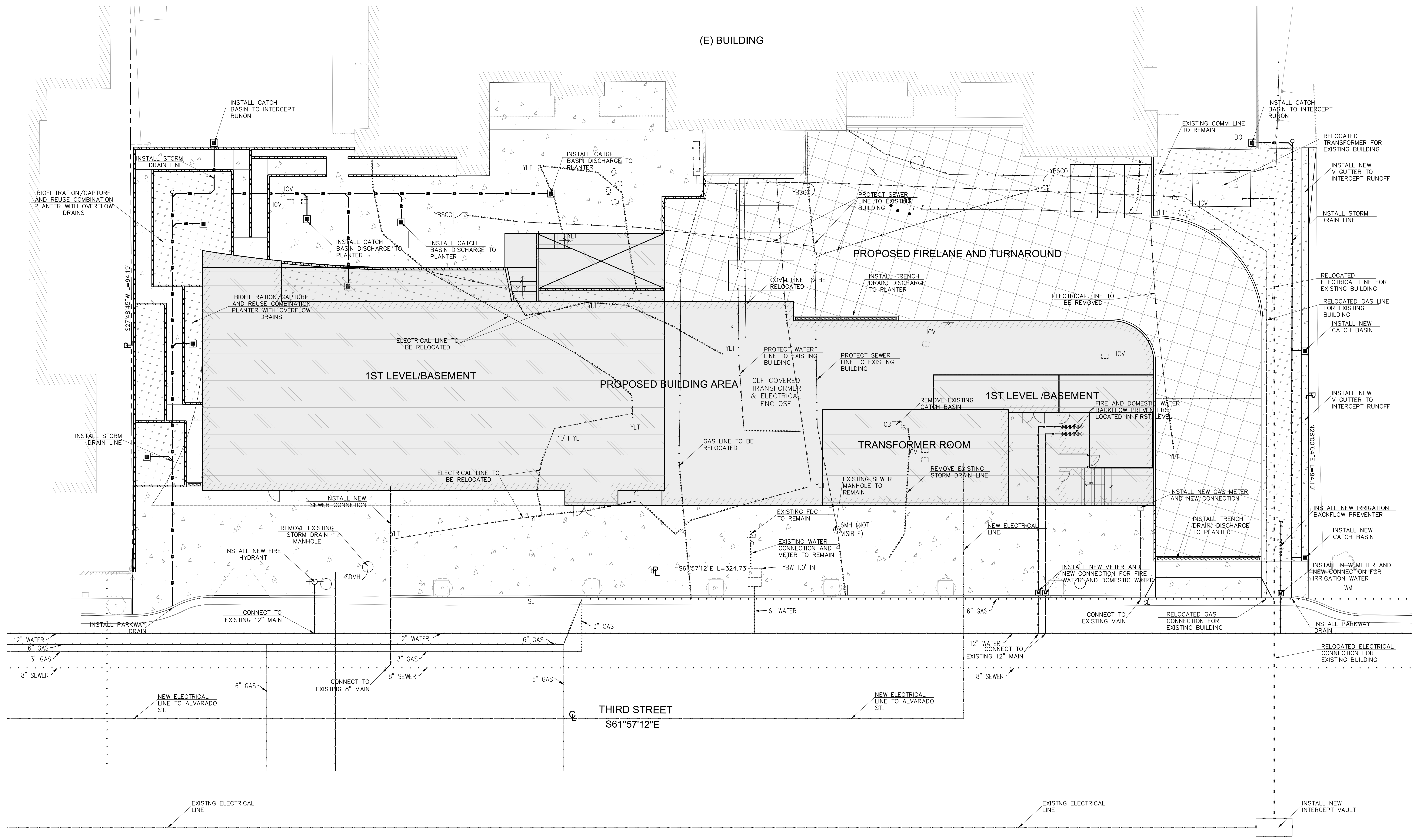
Sincerely,

Jason Sum

Jason Sum

Pipeline Planning Assistant
SoCalGas-Compton HQ

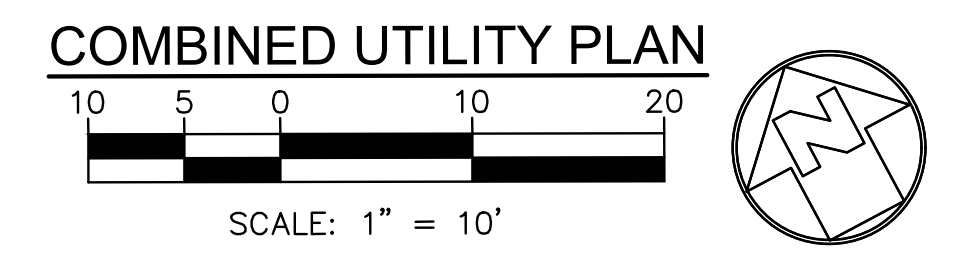
(E) BUILDING



ENTITLEMENT SUBMITTAL	--
LABS PDP SUBMITTAL	05/28/2020
DESIGN DEVELOPMENT	--
CONSTRUCTION DOCUMENTS	--
PLAN CHECK SUBMITTAL	--
PERMIT SET	--
CONSTRUCTION SET	--

LEGEND

	BACK FLOW PREVENTER		IRRIGATION LINE
	CATCH BASIN		GAS LINE
	COMMUNICATION LINE		WATER METER
	DOMESTIC WATER LINE		SANITARY SEWER LINE
	ELECTRICAL LINE		STORM DRAIN LINE
	FIRE HYDRANT		TRENCH DRAIN
	FIRE WATER LINE		



MIRAMAR DEVELOPMENT, LP
 1917-2005 1/2 W 3RD STREET
 LOS ANGELES, CA 90057
 PROJECT NUMBER: 01921.0

BROOKS + SCARPA

REVISIONS:

SHEET TITLE:
COMBINED UTILITY PLAN
 AS INDICATED

DATE PRINTED: 2020-7-18

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