

Appendix L

Utilities and Service Systems



This page left intentionally blank

L-1 Water Supply Assessment



This page left intentionally blank



DRAFT WATER SUPPLY ASSESSMENT

AVION BURBANK PROJECT CITY OF BURBANK

August 2017

TODD 
GROUNDWATER

**2490 Mariner Square Loop, Suite 215
Alameda, CA 94501
510.747.6920
www.toddgroundwater.com**

Table of Contents

1.	INTRODUCTION.....	1
1.1.	Proposed Project Description	1
1.2.	Background	1
1.3.	Purpose	2
1.4.	Acknowledgements.....	2
2.	PROJECT WATER DEMAND	2
2.1.	Existing Water Use	2
2.2.	Estimated Future Water Demand	2
2.3.	Estimated Future Recycled Water Use	3
2.4.	Future Water Conservation	3
2.5.	Total Future Project Demand.....	4
3.	CITY OF BURBANK WATER DEMAND	4
3.1.	Climate	4
3.2.	Population.....	5
3.3.	Current Water Use Sectors and Water Demand.....	5
3.4.	Projected Water Demand	5
3.5.	Water Demand in Normal and Drought Periods.....	6
4.	CITY OF BURBANK WATER SUPPLY	6
4.1.	Imported Water	6
4.2.	Groundwater.....	7
4.3.	Recycled Water	8
4.4.	Water Supply in Normal and Drought Periods	8
5.	COMPARISON OF SUPPLY AND DEMAND.....	9
6.	REFERENCES.....	9

List of Tables

Table 1. Estimation of Future Water Demand, Avion Burbank Project

Table 2. Estimated Landscaping Water Use, Avion Burbank Project

Table 3. Climate Data

Table 4. Population Projections

Table 5. Historical Water Demand by Water Use Sectors (AFY)

Table 6. Projected Water Demand by Water Use Sectors (AFY)

Table 7. Future MWD Water Supply and Demand (AFY)

Table 8. Groundwater Volume Pumped (AFY)

Table 9. Recycled Water Use (AFY)

Table 10. Normal Year Supply and Demand Comparison (AFY)

Table 11. Single Dry Year Supply and Demand Comparison (AFY)

Table 12. Multiple Dry Year Supply and Demand Comparison (AFY)

List of Figures

Figure 1. Project Area

Figure 2. Project Location

Figure 3. Proposed Project

1. INTRODUCTION

1.1. PROPOSED PROJECT DESCRIPTION

The Avion Burbank Project (the Project) is a mixed-use development on a 61-acre site adjacent to the Burbank Bob Hope Airport at 3001 North Hollywood Way in Burbank, California. The project proposes development of approximately 1.3 million square feet of new offices, retail and industrial uses and a hotel (166 rooms). The proposed project also involves creation of transit connectivity to the new Antelope Valley Metro station, parking, street widening, and paths for autos, bikes, and pedestrians.

The project site is primarily vacant and was formerly occupied by Lockheed and Pacific Airmotive Corporation (PAC). Lockheed occupied 60 acres of the project site from the mid-1940s to the mid-1990s. Pacific Airmotive Corporation (PAC) occupied 0.69 acre of the project site and had a Jet Engine Test Facility that operated from 1947 to 1996. Lockheed's buildings demolished from 1997 to 2001 and PAC's buildings were demolished in 2013. A small portion of the northern property is currently used as commercial long-term storage of automobiles and storage pods. There are no buildings on the project site and according to the City, there is no water use at this facility.

Figure 1 shows the project area with reference to the city limits and major roads. **Figure 2** shows an aerial photograph of the existing project location. **Figure 3** shows the proposed project.

1.2. BACKGROUND

The California Water Code section 10910 (also termed Senate Bill 610 or SB610) requires that a water supply assessment (WSA) be provided to cities and counties for projects (of a specified type and size) that are subject to the California Environmental Quality Act (CEQA). The City recognizes the Avion Burbank Project as subject to CEQA and SB610. Agencies (e.g., cities and counties) are mandated to identify the public water system that might provide the project's water supply and then to request a WSA, which includes a discussion with regard to whether the public water system's total projected water supplies (available in normal, single dry, and multiple dry years during a 20-year projection) will meet the projected water demand associated with the proposed project in addition to the public water system's existing and planned future uses. The City of Burbank (City), through Burbank Water and Power (BWP), is the public water provider.

A foundational document for preparation of the WSA is the Urban Water Management Plan (UWMP). BWP prepared a 2015 Urban Water Management Plan, incorporated herein by reference, which was adopted on June 14, 2016, and is available online at: <https://www.burbankwaterandpower.com/urban-water-management-plan-update>. WSAs and UWMPs both require water supply reliability information to be provided for the water

service area in 5-year increments over a 20-year planning horizon. Recognizing the role of the UWMP in future WSAs, Burbank Water and Power prepared its UWMP with water supply reliability information over a 25-year horizon.

The 2015 UWMP (BWP, 2016) recognizes that future water demand may be impacted by large development projects. The UWMP includes the Avion Burbank Project as one of four projects which may impact BWP's future water demand.

1.3. PURPOSE

The purpose of this WSA is to document BWP's existing and future water supplies for its service area and compare them to the area's future water demand including that of the proposed project. This comparison, conducted for both normal and drought conditions, is the basis for an assessment of water supply sufficiency in accordance with the requirements of California Water Code section 10910 (Senate Bill 610).

1.4. ACKNOWLEDGEMENTS

This assessment was prepared by Liz Elliott, Senior Hydrogeologist and Iris Priestaf, President, on behalf of the City of Burbank. Ms. Elliott and Dr. Priestaf have completed numerous WSAs for clients throughout California. We appreciate the valuable assistance provided by ESA.

2. PROJECT WATER DEMAND

This section addresses water demands for the existing project area and for the proposed land use.

2.1. EXISTING WATER USE

There is no existing water use because the project site is vacant. There is a small area in the northern region of the property that is used as commercial long-term storage of automobiles and storage pods. However, there is no water use associated with this storage area. According to the Property Manager, there has been no water use at the property for the last five years.

2.2. ESTIMATED FUTURE WATER DEMAND

Estimation of the future water demand involves application of water demand factors. BWP's UWMP does not include a methodology for how future demand is estimated. Accordingly, estimation of project demand for this WSA is based on water demand factors from nearby water supply analyses, including the Water Use Technical Report for the LAX Master Plan EIS/EIR (Camp Dresser & McKee Inc., 2001) and a water supply assessment in the City of Redondo Beach (Yarne & Associates, Inc., 2015).

The LAX Master Plan EIS/EIR water demand factors were developed for various land uses, including office, industrial, and retail. These water demand factors were similar to water demand factors in the City of Los Angeles Village at Playa Vista Draft EIR (City of Los Angeles, 2003) and in the Water Supply Assessment for the Port of Los Angeles Berths 302-306 [APL] Container Terminal Project (City of Los Angeles Water Resources Division, 2011). The office water demand factor is 0.15 gallons per day per square foot (gpd/sf) and the industrial and retail water demand factors are 0.08 gpd/sf. The hotel water demand factor is 0.5 gpd/sf, from the Water Front Project Water Supply Assessment in Redondo Beach (Yarne & Associates, Inc., 2015). Based on our professional experience, these water demand factors are reasonable. Calculations of water demand based on these water demand factors for the proposed project are shown in **Table 1**.

The estimated landscaping water use was provided by RLA, the Project Landscape Architect. The landscaped area for the proposed project is estimated to be approximately 306,000 square feet, 82 percent of which is composed of low water use plants and 18 percent of which is composed of moderate water use plants. Landscaping water use calculations are shown on **Table 2**.

As shown on **Tables 1 and 2**, the proposed project is estimated to use 185 AFY: 173 AFY for indoor use and 12 AFY for landscaping. This also represents the increase in water use because there is currently no water use at the project site.

2.3. ESTIMATED FUTURE RECYCLED WATER USE

The Burbank Water Reclamation Plant treats wastewater and produces up to 10,000 AFY of recycled water used for power production, evaporative cooling, and landscape irrigation (BWP, 2016). The current recycled water system does not extend to the project site. There is a proposed recycled water pipeline that will extend north along North Hollywood Way to the project site (BWP, 2016). Recycled water may be a future water source if the project gains access to the recycled water supply.

2.4. FUTURE WATER CONSERVATION

The Water Conservation Act of 2009 (SBx7-7) called for a 20 percent reduction in urban water use by the year 2020. The water code was amended to require 2015 and 2020 water use targets to be developed in the 2010 UWMPs and updated in the 2015 UWMPs. Per the 2015 UWMP, Burbank set a 2020 compliance target for per capita water consumption of 157 gallons per capita daily (gpcd).

In 2008, the City of Burbank enacted the Sustainable Water Use Ordinance (SWUO) to provide a tiered response for water conservation. Stage I SWUO implemented permanent conservation measures including prohibition of watering on rainy days or when the sun is out, prohibition of hosing down driveway and other hardscape surfaces, continued water system maintenance, and maximization of recycled water use. Burbank reached the SBx7-7

20 percent reduction target in 2010 and 2011 by implementing Stage II of its SWUO, which limited home watering to three days per week. Due to SBx7-7 and the implementation of Stage III SWUO on June 1, 2015, Burbank's 2015 water use was 127 gpcd, which is below the 2020 compliance target of 157 gpcd. Stage III SWUO requires limiting landscape irrigation to no more than two days per week in the summer and one day per week in the winter, prohibits landscape irrigation between 9:00 am and 6:00 pm, prohibits the use of misters and other outdoor evaporative cooling devices, and requires covering swimming pools and spas when not in use (BWP, 2016). The City believes it can continue to meet the compliance target by limiting landscape irrigation to three days per week. Water usage is expected to increase to 150 gpcd by 2020 and then decrease to 130 gpcd by 2040 gpcd (BWP, 2016).

2.5. TOTAL FUTURE PROJECT DEMAND

Tables 1 and 2 show the estimated future project demand for indoor water use and landscaping. Because the project site is currently vacant and no water is used, the future project demand also represents the net increase in water demand. The change in water demand is 185 AFY: 173 AFY for indoor use (**Table 1**) and 12 AFY for landscaping (**Table 2**).

3. CITY OF BURBANK WATER DEMAND

This section summarizes water demands for the City of Burbank, the provider of water to the Avion Burbank Project. The first part describes the factors affecting total water demand, including climate, population and employment, plus the mix of customer types, such as residential, commercial, agricultural and industrial. The second part documents water demands not only under normal climatic conditions, but also during drought.

3.1. CLIMATE

Climate has a significant influence on water demand on a seasonal and annual basis. This influence increases with the portion of water demand for outside uses, specifically landscape irrigation.

Table 3 summarizes representative climate data for the City, including average monthly and annual rainfall and evapotranspiration (ETO). The City has a Mediterranean climate, characterized by dry summers and wet winters with year-round moderate-to-warm temperatures. Reflecting this pattern, water demand in the City is greater in the summer than in the winter.

Climate change may affect future water supply availability for the City of Burbank by reducing water availability, changing local precipitation patterns, and increasing water demands. As discussed in greater detail below, the City has developed a portfolio of different water supplies, including imported water from the Metropolitan Water District of Southern California, groundwater, and recycled water.

California was in a serious drought from 2012 to 2017. In 2015, the City's water use of 127

gpcd was below the 2020 compliance target of 157 gpcd. The City's cumulative State urban water use reduction since 2015 is 22.1 percent (SWRCB, 2017), exceeding the SBx7-7 urban water use reduction goal of 20 percent. The Governor of California ended the official drought declaration on April 7, 2017 (Executive Order B-40-17).

3.2. POPULATION

City population, a key factor in water demand, is analyzed in the 2015 UWMP. **Table 4** reproduces the UWMP population value for the City's water service area for 2015 with projections to 2040.

3.3. CURRENT WATER USE SECTORS AND WATER DEMAND

Table 5 documents the historical water demand for the City's service area by water use sectors between 2011 and 2015. The water use sectors (customer types) are listed on the left. The 2015 UWMP (BWP, 2016) provides 2015 water use by sector, the average annual potable water sales for 2011 through 2015 (17,339 AF) as well as the percentage of these sales by water use sector. A comparison of the 2015 water use with the 2011 to 2015 average is shown on **Table 5**.

The total potable water use in 2015 was 14,508 AFY, which is approximately 20 percent less than the 2011 to 2015 average of 17,339 AFY. This reflects the success of water conservation factors among other factors. Approximately 73 percent of the potable water consumption in 2015 was by single-family and multi-family residential customers. The 2015 water use, as compared with the 2011 to 2015 average, decreased between 9 and 35 percent in each water use sector. In 2015, total water consumption, including potable water, groundwater recharge, recycled water, and system losses, was 24,856 AFY.

3.4. PROJECTED WATER DEMAND

Table 6 summarizes projected water demands for the City's service area from 2020 to 2040 (BWP, 2016). Overall, the projections indicate decreasing water demands to 2040 for each water use sector, except recycled water, which increases slightly, and recycled water exchange with Los Angeles for groundwater credits, which increases significantly. The projected water use is based on a consumption rate of 150 gpcd for 2020 and then gradually decreases to 130 gpcd in 2040 in accordance with the Water Conservation Act of 2009 (SBx7-7).

Table 6 also shows the decrease in water demand from 2020 to 2040, based on the 2015 UWMP, which assumes an eight percent decrease in total water sales from 2020 to 2040 (BWP, 2016). As indicated, residential water use is expected to decrease 1,069 AFY for single family units and 371 AFY for multi-family units, and commercial/industrial/institutional/governmental demand is projected to decrease by 112 AFY (BWP, 2016).

3.5. WATER DEMAND IN NORMAL AND DROUGHT PERIODS

The Los Angeles region has experienced major drought over the last few decades and recently experienced a severe drought. Water conservation is critical to Southern California’s water sustainability. As summarized in Section 2.4, the Water Conservation Act of 2009 called for a 20 percent reduction in urban water use by the year 2020. By 2010, Burbank met its 20 percent reduction target after it implemented partial Stage II Sustainable Water Use Ordinance requirements, which limited home watering to three days per week. In response to the July 2014 California State Board emergency regulations, the City implemented the full Stage II SWUO requirements. In response to the worsening drought, Governor Brown issued an Executive Order on April 1, 2015 mandating a 25 percent statewide reduction in potable urban water through February 2016. Because of Burbank’s historical water conservation efforts, their reduction target was set at 24 percent. In 2015, the City successfully met their 24 percent reduction target, and saved over 1 billion gallons of water, by implementing the following (BWP, 2016):

- Sustainable Water Use Ordinance Stage III Restrictions – 11 percent reduction
- Recycled Water Conversion Projects – 3 percent reduction
- Enforcement of Water Waste Restrictions already in place - 8 percent reduction
- Indoor Water Waste Behavioral Improvements – 2 percent reduction

4. CITY OF BURBANK WATER SUPPLY

Burbank Water and Power provides potable and recycled water to the City. Potable water includes imported water from the Metropolitan Water District of Southern California (MWD) and groundwater from production wells within the City. The MWD imports water from both the State Water Project and the Colorado River Aqueduct. Groundwater is extracted within the City and is treated for volatile organic compounds (VOCs) at the Burbank Operable Unit. Recycled water is produced at the Burbank Water Reclamation Plant (BWRP). The Avion Burbank Project, however, does not currently have access to recycled water, but may use recycled water as a future water supply if the project gains access to the proposed recycled water pipeline.

The total water demand of the project is anticipated to be met with the current portfolio of supply discussed in the following section.

4.1. IMPORTED WATER

Imported water provided by MWD from the Colorado River and the Sacramento-San Joaquin River Delta (Delta) is purchased and delivered to the City (BWP, 2016). The Colorado River Aqueduct, managed by MWD, is 242 miles long and conveys water from the Colorado River to Lake Matthews. The California Aqueduct, part of the State Water Project and operated by the California Department of Water Resources, is 444 miles long and carries water from

the Delta to Southern California. These two sources provide Southern California with approximately two million acre-feet (MAF) of water annually for urban uses.

In 2015, Burbank obtained approximately 32 percent of its treated potable water from MWD. Since groundwater treatment facilities were built in the mid-1990s, allowing more groundwater use, BWP's demand for treated MWD water decreased from 23,000 AF in 1990 to 4,765 AF in 2015 (BWP, 2016). As summarized on **Table 7**, MWD's projected supply of treated potable water will exceed BWP's projected demand by 32 AFY in 2020 and 1,422 AFY in 2040. MWD will have enough treated potable water to meet BWP's anticipated future demand (BWP, 2016).

4.2. GROUNDWATER

As indicated on **Table 8**, groundwater is a major source of water for the City of Burbank, composing over half of its water supply between 2011 and 2015. Groundwater is pumped from the San Fernando Valley Groundwater Basin (Basin), designated by the Department of Water Resources (DWR) as groundwater basin number 4-12 (DWR, 2003). The Basin underlies the San Fernando Valley and has been adjudicated since 1979. Based on the 2015 UWMP, BWP has eight production wells. As shown on **Table 8**, groundwater extraction ranged from 9,511 to 11,191 AFY from 2011 to 2015.

The Basin was adjudicated in 1979 and the courts gave the City of Los Angeles, under its Pueblo Water Right, an exclusive right to extract and use the entire native safe yield of the Basin of 43,660 AFY (Upper Los Angeles River Area (ULARA) Watermaster, 2017). The adjudication entitles the City of Burbank to an Import Return Credit (IRC) of 20 percent of all water delivered in Burbank, including recycled water. The IRC is calculated every year by the ULARA Watermaster. Burbank has the right to pump additional groundwater if it imports water for recharge and can also purchase groundwater credits from the City of Los Angeles.

Groundwater pumped in Burbank is treated at the Burbank Operable Unit (BOU) for VOCs. The BOU remediates groundwater impacted primarily by Lockheed-Martin as part of the San Fernando Valley Groundwater Basin Superfund Site. Groundwater contamination was first detected in the City's production wells in the 1980s and the BOU began operation in 1996. The BOU is operated by the City of Burbank after it took over operation from Lockheed Martin in 2001.

With a surface area of 226 square miles, the Basin is bounded on the north and northwest by the Santa Susana Mountains, on the north and northeast by the San Gabriel Mountains, on the east by the San Rafael Hills, on the south by the Santa Monica Mountains and Chalk Hills, and on the west by the Simi Hills. The valley is drained by the Los Angeles River and its tributaries. Groundwater in the basin is primarily unconfined.

The water bearing deposits include the lower Pleistocene Saugus Formation, and the alluvium of Pleistocene and Holocene age. The Saugus Formation is composed of

continental and shallow marine deposits and reaches a maximum thickness of 6,400 feet in the center of the Basin. The Holocene age alluvium is composed of coarse-grained gravel and sand and reaches a thickness of approximately 900 feet near Burbank. The Pleistocene age alluvium is dominated by unconsolidated coarse-grained deposits. Groundwater flows generally towards the center of the Basin and then beneath the Los Angeles River Narrows into the Central Subbasin of the Coastal Plain of Los Angeles Basin. Water levels have been relatively stable since the Basin was adjudicated.

4.3. RECYCLED WATER

Although the Avion Burbank Project does not currently have access to recycled water, the City of Burbank uses recycled water. As presented on **Table 9**, the City used 2,463 AFY in 2015 and its use is projected to more than double by 2025, to 5,047 AFY. In 2015, approximately 94 percent of Burbank's recycled water was used for irrigation and power production, with the remainder was for evaporative cooling (BWP, 2016). The City proposes extending the recycled water pipeline in various areas, including north along N Hollywood Way to the project site. It is unknown, however, when this pipeline will be constructed and when the project may have access to recycled water.

Recycled water is produced at the Burbank Water Reclamation Plant, which currently treats approximately 8.5 million gallons per day (MGD) of wastewater. Up to 10,000 AF of recycled water is available for reuse. As shown on **Table 9**, approximately 28 percent of the produced recycled water was used in 2015 and the remaining was discharged to the Burbank Western Channel which flows to the Los Angeles River. By 2025, it is projected that half of the recycled water produced will be used (BWP, 2016). According to the UWMP, BWP is pursuing grant funding to study the feasibility of using the excess recycled water for indirect and direct potable reuse. Excess recycled water may also be used to supplement Los Angeles Department of Water and Power's (LADWP) recycled water supply for indirect potable reuse (BWP, 2016).

4.4. WATER SUPPLY IN NORMAL AND DROUGHT PERIODS

The California Water Code requires a WSA to include discussion of how supply will meet demand during normal, single dry, and multiple dry years during a 20-year projection. The City's 2015 UWMP provides discussion of water supply and demand in normal and drought periods, included herein by reference. Based on the City's 2015 UWMP, **Table 10** summarizes water supply and demand for the City in a normal year, while **Tables 11** and **12** show supply and demand in single-year and multi-year dry conditions.

Review of **Tables 10, 11, and 12** shows that the water supply will remain similar in normal and drought periods. Given that MWD expects to meet demands, and groundwater and recycled water are available in dry years, the City can expect to meet future demands for both single and multiple dry years through 2040 (BWP, 2016).

5. COMPARISON OF SUPPLY AND DEMAND

Burbank Water and Power's 2015 Urban Water Management Plan (adopted June, 2016) projects that future water demand will decrease and forecasts that the City will meet future demands. The change in water demand for the project is 185 AFY: 173 AFY for indoor use and 12 AFY for landscaping. The project site is currently vacant and does not use water. Therefore, the project's estimated water demand represents an increase in water demand. MWD expects to continue to meet demand, and groundwater and recycled water will continue to be available in dry years. As documented in **Tables 10, 11, and 12**, the City of Burbank has sufficient water supply for existing water demands and projected water demands, including the demand of the proposed project, for normal, single dry, and multiple dry years during a 20-year projection.

6. REFERENCES

- Burbank Water and Power, 2016. *2015 Urban Water Management Plan*. June.
- California Department of Water Resources (DWR), 2003. *California's Groundwater, Update 2003*, Bulletin 118, October 2003.
<http://www.water.ca.gov/groundwater/bulletin118/index.cfm>
- Camp Dresser & McKee Inc., 2001. *Technical Report LAX Master Plan EIS/EIR, Water Use Technical Report*, prepared for Los Angeles World Airports, U.S. Department of Transportation, Federal Aviation Administration, January.
- City of Los Angeles, 2003. *Village at Playa Vista Draft EIR*. EIR No. ENV-2002-6129-EIR, State Clearinghouse No. 2002111065, August.
- City of Los Angeles Water Resources Division, 2011. *Water Supply Assessment for the Port of Los Angeles Berths 302-306 [APL] Container Terminal Project*, April 5.
- State Water Resources Control Board (SWRCB), 2017. *Drinking Water Information Clearinghouse, DRINC PORTAL Website*:
<http://drinc.ca.gov/dnn/Applications/UrbanWaterR-GPCD.aspx>, (accessed 8/3/17).
- Todd Groundwater, 2017. *Revised Draft Water Supply Assessment for City of Mountain View North Bayshore Precise Plan Project*. February.
- ULARA Watermaster, 2017. ULARA website for San Fernando Basin:
http://ularawatermaster.com/index.html?page_id=914, (accessed 8/7/17).
- Yarne & Associates, Inc., 2015. *Water Front Project Redondo Beach, California SB610 Water Supply Assessment*, prepared for California Water Service, August 24.

Table 1. Estimation of Future Water Demand, Avion Burbank Project

	Office	Industrial	Retail	Hotel	Total
Water Demand Factors ^{1,2}					
Water Demand Factor Classification	0.15	0.08	0.08	0.5	--
Recommended water demand factor	gpd/sf	gpd/sf	gpd/sf	gpd/sf	
Existing Land Use ³					
Area (SF)	0	0	0	0	0
Daily Demand (gpd)	0	0	0	0	0
Demand (AFY)	0	0	0	0	0
Proposed Land Use ⁴					
Area (SF)	142,250	1,014,887	15,475	101,230	
Daily Demand (gpd)	21,338	81,191	1,238	50,615	154,381
Demand (AFY)	24	91	1	57	173
Estimated Increase (Existing to Proposed)					
Area (SF)	142,250	1,014,887	15,475	101,230	
Daily Demand (gpd)	21,338	81,191	1,238	50,615	154,381
	24	91	1	57	173

Notes:

1. Water demand factors for office, industrial and retail from the LAX Master Plan EIS/EIR (Camp Dresser & McKee Inc., 2001).
2. Water demand factor for hotel based on City of Redondo Waterfront Project Water Supply Assessment (Yarne & Associates, Inc., 2015).
3. Existing site is vacant, no water use.
4. Proposed land use is based on the Project Description in the Initial Study (June 2017).

Table 2. Estimated Landscaping Water Use, Avion Burbank Project ¹

Landscaping Zone	Category	Eto	Conversion Factor	PF	Landscaped Area (sf)	Irrigation Efficiency	Gallons
Hydrozone Area #1	Shrub Drip (moderate)	51.7	0.62	0.4	54,764	0.81	866,867
Hydrozone Area #2	Shrub Drip (low)	51.7	0.62	0.3	221,320	0.81	2,627,478
Hydrozone Area #3	Shrub Spray (low)	51.7	0.62	0.3	30,000	0.71	406,318
Total Landscaped Area (sf)					306,084		
Estimated Landscaping Water Use							
(gallons/year)							3,900,663
(AFY)							12

Notes:

1. Landscaping water use estimate and calculations from RLA, the Project Landscape Architect, based on Figure L-4.1, Preliminary Hydrozone and Mwelo Plan and Calculations

2. Abbreviations

Eto = reference evapotranspiration (51.7 inches per year)

PF = Plant Factor from WUCOLS (Water Use Classification of Landscape Species. California Center for Urban Horticulture, University of California, Davis

sf = square feet

Table 3. Climate Data

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max °F	67.5	69.5	70.6	74.9	77.5	83.2	88.9	89.9	87.1	81.5	73.5	67.9	--
Mean °F	54.8	56.9	58.4	62.2	65.9	70.8	75.5	76.2	73.5	67.6	59.5	54.6	--
Min °F	42	44.3	46.2	49.5	54.2	58.3	62.1	62.4	59.9	53.6	45.4	41.3	--
Precip. (in)	3.56	4.29	3.88	1.02	0.37	0.12	0.02	0.18	0.30	0.55	1.05	2.15	17.5
ET (in)	2.20	2.45	3.64	4.74	5.31	6.06	6.75	6.66	5.01	3.95	2.73	2.31	51.8
ET deficit (in)	0	0	0	3.72	4.94	5.94	6.73	6.48	4.71	3.4	1.68	0.16	37.8

Source: Burbank Water and Power 2015 UWMP, Table 2-2.

Table 4. Population Projections

Parameter	2015	2020	2025	2030	2035	2040
Population	106,084	112,451	113,179	114,850	115,680	118,821

Source: Burbank Water and Power 2015 UWMP, Table 2-1.

Table 5. Historical Water Demand by Water Use Sectors (AFY)

Customer Type	2015	2011-2015 Average Percentage	2011-2015 Average	2015 compared to 2011-2015 Average	2015 Percent Decrease from 2011-2015 Average
Single-Family Residential	6,679	49%	8,496	-1,817	27%
Multi-Family Residential	3,946	25%	4,286	-340	9%
Commercial	3,613	24%	4,193	-580	16%
City departments/Fire protection/ Temporary water	270	2%	364	-94	35%
Total Potable Sales	14,508	100%	17,339	-2,831	20%
Groundwater Recharge	7,350				
Recycled Water	2,463				
System Losses	535				
Total Additional Water Uses and Losses	10,348				
Recycled Water Exchanged with LA for Groundwater Credits	0				
TOTAL WATER CONSUMPTION	24,856				

Source of annual values: Burbank Water and Power 2015 UWMP, Tables 3-1, 3-2, 3-8 and 3-9.

Table 6. Projected Water Demand by Water Use Sectors (AFY)

Customer Type	Projected Water Demand (AFY)					2020 to 2040 Change	
	2020	2025	2030	2035	2040	(AFY)	%
Single-Family Residential	8,481	8,061	7,817	7,543	7,412	-1,069	-13%
Multi-Family Residential	5,011	4,924	4,805	4,629	4,640	-371	-7%
Commercial/Industrial/ Institutional/Governmental	4,930	4,938	4,939	4,884	4,818	-112	-2%
Total Water Sales	18,422	17,923	17,561	17,056	16,870	-1,552	-8%
Groundwater Recharge	6,300	4,700	4,800	4,900	4,900	-1,400	-22%
Recycled Water	3,027	3,047	3,047	3,047	3,047	20	1%
System Losses	472	460	450	437	433	-39	-8%
Total Additional Water Uses and Losses	9,799	8,207	8,297	8,384	8,380	-1,419	-14%
Recycled Water Exchanged with LA for Groundwater Credits	300	2,000	2,000	2,000	2,000	1,700	567%
TOTAL WATER CONSUMPTION	28,521	28,130	27,858	27,440	27,250	-1,271	-4%

Source of annual values: Burbank Water and Power 2015 UWMP, Tables 3-6, 3-8 and 3-9.

Table 7. Future MWD Water Supply and Demand (AFY)

Water Supply Sources	2020	2025	2030	2035	2040
MWD Potable Supply	7,926	7,675	7,604	7,589	7,725
BWP Demand for MWD Treated Potable Supply	7,894	7,383	7,011	6,493	6,303
Difference	32	292	593	1,096	1,422

Source: Burbank Water and Power 2015 UWMP, Tables 4-2 and 4-3.

Table 8. Groundwater Volume Pumped (AFY)

	2011	2012	2013	2014	2015
Groundwater Produced	10,138	10,462	11,191	9,511	10,277
Groundwater as a Percent of Total Water Supply	57%	56%	58%	52%	68%

Source: Burbank Water and Power 2015 UWMP, Table 4-4.

Table 9. Recycled Water Use (AFY)

	2015	2020	2025	2030	2035	2040
Recycled Water Use	2,463	3,327	5,047	5,047	5,047	5,047
Recycled Water Produced	8,786	10,000	10,000	10,000	10,000	10,000
Recycled Water Unused/Discharged	6,323	6,673	4,953	4,953	4,953	4,953
Percentage of Recycled Water Used	28%	33%	50%	50%	50%	50%

Source: adapted from Burbank Water and Power 2015 UWMP, Table 5-1.

Table 10. Normal Year Supply and Demand Comparison (AFY)

	2020	2025	2030	2035	2040
Supply Totals	28,521	28,130	27,858	27,440	27,250
Demand Totals	28,521	28,130	27,858	27,440	27,250
Difference	0	0	0	0	0

Source: Burbank Water and Power 2015 UWMP, Table 6-3.

Table 11. Single Dry Year Supply and Demand Comparison (AFY)

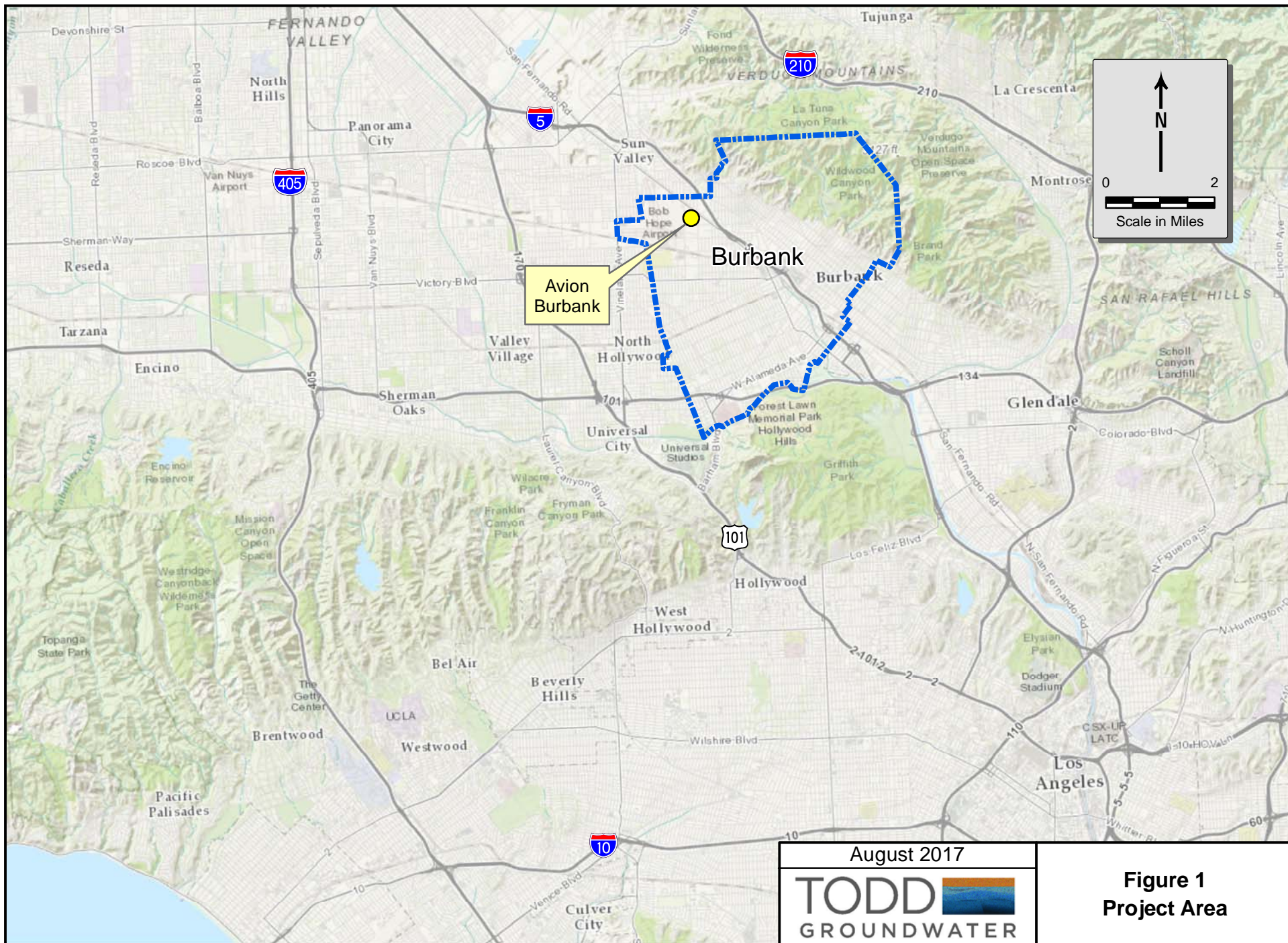
	2020	2025	2030	2035	2040
Supply Totals	28,473	28,082	27,811	27,394	27,204
Demand Totals	28,473	28,082	27,811	27,394	27,204
Difference	0	0	0	0	0

Source: Burbank Water and Power 2015 UWMP, Table 6-4.

Table 12. Multiple Dry Year Supply and Demand Comparison (AFY)

Multiple Dry Year 1st, 2nd & 3rd Year Supply					
	2020	2025	2030	2035	2040
Supply Totals	28,448	28,470	28,183	27,741	27,531
Demand Totals	28,448	28,470	28,183	27,741	27,531
Difference	0	0	0	0	0

Source: Burbank Water and Power 2015 UWMP, Table 6-5.



August 2017

TODD 
GROUNDWATER

Figure 1
Project Area





August 2017
TODD 
 GROUNDWATER

Figure 3
Proposed
Project

ATTACHMENT A



November 19, 2015

Ms. Angie Lomeli
Thienes Engineering, Inc.
14349 Firestone Blvd
La Mirada, CA 90638

SUBJECT: WILL SERVE LETTER- AIRPORT OPPORTUNITY SITE "6B"

Dear Ms. Lomeli,

Burbank Water and Power (BWP) has existing peripheral water infrastructure, and depending on the project's future water demand, will be able to serve the property with domestic, fire, and irrigation services. The proposed development shall utilize recycled water for all approved usages, including landscape irrigation and cooling towers. All on-site piping beyond the property line, excluding any piping located in dedicated city streets, shall be considered private plumbing and installed by the developer. Additionally, due to the size of the development and depending on what the developer is planning to build, a Water Supply Assessment (WSA) may need to be prepared in compliance with SB 610 requirements. The WSA shall be submitted to BWP for review and approval.

Please note that per BWP Rules & Regulation, funds must be deposited with BWP before commencement of construction. The amount of the deposit shall be equal to the estimated construction cost for the installation of mains and services including water main replacement fees, connection fees, and meter charges.

If you have any questions, you may contact me at (818) 238-3500.

Sincerely,

A handwritten signature in blue ink that reads "Bassil Nahhas".

Bassil Nahhas
Principal Civil Engineer

c: Bill Mace – Assistant General Manager/ Water Systems
Patrick Prescott, Principal Planner

ATTACHMENT B

CITY OF BURBANK

BWP – Water Division

COMMENTS FOR:

DEVELOPMENT REVIEW

PLANNED DEVELOPMENT

DR #: 16-4646

PD #: _____

Applicant: Timur Tecimer / Burbank Industrial Investors LP

Project Description: Business Park Development At 61.5-Acre Site

Location: 3001 N. Hollywood Way

Checked: Bassir Nahas 9/21/16 Title Principal Civil Engineer Date 9/21/16 Approved: W.O. Moore 9/21/16 Title Assistant General Manager Date 9/21/16

Zone: AP / M-2 DR Agenda Date: 9/22/2016

REQUIRED INFORMATION MISSING ON PLANS:

- Size & location of water services (domestic, fire, type & location of the backflow assembly)
- Calculations for sizing of domestic water meter and service (See Attached Sheet)
- Landscape irrigation plans for backflow plan check
- Location of stub-out(s) for future connection(s)

GENERAL REQUIREMENTS:

- Temporary water for construction purposes only may be supplied from the existing service at: 3001 N. Hollywood Way only after the owner or contractor has signed up for its use at the Burbank Water and Power, 164 W. Magnolia Blvd., between 8:30 AM and 4:30 PM, Monday through Friday. The existing meter(s) and box(s) are to be protected at all times during demolition of the site and/or construction.
- Water may be supplied temporarily from a fire hydrant. Contact BWP Water Engineering at (818) 238-3500 concerning fees, required permit and fittings.
- The new water service, if required for this project, will come from a (n) 12 inch main in Street Dedications, Tulare Ave. & Kenwood St. at a static pressure of approx. 60-80 psi.
- Developer shall provide a stub-out to within 2' of curb line at _____ to receive service from future main in _____. A pressure regulator and relief valve shall be installed on stub-out if so required for original service. Call BWP Water Engineering for inspection a minimum of 24 hours ahead of time. Inspection is
- Due to the system static pressure at this site, the Building Division requirements for a pressure regulator are to be followed in accordance with the Uniform Plumbing Code.
- A copy of this Development Review shall be shown on the applicant's plan submittal.

CITY OF BURBANK
BWP – Water Division

BWP - Water Division
Development Review/Planned Development

Page: 2
DR: 16-4646
PD: _____

- The water service for this project may be required to be provided with protective devices that prevent objectionable substances from being introduced into the public water supply system, per Title 17 of the California Administrative Code. A \$50 backflow prevention plan check fee is due before the plans will be stamped, signed and approved by the Water Division. Both domestic and fire services may require installation of backflow prevention devices. Plan check will take a minimum of five working days. Backflow devices must be installed on private property and as close as possible to the property line.
- The owner or contractor shall contact BWP Water Division at (818) 238-3500 before the building permit is issued. The drawings will be reviewed for adequate sizing of the service and meter and will take a minimum of five working days. Domestic meter size shall be adequate to provide the required flow, as determined by a licensed plumber or architect, calculated from the number of fixture units for the proposed development, pursuant to the California Plumbing Code 2007, Title 24, Part 5. Prior to final approval and preparation of an estimate by the BWP Water Division, the applicant shall obtain approval from the City of Burbank Fire Department for appropriate fire service size and appurtenance selection. A deposit will then be collected to cover construction costs for all required services. Construction scheduling will be based on date of receipt of the required drawings, fees and deposit.
- If the Fire Department requires any new fire hydrants and/or fire services for this development, the owner or contractor shall request an estimate for same from BWP Water Division by calling (818) 238-3500. The full deposit for any required work (including upgrading the fire service/backflow device) must be paid before the Water Division approves the project drawings.
- A separate meter and service shall be installed for irrigation purposes only. When recycled water becomes available in the area, use of recycled water will be required for all irrigation needs. Pending recycled water availability, a backflow device will be required to protect the potable water system. Please be advised that the recycled water system may be at a lower pressure than the potable water system. If required, a provision in the design shall be made for installation of a booster pump when recycled water becomes available. See attached sheet for details regarding L.A. County plan check approval. Upon completion of the conversion from domestic to recycled water, the applicant shall comply with all rules and regulations set by the State of California, Department of Public Health.
- A Water Distribution Main Charge (WDMC) is due. (Section 4.31 (a) and (b) of BWP Water Division Rules and Regulations).
- A Water Main Replacement Fee (WMRF) is required in accordance with Sections 4.34 (c), (d) and (e) of BWP Water Division Rules and Regulations.

ADDITIONAL COMMENTS:

See page 3.

For additional information, please contact Bassil Nahhas at (818) 238 - 3500.

**CITY OF BURBANK
BWP – Water Division**

**BWP - Water Division
Development Review/Planned Development**

Page: 3
DR: 16-4646
PD: _____

ADDITIONAL COMMENTS, CONTINUED

1) *The applicant shall be responsible for the installation cost of a new 12" potable water main in the newly dedicated Tulare Ave. (from Hollywood Way to the cul-de-sac) and in Kenwood St., from Cohasset St. to dedicated Tulare Ave., as well as the installation of 8" recycled water main on the dedicated Tulare Ave. from Hollywood Way to the cul-de-sac.*

2) *Contingent on the availability of a BWP construction crew at the future time of construction, the expected cost for the installation of the 12" potable main and the 8" recycled water main (without services) is approximately \$850,000. In addition, the applicant shall also be responsible for the connection fee and construction cost of new services, and abandonment cost of existing services and 6" main in the existing portion of Kenwood Street. Contact Water Engineering for a cost estimate when the number and sizes of the needed water services have been determined. This is only an estimate, not a firm quotation. Actual costs of installation will be determined after construction is completed. If the actual cost is less, the applicant will be refunded the difference. Additional deposit maybe required if changes from the original scope of work occur. This cost estimate is only valid for one year. Inflation in the cost of material, fuel, labor and/or paving could materially increase the project cost. Please contact Water Engineering to renew this cost estimate after one year of the date of this DR.*

3) *An alternative to 2) above, and if BWP crews are unavailable at the desired time of construction, BWP may elect to contract out the installation of water facilities or have the applicant install the required facilities at his/her cost under BWP inspection. After completion of construction, all water facilities in the Public Right-of-Way shall be donated to BWP.*

4) *Use of recycled water will be required for all irrigation and HVAC cooling tower water supply. Separate recycled water services are required for irrigation and HVAC cooling. Work with BWP Water Engineering in order to coordinate the sizes and locations of the recycled water service connections. See the attached sheet for more information regarding Los Angeles County Department of Public Health (LACDPH) plan check approval. The applicant shall be responsible for obtaining all required approvals from LACDPH and California State Water Board - Division of Drinking Water. Contact BWP - Recycled Water Group prior to submitting the application to County Public Health. BWP recommends installing two water feeds to cooling towers, one for recycled water and a separate back up pipe for domestic water.*

5) *A Water Supply Assessment (WSA) will be required for this Project, per SB 610 requirements. The WSA shall be prepared by the applicant and submitted to BWP for review and approval.*

For additional information, please contact Bassil Nahhas at (818) 238 - 3500.

CITY OF BURBANK
BWP – Water Division

BWP Recycled Water Conditions for Landscape Irrigation and HVAC Cooling Use

Please provide us with Landscape Irrigation and HVAC Plumbing plans for the subject project for review and comments. Your plans shall include the following:

- ◆ Separate connections for domestic use, irrigation use, and HVAC cooling tower use. Landscape irrigation and HVAC cooling tower will be required to use recycled water. On-site backflow device will be required to protect the potable system.
- ◆ The pressure for the recycled water system is lower than that for the potable water system. However, we recommend installing a pressure reducing valve and a strainer.
- ◆ All irrigation and HVAC cooling piping, valve covers, boxes, and sprinkler system heads shall be purple, in addition to installing signs informing public of the use of recycled water to comply with all State of California Recycled Water Requirements.
- ◆ Minimum separation of potable water mains from recycled water, sewer, storm drain, or others, shall be maintained per the State of California Department of Public Health Requirements.
- ◆ The Los Angeles County Department of Public Health (LACDPH) requires that all plans for recycled water projects be submitted for review and approval prior to construction. Please coordinate your work with the LACDPH, and follow their procedures for plan review and approval, and all requirements and guidelines for using recycled water for landscape irrigation and HVAC cooling purposes.

Contact Information: Carlos Borja - Plan review and approval

5050 Commerce Drive, RM 116
Baldwin Park, Ca 91706-1423

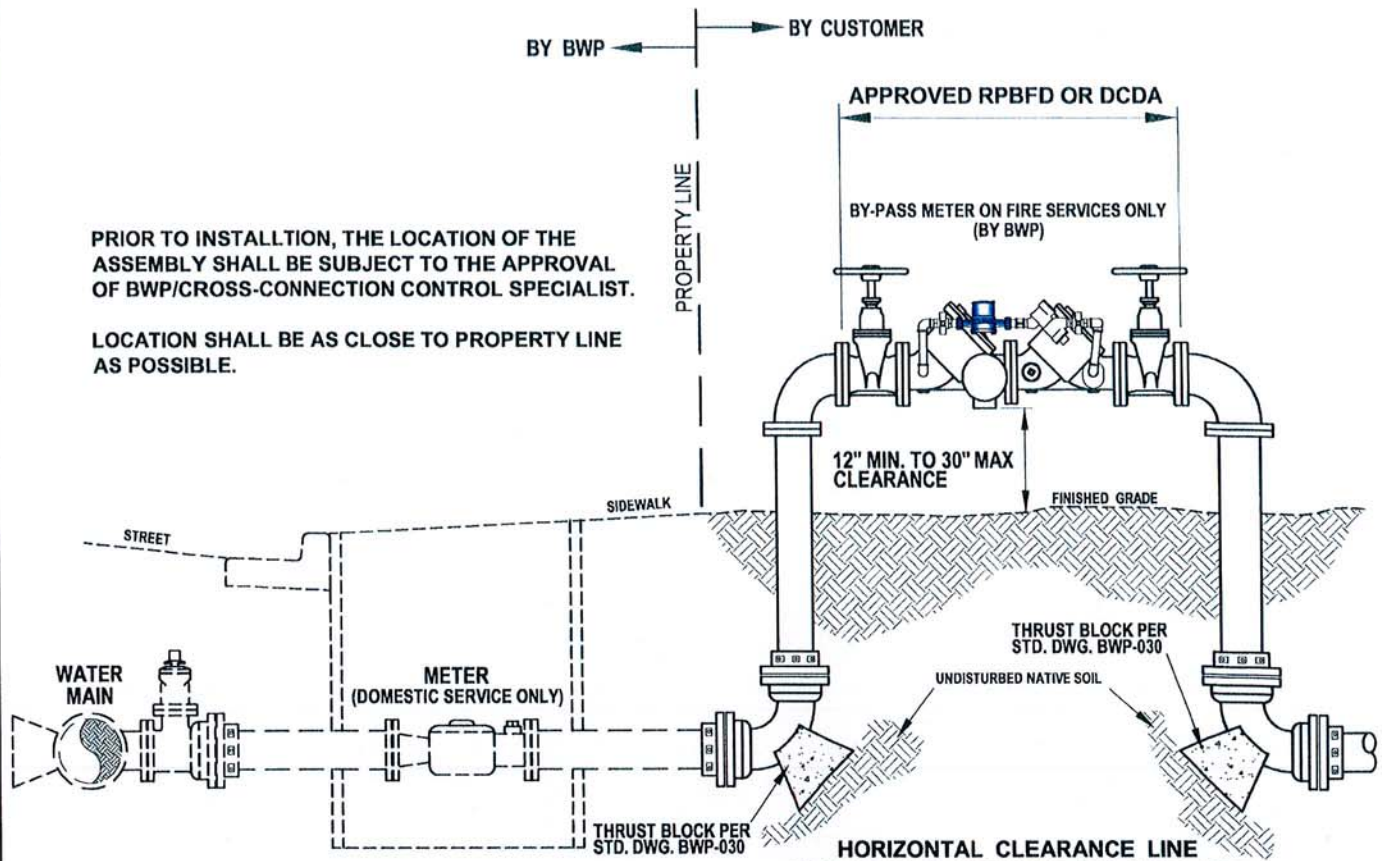
Tel.: (626) 430-5290 (Baldwin Park Office)

Fax: (626) 813-3025

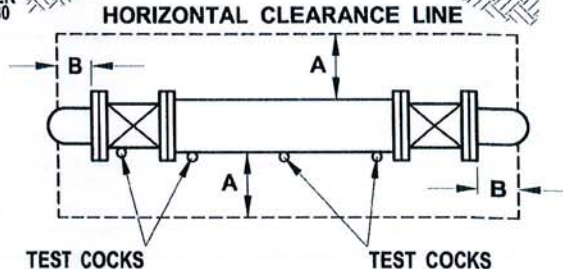
BY BWP ← | → BY CUSTOMER

PRIOR TO INSTALLTION, THE LOCATION OF THE ASSEMBLY SHALL BE SUBJECT TO THE APPROVAL OF BWP/CROSS-CONNECTION CONTROL SPECIALIST.

LOCATION SHALL BE AS CLOSE TO PROPERTY LINE AS POSSIBLE.



MINIMUM CLEARANCE SCHEDULE		
SIZE	A	B
3/4" - 3"	12"	12"
4" & UP	18"	12"



SERVICE TYPE	BACKFLOW ASSEMBLY TYPE
DOMESTIC SERVICE	REDUCED PRESSURE BACKFLOW DEVICE (RPBFD)
FIRE SERVICE	DOUBLE CHECK DETECTOR ASSEMBLY (DCDA)

NOTES:

1. NEW DEVICES MUST BE INSPECTED AND TESTED IMMEDIATELY AFTER INSTALLATION. PLEASE CALL THE BWP/CROSS-CONNECTION CONTROL SPECIALIST FOR MORE INFORMATION (818) 238-3500
2. NO CONNECTIONS OR TEES ARE PERMITTED BETWEEN THE METER AND BACKFLOW PREVENTER POINT OF CONNECTION
3. THIS INSTALLATION IS TYPICAL; CLEARANCES SHALL APPLY TO ALL OTHER TYPES OF BACKFLOW PREVENTION DEVICES
4. BACKFLOW ASSEMBLIES SHALL BE SAME SIZE AS BUILDING SERVICE LINE
5. ALL ASSEMBLIES MUST BE LEAD FREE
6. THE BACKFLOW ASSEMBLY SHALL BE FROM THE LIST OF "APPROVED BACKFLOW PREVENTION ASSEMBLIES" BY THE CROSS-CONNECTION CONTROL FOUNDATION, UNIVERSITY OF SOUTHERN CALIFORNIA

ASSISTANT GENERAL MANAGER

Fred Lantz 4/24/89

DATE

C	REVISED NOTE 5	RPY			
B	ADDITIONAL NOTES	RPY		BN	3/3/11
A	REVISED NOTES	RPY		WOM	4/24/02
NO.	REVISIONS	BY	CHECK	APP'VD	DATE
DRAWN	JJL	SCALE	N.T.S.	CHECK	RRJ
		APP'VD	CRB	DATE	3-21-89

CITY OF BURBANK
WATER AND POWER

BACKFLOW ASSEMBLY
INSTALLATION

DRAWING NO.
BWP-615

L-2 Sewer Capacity Study



This page left intentionally blank

Sewer Capacity Study

TUSTIN

17782 17th Street
Suite 200
Tustin, CA 92780-1947
714.665.4500
Fax: 714.665.4501

LOS ANGELES

201 S. Figueroa Street
Suite 240
Los Angeles, CA 90012
213.337.3680

SANTA CLARITA

25152 Springfield Court
Suite 350
Santa Clarita, CA 91355-1096
661.284.7400
Fax 661.284.7401

TEMECULA

41951 Remington Avenue
Suite 220
Temecula, CA 92590-2553
951.294-9300
Fax: 951.294-9301

VICTORVILLE

14297 Cajon Avenue
Suite 101
760.524.9100
Fax 760.524.9101

www.deainc.com



Avion Burbank Project

3001 N. Hollywood Way
Burbank, CA

Prepared For:

ESA

**626 Wilshire Blvd., Suite 1100
Los Angeles, CA 90017**

Prepared By:



**DAVID EVANS
AND ASSOCIATES INC.**

**TRAVIS IVERSON, P.E.
R.C.E. 78235**

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	EXISTING SEWER INFRASTRUCTURE	1
3.0	SEWER CAPACITY ANALYSIS (SCA)	1
4.0	CONCLUSION	2

FIGURE 1—VICINITY MAP

APPENDICES

APPENDIX A—SEWER CAPACITY ANALYSIS

APPENDIX B—SEWER ATLAS MAP

APPENDIX C—CONCEPTUAL UTILITY PLAN

SEWER CAPACITY STUDY

1.0 INTRODUCTION

The proposed Avion Burbank Project site is located at 3001 N. Hollywood Way in the City of Burbank, California. The site comprises of approximately 61 acres and proposes a variety of land uses including creative office, retail, hotel uses and creative industrial. The proposed project site is bound by the Burbank Bob Hope Airport to the west and south, North Hollywood Way to the east, and San Fernando Road and Cohasset Street to the north. See Figure 1. The site is currently graded and partially developed with surface parking lots.

2.0 EXISTING SEWER INFRASTRUCTURE:

There are several existing sewer mains fronting the property: one main is an 8" VCP located in North San Fernando Road, another is an 8" VCP located in North Hollywood Way, and the third is a 8" VCP located in Winona Avenue. Reference City of Burbank Sewer Atlas Maps in Appendix B, "Sewer Atlas Maps".

3.0 SEWER CAPACITY ANALYSIS:

The Sewer Capacity Analysis is a review by the City of Burbank for Sewer Connection Permits. The process is used to evaluate the existing sewer system to determine if there is adequate capacity to safely convey sewage from proposed development projects, construction projects, groundwater dewatering projects and any increases in sewage from existing facilities. In addition, the analysis is used in determining the related sewer fees.

In order to determine the impact anticipated for the existing sewer systems, the City of Burbank processed a Sewer Capacity Analysis for the proposed improvements. Reference Appendix A, "Sewer Capacity Analysis." The sewer capacity analysis determined that approximately 1,800 feet of sewer will be impacted by the proposed improvements and will require upgrades. Per the review, the City of Burbank has granted permission to connect to the City's existing sanitary sewer system contingent that:

- 1) Sewer Facility Charges are paid prior to issuance of a Building Permit – Estimated \$374,000
- 2) The developer agrees to pay a portion of the necessary sewer infrastructure upgrades valued as a percentage of the projects contribution to the impacted sanitary sewer system – Estimated \$49,000, which is 2.7% of the total cost of off-site sewer infrastructure upgrades.

The above fees are due prior to the issuance of the building permit. The City will pursue the sewer infrastructure upgrades at their earliest convenience, but may not be initiated or completed by the completion of the proposed improvements.

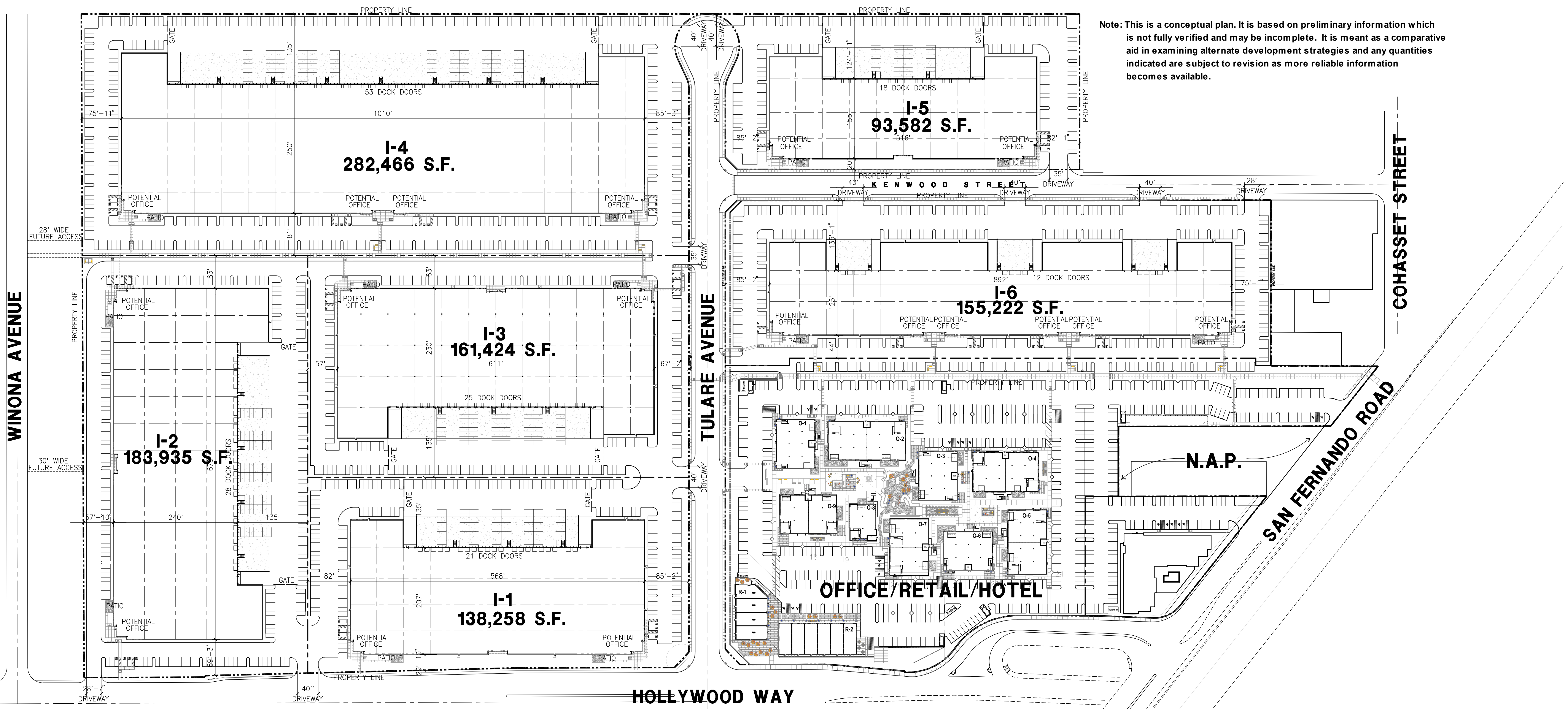
4.0 CONCLUSION

Due to the scale of this development, there will be a network of on-site sewer infrastructure that will have 2 connections to the existing main. Both will be 8-inch connections to the existing 8-inch in Hollywood Way and will require a new and/or modified manhole, respectively.

Reference Appendix C, Conceptual Utility Plan. The City of Burbank has granted permission to connect to the City's existing sanitary sewer system contingent that the Sewer Facility Charges and the portion of the fees associated with related sewer infrastructure upgrades noted above are paid prior to issuance of the Building Permit.

FIGURE 1

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.



TABULATION - SUPER PARKING SCENARIO

SITE AREA	INDUSTRIAL						TOTAL
	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	BLDG. 6	
In s.f.	271,972	351,683	314,645	543,717	202,666	316,974	2,001,657 s.f.
In acres	6.24	8.07	7.22	12.48	4.65	7.28	45.95 ac
BUILDING AREA							
Footprint	128,258	173,935	151,424	262,466	88,582	143,222	947,887 s.f.
Mezzanine	10,000	10,000	10,000	20,000	5,000	12,000	67,000 s.f.
TOTAL	138,258	183,935	161,424	282,466	93,582	155,222	1,014,887 s.f.
COVERAGE							
AUTO PARKING PROVIDED	50.8%	52.3%	51.3%	52.0%	46.2%	49.0%	50.7%
AUTO PARKING PROVIDED							
Standard (8.5' x 18')	247	271	257	545	189	262	1,771 stalls
Handicap (8.5' x 18')	6	8	8	12	6	12	52 stalls
TOTAL	253	279	265	557	195	274	1,823 stalls
LANDSCAPE PROVIDED							
TOTAL	39,832	34,211	34,694	51,659	29,350	41,119	230,865 s.f.
COVERAGE	15%	10%	11%	10%	14%	13%	12%
ZONING ORDINANCE FOR CITY							
Current Zoning Designation - General Industrial (M-2) & Airport (AP)							
Proposed Zoning Designation - General Industrial (M-2)							
MAXIMUM FLOOR AREA RATIO							
FAR - to be verified							
SETBACKS							
Front - Minimum 5' from the front line or 20% of the building height, whichever is greater.							

TABULATION - OFFICE/RETAIL/HOTEL (** AUTO PARKING IS PROVIDED THROUGH A RECIPROCAL PARKING AGREEMENT)

SITE AREA	OFFICE									TOTAL	
	BLDG. 01	BLDG. 02	BLDG. 03	BLDG. 04	BLDG. 05	BLDG. 06	BLDG. 07	BLDG. 08	BLDG. 09		
In s.f.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	380,049 s.f.
In acres	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8.72 ac
BUILDING AREA											
First Level	7,125	11,250	7,125	9,375	9,375	7,125	8,250	3,250	8,250	71,125 s.f.	142,250 s.f.
Second Level	7,125	11,250	7,125	9,375	9,375	7,125	8,250	3,250	8,250	71,125 s.f.	142,250 s.f.
TOTAL	14,250	22,500	14,250	18,750	18,750	14,250	16,500	6,500	16,500	142,250 s.f.	284,500 s.f.
COVERAGE											
AUTO PARKING PROVIDED (OFFICE)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	427 stalls
Office: 3 spaces/1000 gsf	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	427 stalls
AUTO PARKING PROVIDED											
Standard (8.5' x 18')	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	540 stalls
Handicap (8.5' x 18')	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	11 stalls
TOTAL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	551 stalls
LANDSCAPE PROVIDED											
TOTAL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	62,939 s.f.
COVERAGE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	17%
ZONING ORDINANCE FOR CITY											
Current Zoning Designation - General Industrial (M-2) & Airport (AP)											
Proposed Zoning Designation - PUD											
MAXIMUM FLOOR AREA RATIO											
FAR - to be verified											
SETBACKS											
Front - Minimum 5' from the front line or 20% of the building height, whichever is greater.											

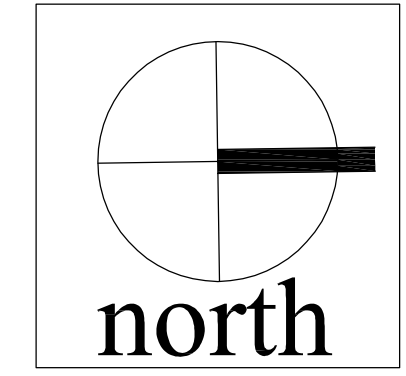
SITE AREA	RETAIL		TOTAL
	BLDG. R1	BLDG. R2	
In s.f.	n/a	n/a	69,087 s.f.
In acres	n/a	n/a	1.59 ac
BUILDING AREA			
First Level	6,300	9,175	15,475 s.f.
Second Level	0	0	0 s.f.
TOTAL	6,300	9,175	15,475 s.f.
COVERAGE			
AUTO PARKING PROVIDED (RETAIL)	n/a	n/a	22.4%
Retail: 5 spaces/1000 gsf	n/a	n/a	78 stalls
AUTO PARKING PROVIDED			
Standard (8.5' x 18')	n/a	n/a	71 stalls
Handicap (8.5' x 18')	n/a	n/a	3 stalls
TOTAL	n/a	n/a	74 stalls
LANDSCAPE PROVIDED			
TOTAL	n/a	n/a	13,418 s.f.
COVERAGE	n/a	n/a	19%
ZONING ORDINANCE FOR CITY			
Current Zoning Designation - General Industrial (M-2) & Airport (AP)			
Proposed Zoning Designation - PUD			
MAXIMUM FLOOR AREA RATIO			
FAR - to be verified			
SETBACKS			
Front - Minimum 5' from the front line or 20% of the building height, whichever is greater.			

SITE AREA	HOTEL		TOTAL
	BLDG. H1	BLDG. H2	
In s.f.	n/a	n/a	63,320 s.f.
In acres	n/a	n/a	1.45 ac
BUILDING PAD			
First Level	18,000	18,000	36,000 s.f.
Second Level	0	0	0 s.f.
TOTAL	18,000	18,000	36,000 s.f.
COVERAGE			
AUTO PARKING PROVIDED (HOTEL)	n/a	n/a	28.4%
Office: 1 spaces/KEY	n/a	n/a	150 stalls
AUTO PARKING PROVIDED			
Standard (8.5' x 18')	n/a	n/a	106 stalls
Handicap (8.5' x 18')	n/a	n/a	5 stalls
TOTAL	n/a	n/a	111 stalls
LANDSCAPE PROVIDED			
TOTAL	n/a	n/a	12,559 s.f.
COVERAGE	n/a	n/a	20%
ZONING ORDINANCE FOR CITY			
Current Zoning Designation - General Industrial (M-2) & Airport (AP)			
Proposed Zoning Designation - PUD			
MAXIMUM FLOOR AREA RATIO			
FAR - to be verified			
SETBACKS			
Front - Minimum 5' from the front line or 20% of the building height, whichever is greater.			

AERIAL MAP



Conceptual Site Plan
Burbank, CA



1" = 80'
0 80 160 240



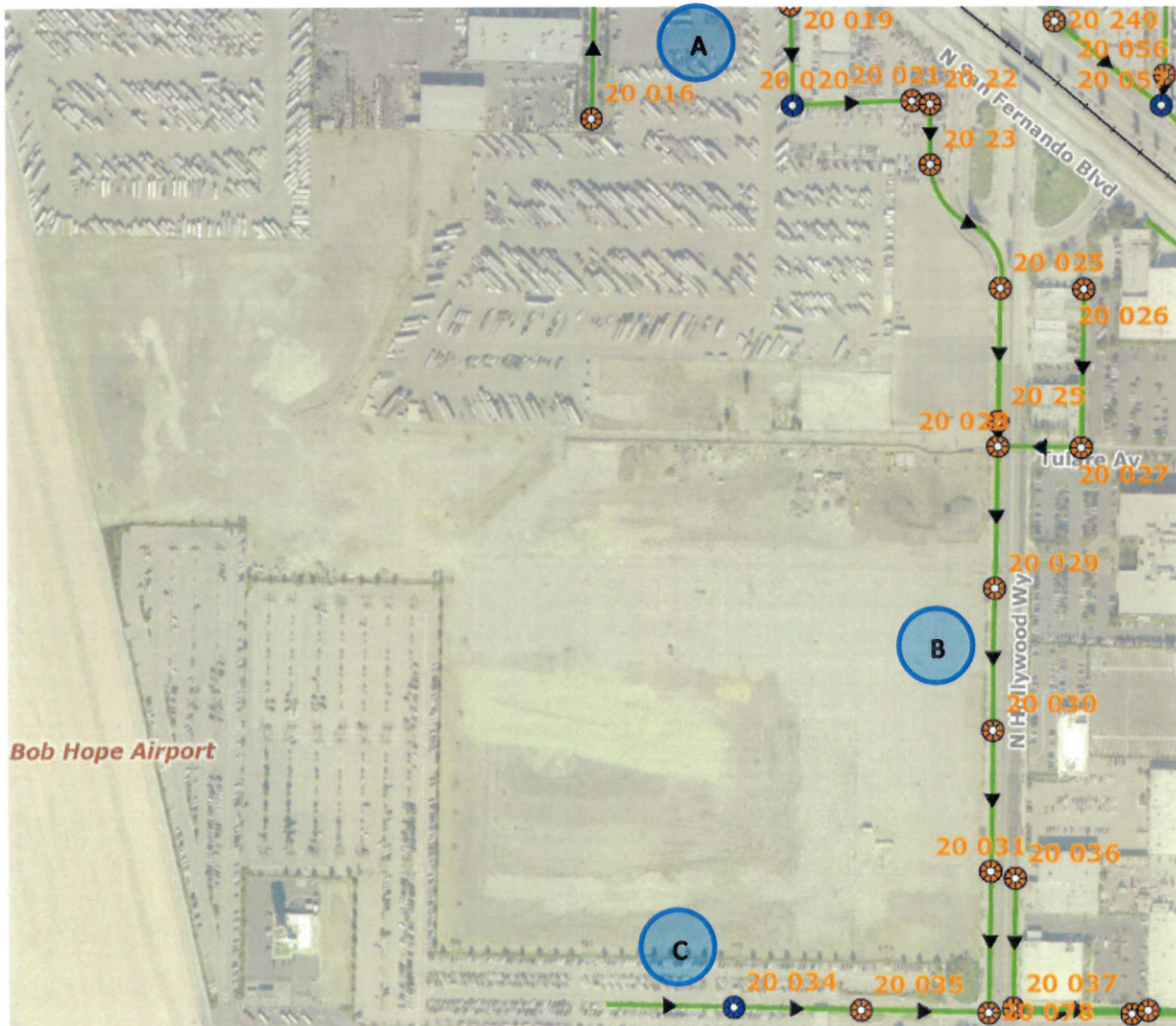
18831 Bardeen Ave. - Ste. #100
Irvine, CA 92612
(949) 863-1770
www.hparchs.com

June 6, 2017 / Job #15121
Scheme 20-Manufacturing

APPENDICES

APPENDIX A

3003 N. Hollywood Way - Sewer Capacity Analysis



Executive Summary:

The sewer capacity analysis discovered approximately 1,800 feet of impacted sewer along the tributary reaches of sanitary sewer servicing this property. This deficiency is located by Burbank Boulevard and Lake Street. The 3003 N Hollywood Way project is granted permission to connect to the City's sanitary sewer system contingent that 1) Sewer Facility Charges (SFC's) are paid prior to issuance of a Building Permit and; 2) the developer agrees to pay a portion of the necessary sewer infrastructure upgrades valued as a percentage of the project's contribution to the impacted sanitary sewer system. The developer is subject to SFC's estimated at \$374,000 and will also be responsible for an estimated \$49,000 which is approximately 2.7 percent of the total¹ cost of off-site sewer infrastructure upgrades.

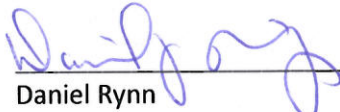
¹ Total costs include design, permitting, hired contractor to install the necessary improvements, inspection, traffic control, and street restoration.

The estimate of these off-site sewer infrastructure upgrades is based upon replacement of the existing sewer (due to other existing utilities, a relief sewer may not be possible for this impacted reach). Therefore, the proposed development is subject to a total charge estimated at **\$423,000**. The charge is due prior to issuance of a Building Permit [BMC 8-1-802 and BMC 8-1-806]. The City shall pursue these sewer infrastructure upgrades at their earliest convenience, but may not be initiated or completed at the time of completion of the 3003 N Hollywood Way project.

Please note that there appears to be little sewer infrastructure within the 3003 N Hollywood Way property. As such, on-site private sewer facilities will need to be constructed by the developer to service the proposed project's structures. Should these sewer facilities be 8-inches or larger in diameter then a maintenance hole will be necessary at the connection point(s) to the City sewer main per Burbank Municipal Code (BMC) 8-1-308. Any connection(s) or tap(s) to the City sewer main will require a permit [BMC 8-1-301].

As long as the developer agrees to the aforementioned conditions, then connection to the City's sanitary sewer system may occur along any of the locations shown on the map above (A: North San Fernando Boulevard, B: North Hollywood Way, or C: Winona Avenue).

For additional information or questions, please contact Kenneth Kozovich at (818) 238-3932.



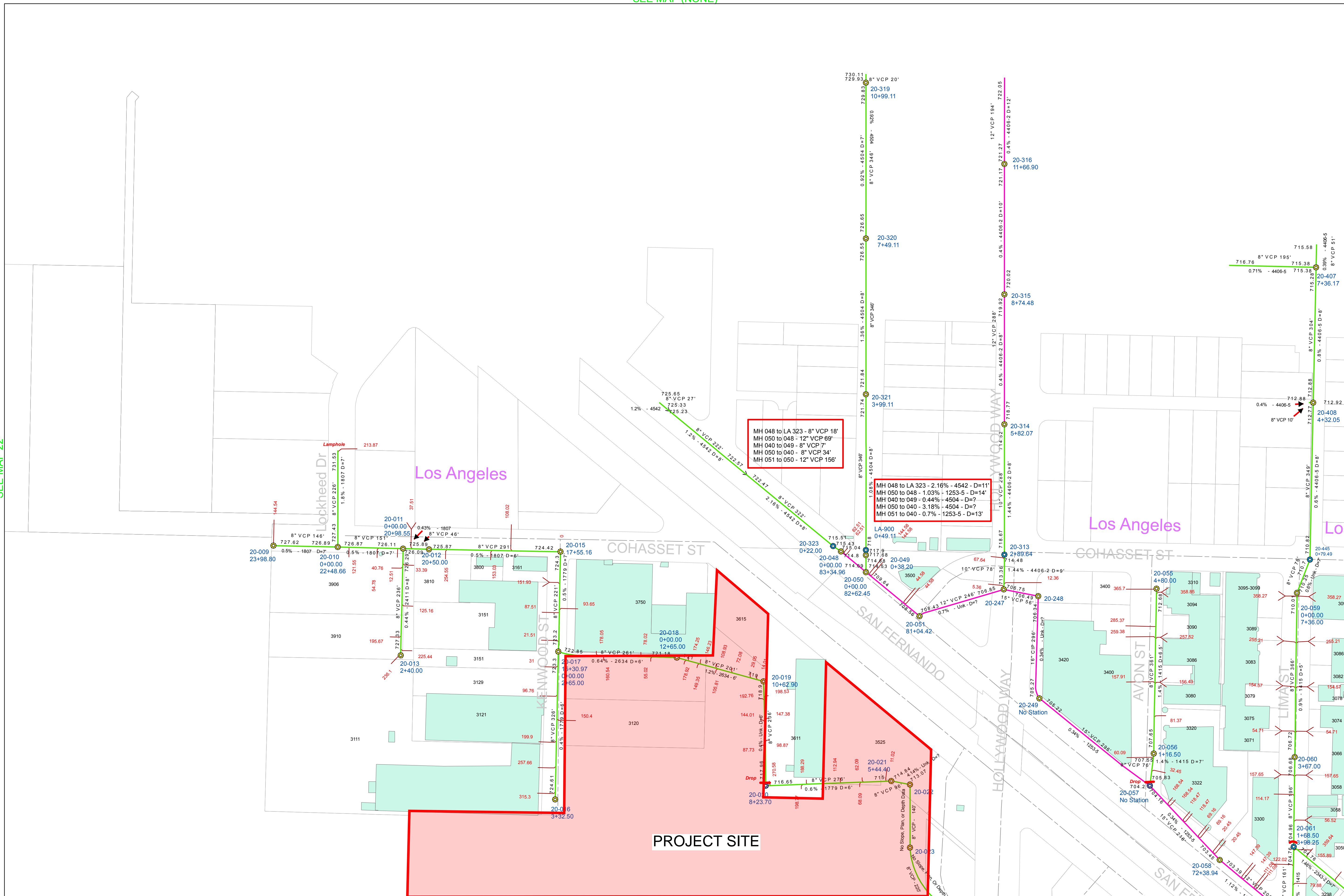
Daniel Rynn
Assistant Public Works Director -
Wastewater Systems

Processed by: Kenneth Kozovich

APPENDIX B

SEE MAP 22

SEE MAP 24

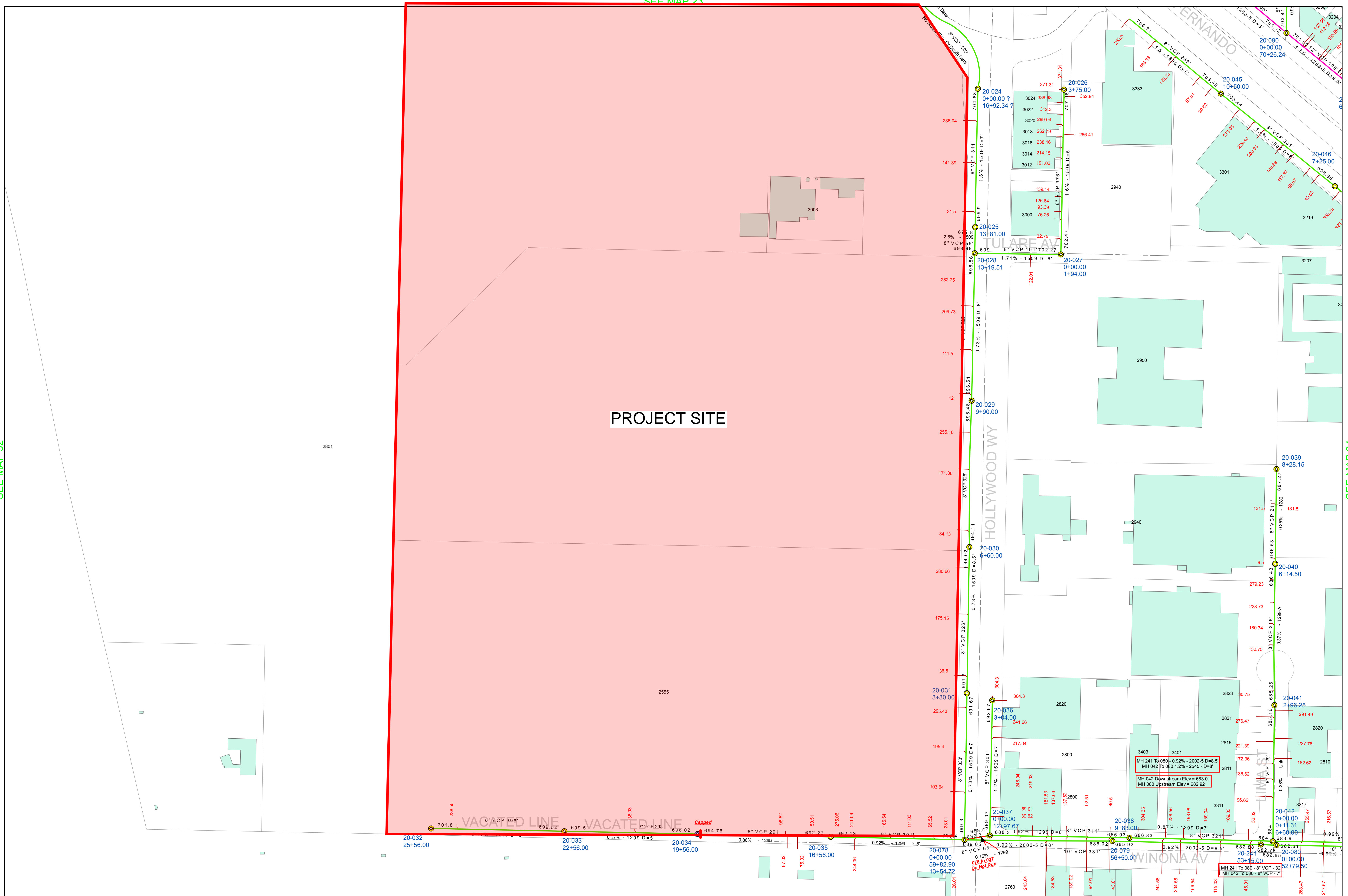


MH 048 to LA 323 - 8" VCP 18'
 MH 050 to 048 - 12" VCP 69'
 MH 040 to 049 - 8" VCP 7'
 MH 050 to 040 - 8" VCP 34'
 MH 051 to 050 - 12" VCP 156'

LA-900
 0+49.11
 MH 048 to LA 323 - 2.16% - 4542 - D=11'
 MH 050 to 048 - 1.03% - 1253-5 - D=14'
 MH 040 to 049 - 0.44% - 4504 - D=7'
 MH 050 to 040 - 3.18% - 4504 - D=7'
 MH 051 to 040 - 0.7% - 1253-5 - D=13'

PROJECT SITE



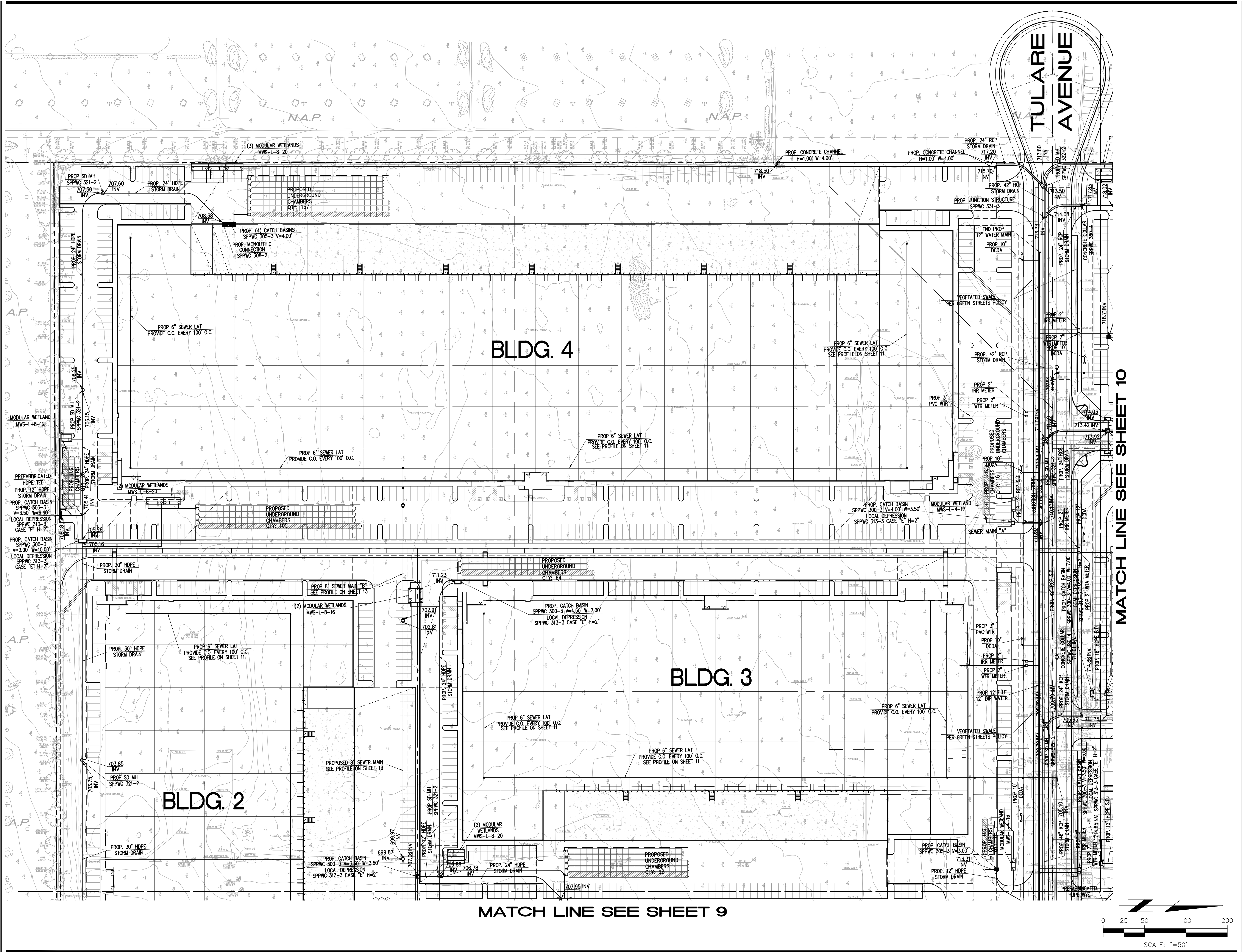


PROJECT SITE

MH 241 To 080 - 0.92% - 2002-5 D=8.5'
 MH 042 To 080 1.2% - 2545 - D=8'
 MH 042 Downstream Elev= 683.01
 MH 080 Upstream Elev= 682.92



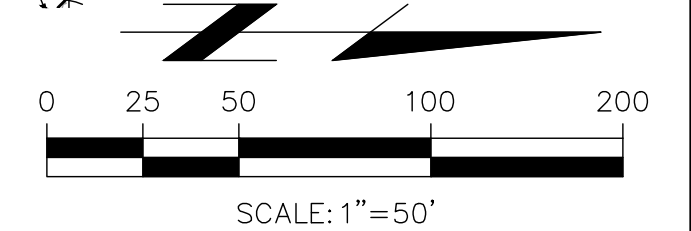
APPENDIX C



TULARE AVENUE

MATCH LINE SEE SHEET 10

MATCH LINE SEE SHEET 9



CLIENT
 Overton Moore Properties
 19300 S Hamilton Ave # 200
 Gardena, CA 90248



Gensler
 500 South Figueroa Street
 Los Angeles, California 90071
 United States
 Tel 213.327.3600
 Fax 213.327.3601

HPA
 Architecture
 18531 Barden Ave
 Irvine, California 92618
 United States
 Tel 949.863.1770

Ridge Landscape Architects
 6841 Research Dr # 200
 Irvine, CA 92618
 United States
 Tel 949.387.1323

Ti
 Thienes Engineering, Inc.
 14349 Firestone Boulevard
 La Mirada, California 90638
 United States
 Tel 217.521.4811
 Fax 714.521.4173

Gibson
 Transportation Consulting, Inc.
 523 W 6th St, Suite 1234
 Los Angeles, CA 90014
 United States
 Tel 213.683.0088

STRUCTURAL FOCUS
 Structural Focus
 Building B, Suite 210
 Gardena, CA 90248
 United States
 Tel 210.323.9924

amaconsulting
 engineers, p.c.
 2101 E. El Segundo, Suite 303
 El Segundo, CA 90245
 United States
 Tel 310.845.4666
 Fax 310.846.4667

KGM
 Company Name
 # Street Name, Suite
 Country
 Tel xxxxxxxxxx

Looking
 strategy and design
 for
 visual communication
 145 standard street
 el segundo, california 90245
 looking,la

Date	Description
------	-------------

07.20.2016

Seal / Signature

Ti Thienes Engineering, Inc.
 CIVIL ENGINEERING & LAND SURVEYING
 14349 FIRESTONE BOULEVARD
 LA MIRADA, CALIFORNIA 90638
 PH(714)521-4811 FAX(714)521-4173

Project Name
AVION BURBANK

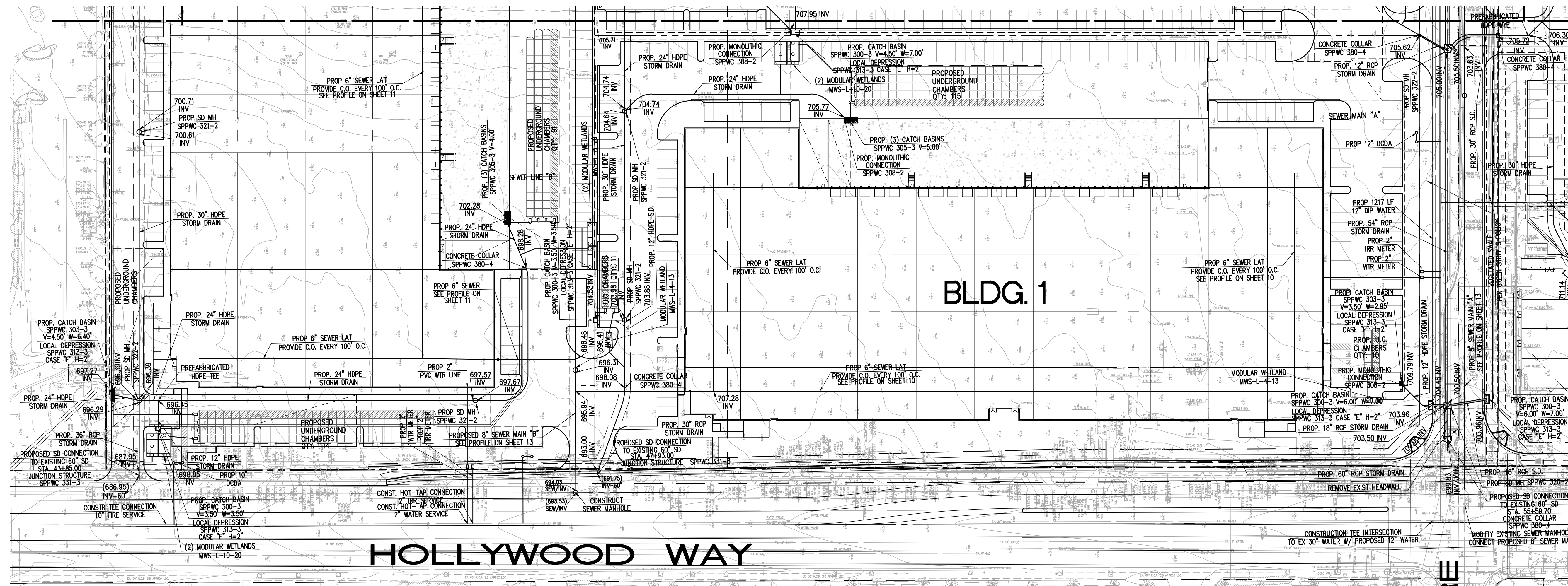
Project Number
 -

Description
 CONCEPTUAL UTILITY PLAN

Scale

C-8

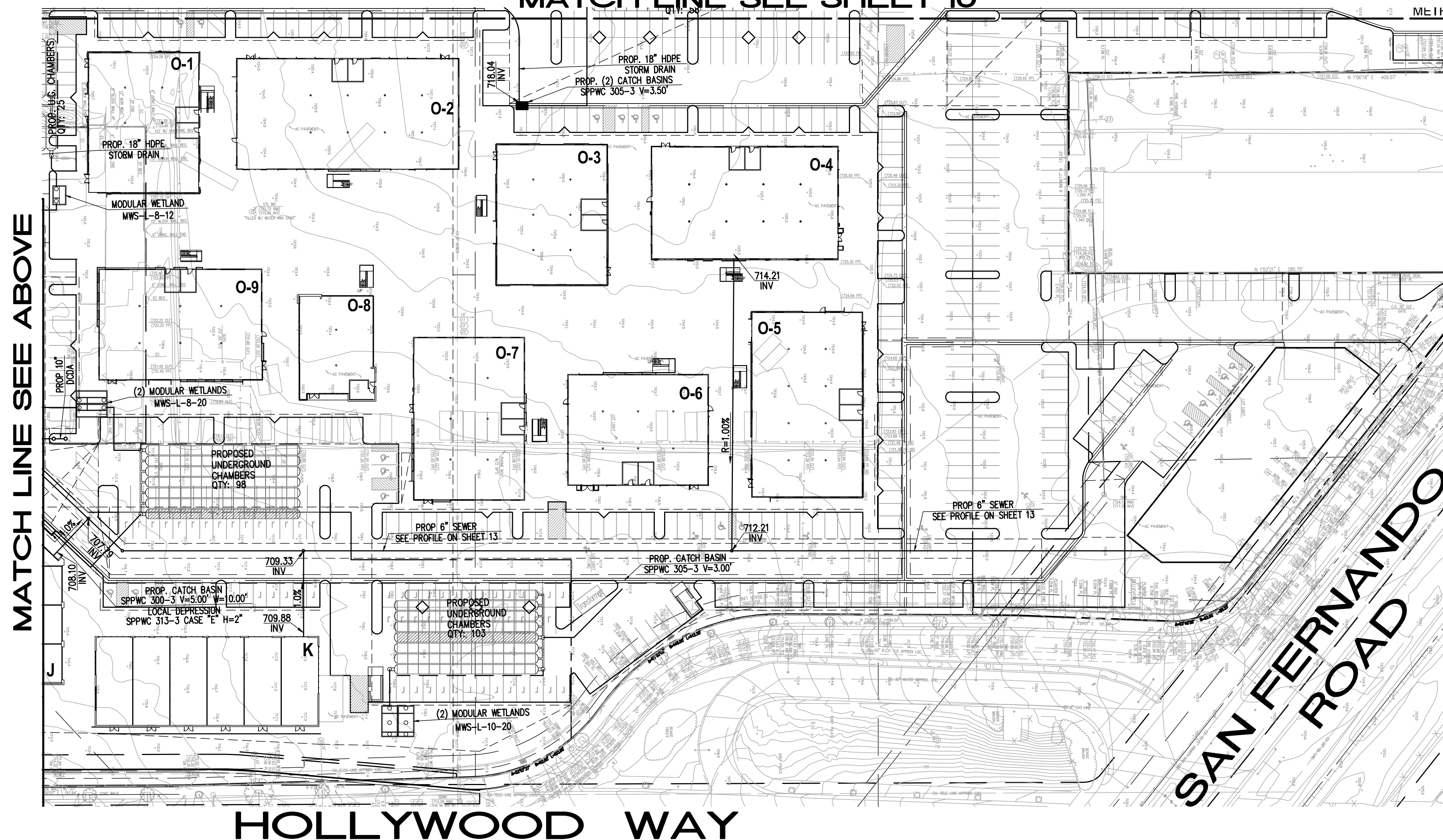
MATCH LINE SEE SHEET 8



HOLLYWOOD WAY

TULARE AVE

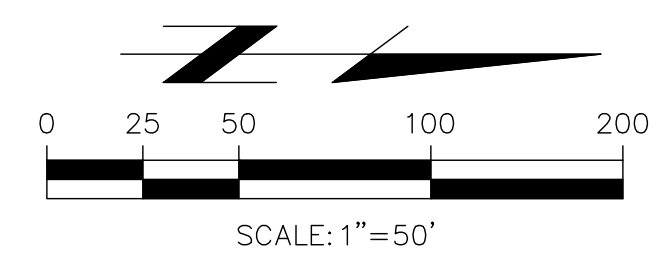
MATCH LINE SEE SHEET 10



HOLLYWOOD WAY

SAN FERNANDO ROAD

MATCH LINE SEE BELOW

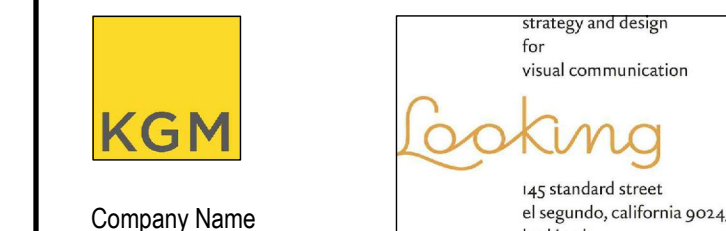
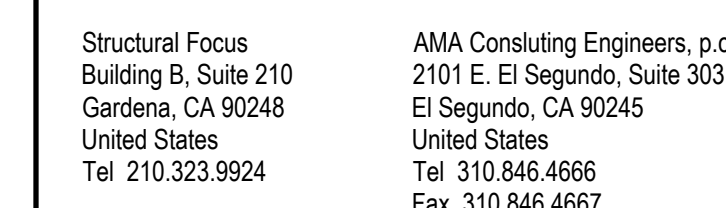


CLIENT
 Overton Moore Properties
 19300 S Hamilton Ave # 200
 Gardena, CA 90248



Gensler

500 South Figueroa Street
 Los Angeles, California 90071
 United States
 Tel 213.327.3600
 Fax 213.327.3601



Company Name
 # Street Name, Suite
 Country
 Tel xxx.xxx.xxxx

Date	Description
07.20.2016	
Seal / Signature	

Thi *Thieng Engineering, Inc.*
 CIVIL ENGINEERS & LAND SURVEYING
 14349 FIRESTONE BOULEVARD
 LA MIRADA, CALIFORNIA 90638
 PH(714)521-4811 FAX(714)521-4173

Project Name
AVION BURBANK

Project Number
 -

Description
 CONCEPTUAL UTILITY PLAN

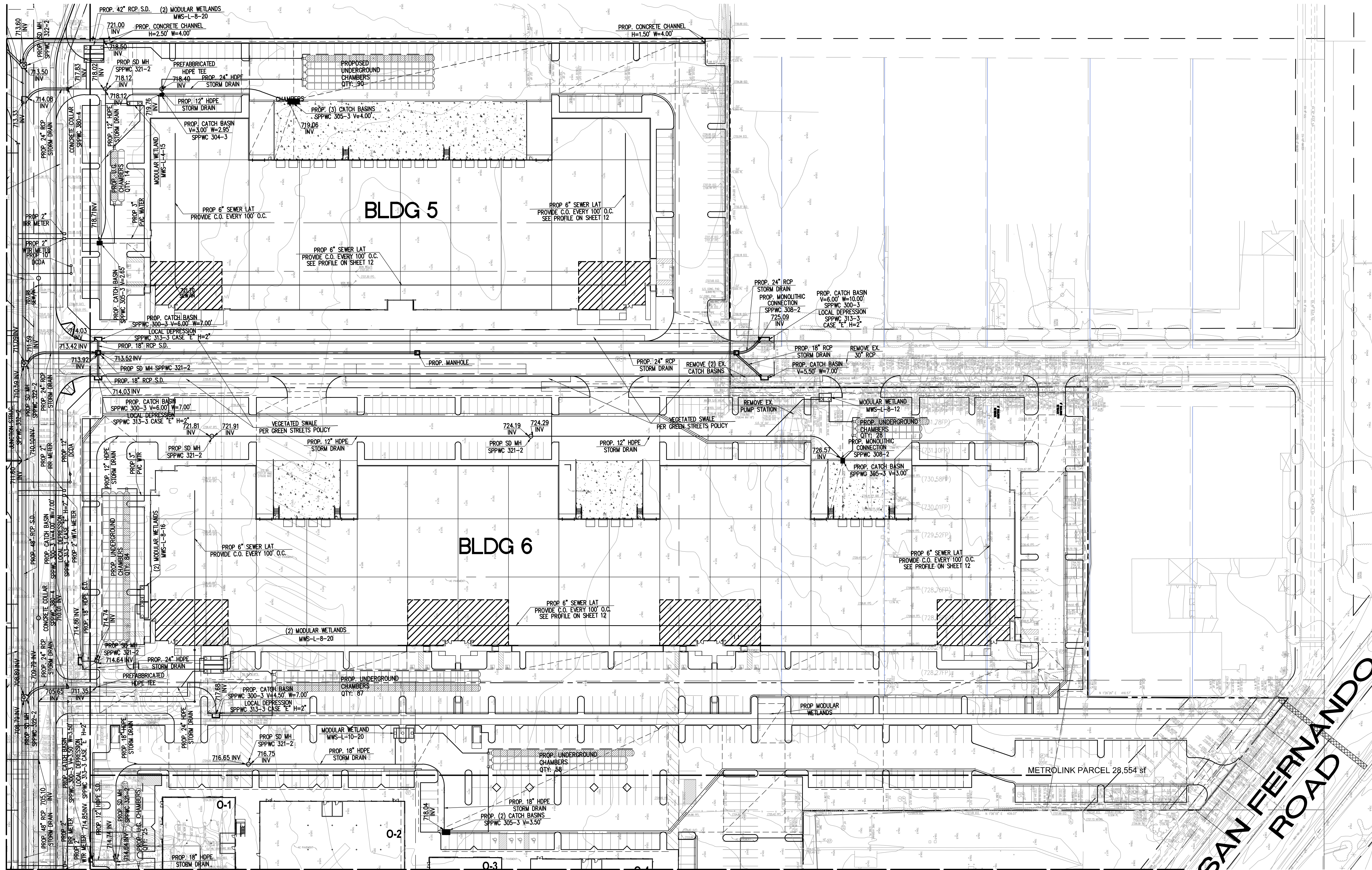
Scale

C-9

Last Update: 7/12/16
 C:\3400-3499\3421\3421COP09.dwg
 © 2015 Gensler

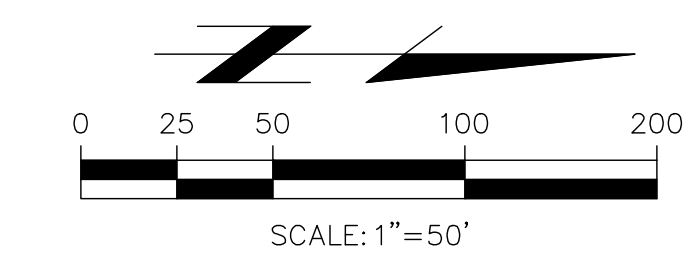
TULARE AVE

MATCH LINE SEE SHEET 8



MATCH LINE SEE SHEET 9

SAN FERNANDO ROAD



CLIENT

Overton Moore Properties
19300 S Hamilton Ave # 200
Gardena, CA 90248



Gensler

500 South Figueroa Street
Los Angeles, California 90071
United States
Tel 213.327.3600
Fax 213.327.3601



HPA Architecture
18531 Barden Ave
Irvine, California 92612
United States
Tel 949.863.1770



Ridge Landscape Architects
6841 Research Dr # 200
Irvine, CA 92618
United States
Tel 949.387.1323



Thienes Engineering, Inc.
14349 Firestone Boulevard
La Mirada, California 90638
United States
Tel 217.521.4811
Fax 714.521.4173



Gibson Transportation
523 W 6th St, Suite 1234
Los Angeles, CA 90014
United States
Tel 213.683.0088



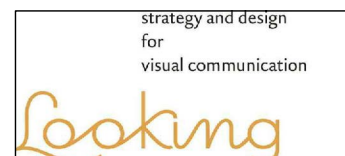
Structural Focus
Building B, Suite 210
Gardena, CA 90248
United States
Tel 210.323.9924



AMA Consulting Engineers, p.c.
2101 E. El Segundo, Suite 303
El Segundo, CA 90245
United States
Tel 310.846.4666
Fax 310.846.4667



Company Name
Street Name, Suite
Country
Tel xxx.xxx.xxxx



strategy and design
for
visual communication
145 standard street
el segundo, california 90245
looking.is

Date	Description
07.20.2016	

07.20.2016

Seal / Signature



Project Name
AVION BURBANK

Project Number
-

Description
CONCEPTUAL UTILITY PLAN

Scale

C-10

Last Update: 7/12/16
C:\3400-3499\3421\3421CSP10.dwg

© 2015 Gensler

This page left intentionally blank

L-3 Sewer Capacity Assessment



This page left intentionally blank

3003 N. Hollywood Way - Sewer Capacity Analysis



Executive Summary:

The sewer capacity analysis discovered approximately 1,800 feet of impacted sewer along the tributary reaches of sanitary sewer servicing this property. This deficiency is located by Burbank Boulevard and Lake Street. The 3003 N Hollywood Way project is granted permission to connect to the City's sanitary sewer system contingent that 1) Sewer Facility Charges (SFC's) are paid prior to issuance of a Building Permit and; 2) the developer agrees to pay a portion of the necessary sewer infrastructure upgrades valued as a percentage of the project's contribution to the impacted sanitary sewer system. The developer is subject to SFC's estimated at \$374,000 and will also be responsible for an estimated \$49,000 which is approximately 2.7 percent of the total¹ cost of off-site sewer infrastructure upgrades.

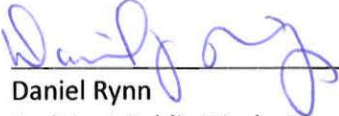
¹ Total costs include design, permitting, hired contractor to install the necessary improvements, inspection, traffic control, and street restoration.

The estimate of these off-site sewer infrastructure upgrades is based upon replacement of the existing sewer (due to other existing utilities, a relief sewer may not be possible for this impacted reach). Therefore, the proposed development is subject to a total charge estimated at **\$423,000**. The charge is due prior to issuance of a Building Permit [BMC 8-1-802 and BMC 8-1-806]. The City shall pursue these sewer infrastructure upgrades at their earliest convenience, but may not be initiated or completed at the time of completion of the 3003 N Hollywood Way project.

Please note that there appears to be little sewer infrastructure within the 3003 N Hollywood Way property. As such, on-site private sewer facilities will need to be constructed by the developer to service the proposed project's structures. Should these sewer facilities be 8-inches or larger in diameter then a maintenance hole will be necessary at the connection point(s) to the City sewer main per Burbank Municipal Code (BMC) 8-1-308. Any connection(s) or tap(s) to the City sewer main will require a permit [BMC 8-1-301].

As long as the developer agrees to the aforementioned conditions, then connection to the City's sanitary sewer system may occur along any of the locations shown on the map above (A: North San Fernando Boulevard, B: North Hollywood Way, or C: Winona Avenue).

For additional information or questions, please contact Kenneth Kozovich at (818) 238-3932.



Daniel Rynn
Assistant Public Works Director -
Wastewater Systems

Processed by: Kenneth Kozovich

L-4 Utilities Calculations



This page left intentionally blank

**Potable Water Calculations* – Avion Burbank Project
May 2018**

Alternative 2 Potable Water Demand

$$\text{Water Demand} = (\text{Office} * 0.15 \text{ GPD/SF}) + (\text{Industrial} * 0.08 \text{ GPD/SF}) + (\text{Retail} * 0.08 \text{ GPD/SF}) + (\text{Hotel} * 0.5 \text{ GPD/SF})$$

$$\text{Water Demand} = (500,000 * 0.15 \text{ GPD/SF}) + (500,000 * 0.08 \text{ GPD/SF}) + (15,475 * 0.08 \text{ GPD/SF}) + (240,000 * 0.5 \text{ GPD/SF})$$

$$\text{Peak GPD} = 2.5 * [75,000 \text{ GPD} + 40,000 \text{ GPD} + 1,238 \text{ GPD} + 120,000 \text{ GPD}]$$

$$\text{Peak GPD} = \mathbf{236,238 \text{ GPD or } 235 \text{ AFY}}$$

All conversion factors used in the equation above are listed in the Water Supply Assessment prepared for the proposed project.

Key

AFY: acre-feet per year

GPD: gallons per day

SF: square foot/feet

*Note: Water demand for the proposed project itself was pre-determined at 174 AFY, and the calculations are not included here.

Wastewater Calculations – Avion Burbank Project May 2018

$$\text{Peak GPD} = 2.5 * [(\text{Industrial area} * 0.6831 \text{ GPD/SF}) + (\text{Office area} * 0.11012 \text{ GPD/SF}) + (\text{Retail area} * 0.08539 \text{ GPD/SF}) + (\text{Hotel Rooms} * 133.36 \text{ GPD/Room})]$$

Proposed Project Wastewater Generation

$$\text{Peak GPD} = 2.5 * [(1,014,887 * 0.06831 \text{ GPD/SF}) + (142,250 \text{ SF} * 0.11012 \text{ GPD/SF}) + (15,475 \text{ SF} * 0.08539 \text{ GPD/SF}) + (166 \text{ rooms} * 133.36 \text{ GPD/Room})]$$

$$\text{Peak GPD} = 2.5 * [69,327 \text{ GPD} + 15,665 \text{ GPD} + 1,321 \text{ GPD} + 22,138 \text{ GPD}]$$

$$\text{Peak GPD} = \mathbf{271,127 \text{ GPD}}$$

Alternative 2 Wastewater Generation

$$\text{Peak GPD} = 2.5 * [(500,000 * 0.6831 \text{ GPD/SF}) + (500,000 * 0.11012 \text{ GPD/SF}) + (15,475 * 0.08539 \text{ GPD/SF}) + (400 * 133.36 \text{ GPD/Room})]$$

$$\text{Peak GPD} = 2.5 * [341,550 \text{ GPD} + 55,060 \text{ GPD} + 1,321 \text{ GPD} + 53,344 \text{ GPD}]$$

$$\text{Peak GPD} = \mathbf{1,128,188 \text{ GPD}}$$

All conversion factors used in the equation above are listed in the City of Burbank's Sewer Design Guidelines (https://file.burbankca.gov/publicworks/OnlineCounter/sewer_sanitation/gen_info/swr_dsign_guidelines.pdf) and were approved by the City's Public Works Department.

Key

GPD: gallons per day

SF: square foot/feet