APPENDIX L

Utility Report

UTILITY REPORT

for

Carol Kimmelman Athletic and Academic Campus
Carson, California

Prepared For:

The Carol Kimmelman Center, LLC.
2121 East 7th Place
Los Angeles, CA 90021

Prepared By:

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Los Angeles, California 90071

12 April 2019
Langan Project No. 700060401

LANGAN

TABLE OF CONTENTS

1.0 INTRODUCTION

The purpose of this report is to inform the utility evaluations of the Environmental Impact Report for the Carol Kimmelman Athletic & Academic Campus project (the "Project"). This report identifies the potential wastewater and water impacts that may be associated with the development of the Project. The report provides technical information and responds to the relevant thresholds of significance listed in Appendix G of the California Environmental Quality Act ("CEQA") Guidelines relating to wastewater and water.

2.0 PROJECT DESCRIPTION

2.1 Site Description

The Project site includes approximately 87 acres (Site) of the northeastern portion of the existing approximately 187 acre Victoria Golf Course. The County of Los Angeles (County) owns the Site which the County currently leases for the operation of a golf course. Prior to the Victoria Golf Course's current use as a County golf course, it was the site of a portion of the former Ben K. Kazarian (BKK) landfill, which operated as a Class II municipal solid waste landfill from 1948 to 1959. The California Department of Toxic Substances Control (DTSC) is overseeing the former landfill's remediation. The entire former landfill site is divided into Operable Units (OU) focused on two separate remediation operations, of which the Victoria Golf Course site is OU-2. Refer to Figure 1 for the Site location.

The Site contains existing infrastructure within and adjacent to its boundaries including water, wastewater, stormwater drainage, electric, gas and telecommunications. The County owns and operates the facility which includes wastewater and stormwater drainage. Domestic water is operated and maintained by California Water Service Company (CWSC). Recycled water is operated and maintained by West Basin Municipal Water District (WBMWD). Dry utility providers and infrastructure owners with facilities near the Site include Southern California Gas, Southern California Edison, and AT&T.

2.2 Proposed Development

The Project involves the redevelopment of the Site as a sports and academic campus (see Figure 2 for current concept). Project components would include a learning center, tennis center, soccer center, and various support buildings. Features of the Project include:

<u>Tennis Center</u>

- The tennis center component would occupy approximately 28 acres developed with a 23,000 square foot welcome center, a spectator venue with up to 12 hard courts and 1,200 seats, 50 tennis courts of various sizes, a 5,000 square foot administration building, a 13,000 square foot player development building, and outdoor training spaces including a 100-meter sprint track, basketball courts, a training turf, a maintenance facility, and vehicle/ bus parking.

Learning Center

- Adjacent to the tennis center would be an approximately 25,000 square foot learning center that would include classrooms, quiet rooms, staff support for homework, counseling, and tutoring.
- The welcome center and learning center will be located in the main entrance area within the northwest portion of the Site.

Soccer Center

- The soccer center component would occupy approximately 58 acres developed with full-sized natural grass soccer fields, full-sized artificial turf soccer fields, and natural grass multi-purpose fields.

Other Improvements

- Additional site improvements would include asphalt paved parking lots and two additional overflow parking areas between the fields and South Avalon Boulevard.
- Miscellaneous support buildings, including maintenance facilities, restrooms, and sheds, will be constructed throughout the site.

3.0 UTILITY ASSESSMENT

3.1 Wastewater

The Project site sanitary sewer system is within Los Angeles County Sanitation District (LACSD) Number 8 sphere of influence as shown in the Sanitation Districts of Los Angeles County Boundary Map in Appendix A. There is an 8-inch diameter sanitary sewer in Martin Luther King Jr. Street, 8-inch diameter sanitary sewer in Towne Avenue and a 10-inch diameter sanitary sewer in 189th Street, which provide the existing sewer service for the Victoria golf course. As depicted on the County of Los Angeles Sanitary Sewer Atlas Maps (Appendix A), there is an existing 15-inch diameter sanitary sewer in Avalon Boulevard, and an existing 18-inch diameter sanitary sewer in Avalon Boulevard starting from East Elsmere Drive and continuing south, parallel to the said 15-inch sanitary sewer. The two parallel pipes ultimately connect to the LACSD 27-inch diameter Del Amo trunk sewer, located in Avalon Boulevard south of Del Amo Boulevard. The LACSD 27-inch diameter trunk sewer has a capacity of 3.7 million gallons per day (mgd) and conveyed a peak flow of 2.4 mgd when last measured in 2015. Figure 3 – Existing Water and Sewer Map shows the approximate location of the existing sewers.

The wastewater from the Site is conveyed and discharged to the Joint Water Pollution Control Plant (JWPCP), which is operated by the Los Angeles County Sanitation District (LACSD) (Appendix F). The plant occupies approximately 420 acres to the east of the Harbor (110) Freeway. Approximately 200 of the 420 acres are used as buffer areas between the operational areas and surrounding residential neighbors. The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the Sanitation Districts' wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 260 million gallons of wastewater per day (mgd), and has a total permitted capacity of 400 mgd. In 2017,

the plant effluent was approximately 257 mgd. The plant serves a population of approximately 3.5 million people throughout Los Angeles County. Prior to discharge, the treated wastewater is disinfected with sodium hypochlorite and sent to the Pacific Ocean through a network of outfalls. These outfalls extend 1-½ miles off the Palos Verdes Peninsula to a depth of about 200 feet.

The Site is served by on-site, gravity flow sanitary sewers. All on-site wastewater flows from the private sanitary sewers ultimately discharge into the County owned sanitary sewers described above. Per the LACSD Sanitary Sewer Discharge Table of Appendix E, the total existing estimated wastewater flow from the Site is 4,542 gpd as per Table 1 and the proposed estimated wastewater flow from the Project is 19,700 gpd as per Table 2 shown below.

Table 1
Existing Estimated Wastewater Flow

Land Use	Total Building Area of Project (sf)	Average Wastewater Flow (gpd)	Peak Flow (cfs)
Golf Course, Camp, & Park (100 gpd/1000 sf)	14,780	1,478	0.006
Restaurant (1000 gpd/1000 sf)	2,773	2,773	0.011
Maintenance Building (100 gpd/1000 sf)	2,905	291	0.001
Totals		4,542 gpd	0.017 cfs

1. Golf Course, Camp & Park includes 14,278 sf clubhouse and 502 sf comfort station
2. Land use area and flow per Los Angeles County Sanitation District in Appendix E
3. Peak flow based on 2.5 peaking factor

Table 2
Proposed Estimated Wastewater Flow

Land Use	Total Building Area of Project (sf)	Average Wastewater Flow (gpd)	Peak Flow (cfs)
Learning Center (200 gpd/1000 sf)	25,000	5,000	0.019
Welcome Center (200 gpd/1000 sf)	23,000	4,600	0.018
Player Development (600 gpd/1000 sf	13,000	7,800	0.030
Administrative Building (200 gpd/1000 sf)	5,000	1,000	0.003
Maintenance Building (100 gpd/1000 sf)	3,000	300	0.001
Soccer Center Support (100 gpd/1000 sf)	10,000	1,000	0.003
Totals		19,700 gpd	0.074 cfs

1. Land use area and flow per Los Angeles County Sanitation District in Appendix E
2. Peak flow based on 2.5 peaking factor

In order to accommodate the proposed Project, based on the Site Plan, new sanitary sewers would be constructed on-site as necessary. Prior to the development of new buildings, new sanitary sewers serving the buildings would be designed using the County Department of Public Works and California Plumbing Code standards. Also, the Project would implement water conservation measures that would serve to reduce the Project's demand on the wastewater system.

Sanitary sewer service for the Project would be provided utilizing one or multiple new sewer lateral connections from the Site to the existing 8-inch diameter sewer in Martin Luther King Jr. Street and the existing 15-inch diameter sewer main in Avalon Boulevard depending on the final design. The estimated average daily and peak flow increase for the Project is approximately 15,158 gpd and 0.057 cfs.

3.2 Domestic Water

Domestic and fire water service to the Site is provided by the California Water Service Company (CWSC). As depicted on the CWSC Water Atlas Maps of Appendix B, there is an existing 14-inch diameter water main in Martin Luther King Jr. Street and an existing 8-inch water main in Avalon Boulevard. There are currently two public fire hydrants along the south side of Martin Luther King Jr. Street, fronting the Project. Figure 3 – Existing Water and Sewer Map shows the approximate location of the existing water mains.

The Site is within the CWSC Dominguez District sphere of influence. Based on the 2015 Urban Water Management Plan (UWMP) provided by CWSC, the imported water is purchased from Metropolitan Water District of Southern California through the West Basin Municipal Water District. In accordance the Water Conservation Act of 2009, the Dominguez District is targeting a 20% reduction from its 10-year baseline average by 2020. As per the 2015 UWMP, the 10-15 year baseline gross water use is 33,834 ac-ft per year and 216 gallons per capita per day (gpcd). Presently, the Victoria Golf Course is consuming approximately 12,800 gpd of domestic water for the entire golf course site. Since the proposed Project is approximately 50% of the entire site, the proportional domestic water consumption for the Project site is 6,400 gpd.

Domestic water service to the Site in the future will continue to be supplied by CWSC for domestic and fire protection use. New on-site water mains and laterals will be needed to distribute water to the new proposed buildings. The domestic water improvements are anticipated to include construction and installation of 4-inch to 8-inch diameter water mains. It is anticipated that the on-site mains would connect to the existing mains in both Martin Luther King Jr. and Avalon Boulevard. All new on-site water mains will be sized to accommodate demands for the proposed uses. The design and installation of new water mains will meet applicable CWSC standards and County Code. Additional on-site fire water mains and hydrants will be constructed as necessary to comply with applicable County Code (Title 20 – Utilities) and fire requirements regarding fire flow to provide fire water service to the new buildings and the improved Site. The minimum fire flow and fire hydrant requirements would be determined by the Los Angeles County Fire Department. The computation of the available fire flow would be based upon a minimum of 20 psi residual operating pressure remaining in the street main from which the fire flow is being measured at the time of measurement of the fire flow.

Domestic water demand on-site would be designed to operate efficiently in order to facilitate the County's water usage goals. It is anticipated that the Project would incorporate high-efficiency bathroom fixtures and water heaters and use reclaimed water for landscaping to reduce water consumptions. The proposed estimated domestic water demand for the Project is 24,887 gpd per Table 3.

Table 3
Proposed Estimated Water Demand

Use	Estimated Water Demand (gpd)
Tennis and Soccer Buildings	21,917
Tennis Courts	2,970
Total	24,887 gpd

1. Tennis Buildings demand assumes waterless urinals
2. Tennis courts based on estimated usage of 500,000 gal/year for hard courts and 400 gpd/court for clay courts

The proposed estimated water demand of 24,887 gpd is greater than the existing estimated domestic water consumption of 6,400 gpd.

3.3 Recycled Water

Recycled water service to the Site is provided by the West Basin Municipal Water District (WBMWD). As depicted on the WBMWD Recycled Water Atlas Map of Appendix D, 12-inch and 24-inch diameter recycled water mains exist in Martin Luther King Jr. Street. In addition, there is an existing 30-inch recycled water main in Avalon Boulevard. Based on the 2015 Urban Water Management Plan provided by CWSC, the recycled water is produced by WBMWD in their West Basin Water Recycling Plant located in El Segundo. Figure 3 – Existing Water and Sewer Map shows the approximate location of the existing water mains.

Presently, the Victoria Golf Course is consuming approximately 218,000 gpd of recycled water for the entire golf course site. Since the proposed Project is approximately 50% of the entire site, the proportional recycled water usage is approximately 109,000 gpd.

Recycled water service to the Site in the future will continue to be supplied by the WBMWD. New on-site recycled water mains and laterals will be needed to distribute the water. The recycled water improvements are anticipate to include construction and installation of 4-inch and 6-inch diameter mains. The design and installation of the new recycled water mains would meet applicable WBMWD standards and County Department of Public Health codes and standards.

The Project would utilize recycled water for the irrigation of landscaped areas and soccer fields. Soccer fields would be both natural grass and synthetic turf and would be irrigated. The estimated amount of proposed recycled water consumption is 31,552 gpd per Table 4.

Table 4
Proposed Estimated Recycled Water Demand

Use	Estimated Water Demand (gpd)
Soccer Fields	31,552

1. Soccer field demand based on approximately 2,300,000 gal/year/field for natural turf And 3,000 gal/year/field for artificial turf

The proposed estimated recycled water total demand for the project is 31,552 gpd and is less than the existing estimated recycled water consumption of 109,000 gpd. Therefore, recycled water is available for use to meet irrigation requirements for the Project. Based on this analysis, adequate recycled water services exist in the vicinity of the Project site to provide recycled water for the Project.

4.0 ANALYSIS OF PROJECT IMPACTS

4.1 Methodology

The development characteristics of the Project, as defined in the Project Description and on the Conceptual Site Plan, were extracted to understand the Project needs. Information about the Site including location, surrounding existing utilities, and agencies that would provide services to the Site for the Project has been assessed. Wastewater assessment was determined by calculating the estimated discharge of the Project's land use using the information provided by the County of Los Angeles Sanitation District. Estimated domestic water and recycled water demand have been estimated and tabulated in Table 3 and 4 above.

4.2 CEQA Thresholds of Significance

The relevant CEQA thresholds of significant factors regarding utilities and service systems for the wastewater and water utilities are presented in Appendix G of the 2018 CEQA Statute and Guidelines. Based on the existing conditions and proposed Project, impacts would be less than significant.

- ***Would the project require or result in the relocation or construction of new or expanded water or wastewater treatment facilities, the construction of which could cause significant environmental effects?***

  No significant increase in wastewater flows from the Site is expected as a result of construction activities. The majority of the proposed sanitary sewers would be constructed within the Site, with the exception of the new lateral connections to the sanitary sewer system in the adjacent streets. Construction would be confined to trenching for the sanitary sewer line and would be temporary in nature. Vehicle and pedestrian access may be temporarily affected during the construction of the new connections requiring traffic detouring and traffic control. However, emergency access would continue to be provided.

During operation, the Project would include a learning center, tennis center, soccer center. The existing golf course and open space areas, clubhouse, maintenance area and parking would be replaced by new buildings, courts, fields, parking lots and other public areas. As discussed in more detail in our Hydrology and Water Quality Report dated 12 April 2019, the Project would be designed to comply with the requirements of the Los Angeles Regional Water Quality Control Board (RWQCB) Municipal Regional Stormwater NPDES Permit Order R4-2018-0087 NPDES Permit No. CAG914001, the Construction General Permit Water Quality Order 2009-0009-DWQ (as amended by Order No. 2010-0014-DWQ and 2012-006-DWQ).

Wastewater generated by the Project would be routed to and treated by the Joint Water Pollution Control Plant (JWPCP), which is owned and operated by the Los Angeles County Sanitation District (LACSD). Operational discharge flows treated at the JWPCP would be required to comply with the waste discharge requirements. Compliance with condition or permit requirements established at the JWPCP would ensure that discharges into the wastewater treatment facility system from the operation of the Project would not exceed applicable Los Angeles RWQCB wastewater treatment requirements. The LACSD 27-inch diameter Del Amo trunk sewer, located in Avalon Boulevard south of Del Amo Boulevard has a capacity of 3.7 million gallons per day (mgd) and conveyed a peak flow of 2.4 mgd when last measured in 2015. The estimated average daily and peak wastewater flow increase for the Project is approximately 15,158 gpd and 0.057 cfs. This is a negligible increase in both average and peak daily flow and upgrades to the existing sanitary sewers are not anticipated. The JWPCP has a total permitted capacity of 400 mgd, and in 2017 the reported plant effluent was approximately 257 mgd. The Project estimated average daily wastewater flow of 19,700 gpd would be 0.005% of the total permitted capacity. Therefore, the JWPCP has available treatment capacity and the Project would not exceed the wastewater treatment requirements.

As discussed in more detail in this report, the water and wastewater needs for the Project would not exceed the available capacity of the existing water supply, water distribution mains, wastewater conveyance systems or wastewater treatment facility. Adequate domestic water and wastewater infrastructure exist in the vicinity of the Project Site to provide domestic water for the Project. CWSC would continue to provide water service to the Project. The CWSC Will Serve Letter and the County Sanitation Districts of Los Angeles County Will Serve letter are included as Appendix C.

On-site construction of the proposed water and wastewater infrastructure would be within the Project limits. The design and construction would comply with applicable regulatory codes and standards. The expansion of the existing water or wastewater treatment facilities is not anticipated. The connection to the existing water mains and sanitary sewers would require construction activities at the locations of the existing facilities within the public streets. The existing water and sewer infrastructure is directly adjacent to the Site and would require the construction of lateral connections. No off-site extensions or upgrades to the existing water mains and sewers are anticipated. The construction of the laterals would be temporary and limited to trenching and connections in the streets adjacent to the Site.

Since facility expansion and new facility construction is not required, and the construction of new connections to the existing water and wastewater infrastructure would be minimal, the Project would not result in the construction of new treatment facilities or the expansion of existing facilities the construction of which could cause significant environmental effects.

- ***Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?***

  Project construction activities which require the use both domestic and recycled water include, but are not limited to: soil compaction and earthwork, dust abatement, mixing and placement of concrete, equipment and site cleanup, irrigation for plant and landscaping establishment and water line testing. Waster used during construction would be obtained from CWSC domestic and WBMWD recycled water supplies. Water consumption during Project construction would be temporary in nature, would not exceed the net new water consumption and would not create a significant increase in domestic or fire water consumption and would not be expected to have an adverse impact on available supplies and infrastructure. The majority of the proposed new water mains would be constructed within the Site, with the exception of the new lateral connections to the existing water mains in Martin Luther King Jr. Street and Avalon Boulevard. Construction would be confined to trenching for the mains and would be temporary in nature. Vehicle and pedestrian access may be temporarily affected during the construction of the new connections requiring traffic detouring and traffic control. However, emergency access would continue to be provided.

  The Project has sufficient water supply for the proposed domestic consumption and recycled water usage. The proposed estimated domestic water demand for the Project is 24,887 gpd, which is greater than the existing estimated domestic water consumption of 6,400 gpd. The proposed estimated recycled water total demand for the Project is 31,552 gpd, which is less than the existing estimated recycled water consumption of 109,000 gpd.

  The CWSC Ranch Dominguez District Will Serve Letter indicates that water would be provided to the Project. Therefore, the project has sufficient water supplies to serve the project.

- ***Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

  The estimated average daily and peak wastewater flow increase for the Project is approximately 15,158 gpd and 0.057 cfs. This is a negligible increase in both average and peak daily flow and upgrades to the existing sanitary sewers are not anticipated. The JWPCP has a total permitted capacity of 400 mgd, and in 2017 the reported plant effluent was approximately 257 mgd. The Project estimated average daily wastewater flow of

19,700 gpd would be 0.005% of the total permitted capacity. Therefore, the Joint Water Pollution Control Plant has adequate capacity to serve the Project's projected demand.

5.0 CUMULATIVE IMPACTS

Development of the proposed Project in conjunction with the related projects would result in an increase in the demand for sanitary sewer service area in the service area. Forecasted growth from the related projects in the area serving the Site could generate up to approximately 372,470 gpd of wastewater. Combined with the Project, this equates to an increase of approximately 16% of the peak flow of 2.4 mgd in the Del Amo trunk sewer (last measured by LACSD in 2015). With respect to the JWPCP, this equates to an increase of approximately 0.15% of the estimated average daily wastewater flow.

The Project and related projects would result in the increased consumption of water in the area. Forecasted growth from the related projects in the area serving the Site could generate up to approximately 225,000 gpd. Based on the 2015 CWSC Urban Water Management Plan, the CWSC water supply (and projections to year 2040) are sufficient to meet the future demand projections for the region. Combined with the Project, this equates to an increase of less than 0.7% of the CWSC annual water demand. Pursuant to the Water code, certain larger projects are required to obtain a Water Supply Assessment to demonstrate that adequate water supplies are available to meet the needs of the individual project. With regard to infrastructure, it is anticipated that related projects would comply with applicable requirements regarding the distribution infrastructure to serve the projected demand. As the Project would meet its infrastructure needs, cumulative impacts would be less than significant.

6.0 CONCLUSION

The Project would be designed and operated in compliance with the relevant regulatory requirements. Based on the analysis contained in this report no significant impacts have been identified nor are significant impacts expected to the existing wastewater and water infrastructure and capacities within the vicinity of the Project Site as a result of the Project.

7.0 REFERENCES

California Natural Resources Agency, "2018 California Environmental Quality Act (CEQA) Statute and Guidelines - Appendix G: Environmental Checklist Form", dated 2018.

California Water Service Company, "Dominguez District 2015 Urban Water Management Plan", dated 2015.

California Water Service Company, "Water Atlas Map", dated October 2016.

County of Los Angeles Flood Control District, "As-Built Plans No. 314," dated July 1966.

County of Los Angeles Sanitation District, "Sanitation Districts' Service Area", dated August 2018.

County of Los Angeles Sanitation District, "Table 1 - Loadings for Each Class of Land Use", dated August 2018.

West Basin Municipal Water District, "Recycled Water Atlas Maps", dated May 2010.

Los Angeles County Department of Public Health Guidelines for Alternate Water Sources: Indoor and Outdoor Non-Potable Uses dated February 2016.

FIGURES

LEGEND:

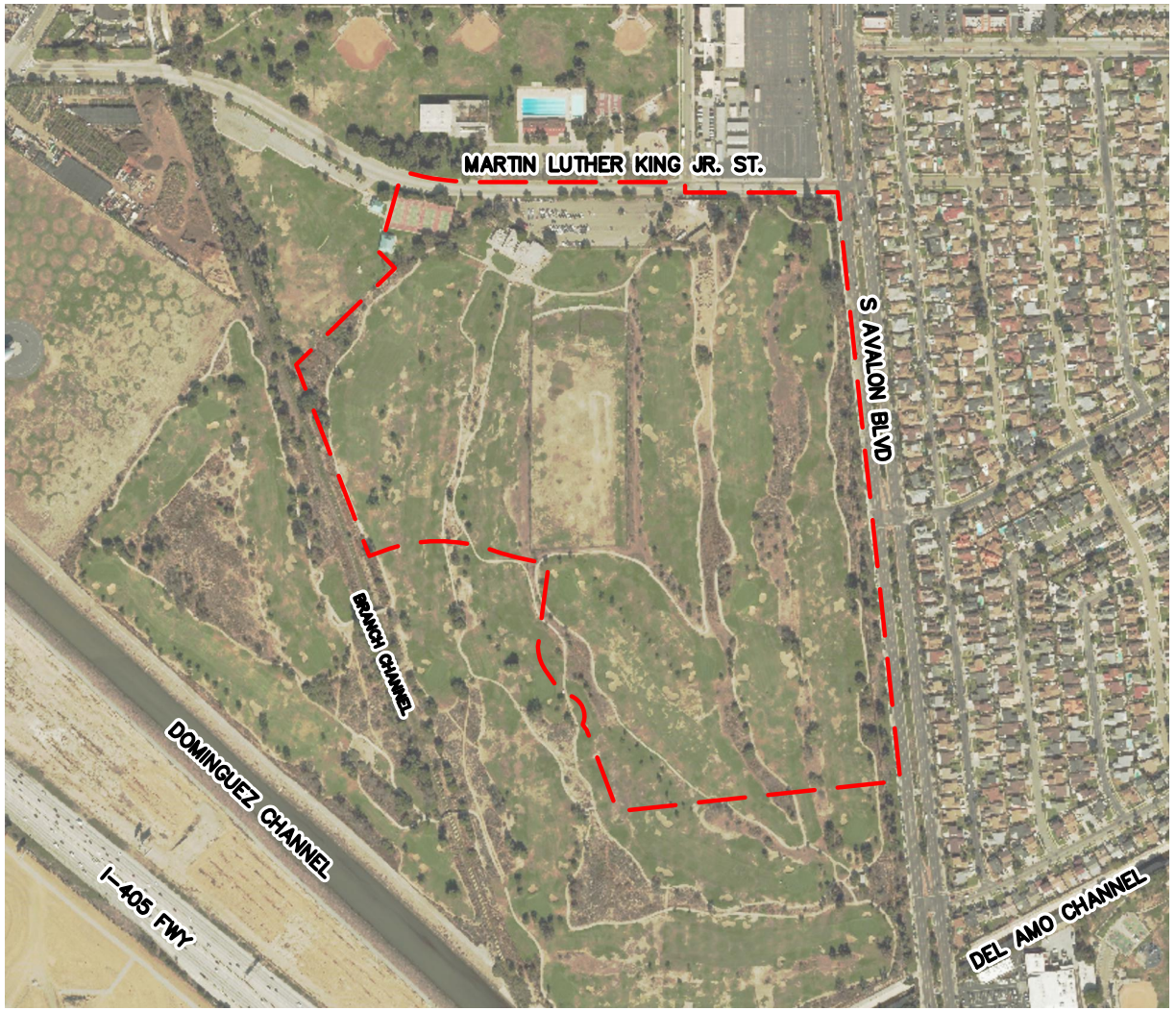
APPROXIMATE SITE LIMITS

NOTES:

1. BACKGROUND AERIAL IMAGE REFERENCED FROM BING MAPS ON 30 JULY 2018.
2. APPROXIMATE SITE LIMITS BASED ON THE PLAN TITLES "CAROL KIMMELMAN SPORTS AND ACADEMIC CENTER, ILLUSTRATIVE OVERALL SITE PLAN" BY MEIS ARCHITECTS, INC.

700 350 0 700

SCALE: 1"=700'



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Project
CAROL KIMMELMAN ATHLETIC AND ACADEMIC CENTER
UNINCORPORATED AREA OF LOS ANGELES COUNTY CA

Drawing Title
SITE VICINITY MAP

Project No.	700060401
Date	12 APRIL 2019
Drawn By	JL
Checked By	FI

Figure No. 1

Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Exhibits\Utility Report Exhibits\700060401-FIG-01-Site Location Plan.dwg Date: 4/16/2019 Time: 09:20 User: dhodson Style Table: Langan.stb Layout: 8.5 X 11

NOTE:

1. CONCEPTUAL SITE PLAN BASED ON THE PLAN TITLES "CAROL KIMMELMAN SPORTS AND ACADEMIC CENTER, ILLUSTRATIVE OVERALL SITE PLAN" BY MEIS ARCHITECTS, INC.

LEGEND

TENNIS CENTER

1. WELCOME CENTER
2. LEARNING CENTER
3. ENTRY PLAZA
4. BASKETBALL COURTS
5. COMPETITION VENUE (12 HARD COURTS)
6. PLAYER DEVELOPMENT / COLLEGIATE CENTER
7. TOURNAMENT/ LEAGUE ADMINISTRATION BUILDING
8. 100M SPRINT TRACK
9. 4 CLAY COURTS
10. MONUMENT ENTRY/ SIGN
11. CENTRAL PLAZA
12. 8 36 FT COURTS
13. 4 60 FT COURTS (+4 FUTURE COURTS)
14. TRAINING TURF
15. TENNIS CENTER COURTS (24 HARD COURTS)
16. FUTURE COVERED COURTS (6 COURTS)
17. MAINTENANCE BUILDING
18. OUTDOOR EXERCISE COURSE
19. VISITOR PARKING
20. BUS PARKING
21. EMPLOYEE PARKING
22. OVERFLOW PARKING

SOCCER CENTER

23. 2 NATURAL GRASS MULTIPURPOSE FIELDS
24. 6 FULL SIZE NATURAL GRASS SOCCER FIELDS
25. 2 FULL SIZE ARTIFICIAL TURF SOCCER FIELDS
26. SUPPORT BUIDLING
27. SOCCER PARKING
28. OVERFLOW PARKING

N

NOT TO SCALE

MEIS CAROL KIMMELMAN SPORTS AND ACADEMIC CAMPUS

COUNTY OF LOS ANGELES

ILLUSTRATIVE OVERALL SITE PLAN

07/20/2018

0 100 250 500

A 100

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Project	CAROL KIMMELMAN ATHLETIC AND ACADEMIC CENTER UNINCORPORATED AREA OF LOS ANGELES COUNTY CA
Drawing Title	CONCEPTUAL SITE PLAN
Project No.	700060401
Date	12 APRIL 2019
Drawn By	JL
Checked By	FI
Figure No.	2

Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Exhibits\Utility Report Exhibits\700060401-FIG-02-Conceptual Site Plan.dwg Date: 4/16/2019 Time: 09:39 User: dhodson Style Table: Langan.stb Layout: 11 X 17

LEGEND:

- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING RECYCLED WATER MAIN

NOTES:

1. BACKGROUND AERIAL IMAGE REFERENCED FROM BING MAPS ON 30 JULY 2018.
2. LOCATIONS OF ALL EXISTING UTILITIES AND APPURTENANCES ARE NOT TO SCALE AND FOR SCHEMATIC PURPOSES ONLY.

400 200 0 400 800

SCALE: 1"=400'

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Project	Drawing Title	Project No.	Figure No.
CAROL KIMMELMAN ATHLETIC AND ACADEMIC CENTER UNINCORPORATED AREA OF LOS ANGELES COUNTY CA	EXISTING WATER AND SEWER MAP	700060401	3
		Date: 12 APRIL 2019	
		Drawn By: JL	
		Checked By: FI	

Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Exhibits\Utility Report Exhibits\700060401-FIG-03-.dwg Date: 4/16/2019 Time: 09:48 User: dhodson Style Table: Langan.stb Layout: 11 X 17

APPENDIX A
County of Los Angeles Sanitary Sewer Atlas Maps

SEE SHT. NO. S-1703

C-37
C-38
C-43

SAN DIEGO F R W Y

CITY OF LOS ANGELES

COUNTY OF LOS ANGELES

CITY OF CARSON

VICTORIA REGIONAL PARK

VICTORIA GOLF COURSE

Project Site

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

SEE SHT. NO. S-1759

SEE SHT. NO. S-1705

AUTOMATED GRAPHICS

METERS
0 50 100 200 250
0 200 400 600 800
FEET

LEGEND

- CLAY SEWERS MAINTAINED BY SMD. 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.O. CLEANOUT
- L.H. LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 258

MAP REV
05-19-16

DATA BASE REV
01-30-86

CONSOLIDATED S.M.D.

S-1704

T: 764 A-5

0519.0519.1704

C-36
C-38
C-39

SEE SHT. NO. S-1758

CITY OF CARSON

Project Site

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

SEE SHT. NO. S-1704

SEE SHT. NO. S-1814

SEE SHT. NO. S-1760

E 4,207,000

E 4,054,000

SAN. DIST. TRUNK SEWER BY

AUTOMATED GRAPHICS

METERS
0 50 100 200 250
0 200 400 600 800
FEET

LEGEND

- CLAY SEWERS MAINTAINED BY SMD. 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.O. CLEANOUT
- L.H. LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 731

MAP REV
03-18-14

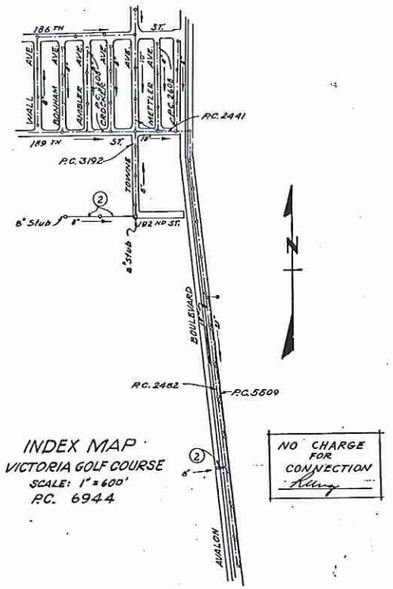
DATA BASE REV
10-20-87

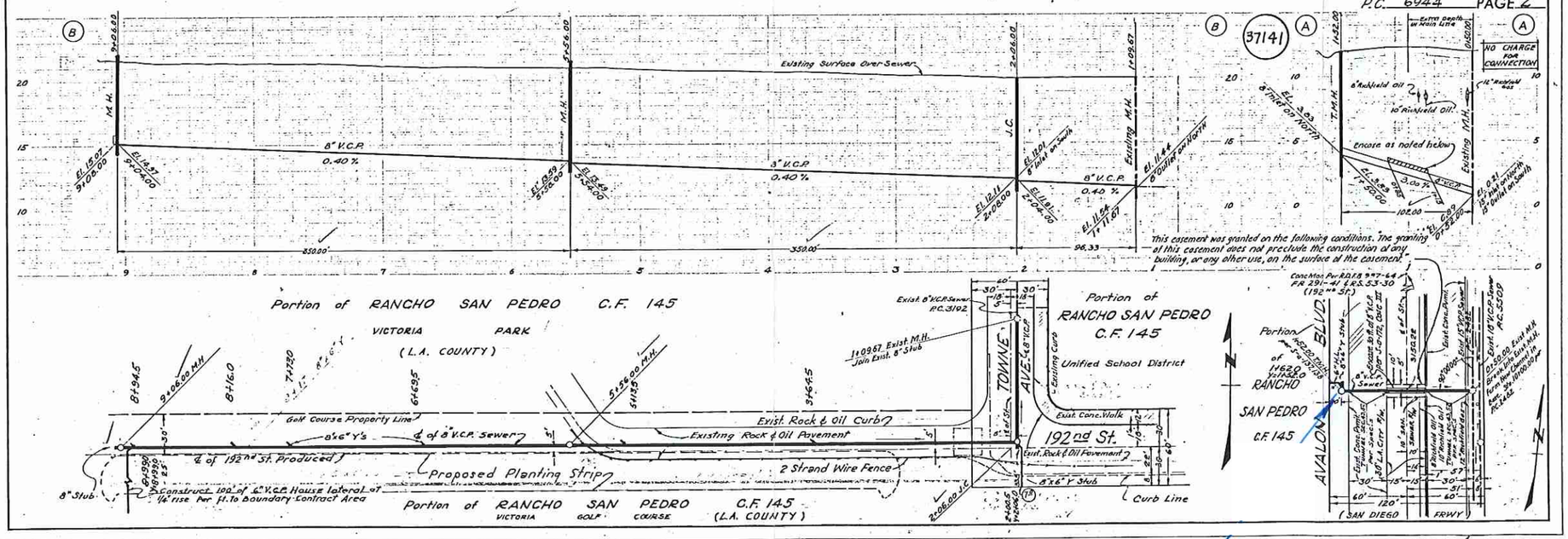
CONSOLIDATED S.M.D.

S-1759

T: 764 G-3

0519.0519.1759





TRIM LINE

B.M. 23-6 ELEV. 18.928
Avalon Blvd. ℄ D.W.&P. Tower Nº 48
Std. C.S. Mon. in Wall 14.4 W. of Center of Tower
C.S.F.B. 2317 Pg. 114

INDEX MAP
VICTORIA GOLF COURSE
SCALE: 1" = 600'
P.C. 6944

NO CHARGE FOR CONNECTION
Kling

LENNOX BUILDING DISTRICT No. 7

USE EXTRA STRENGTH PIPE. ALL PIPE IS STANDARD DEPTH EXCEPT AS NOTED.

USE MECHANICAL COMPRESSION JOINTS FOR ALL VITRIFIED CLAY PIPE SEWERS PER SPEC., SECS. 34, 48, & 49.

ALL STRUCTURES SHALL BE BRICK SEWER STRUCTURES AS PER PLAN NO. S-a-104, EXCEPT AS NOTED.

USE STANDARD MANHOLE FRAMES AND COVERS AS PER PLAN NO. S-a-117, EXCEPT AS NOTED.

USE FORMULA NO. 2, SEC. 34 OF SPECIFICATIONS TO COMPUTE ALLOWABLE LEAKAGE.

CONSTRUCT HOUSE LATERALS WITH INVERTS AT PROPERTY LINE 6 FEET BELOW CURB GRADE, OR GRADE OF CENTER LINE OF STREET, EXCEPT AS NOTED.

(7.5FT) FIGURES IN CIRCLES AT ENDS OF HOUSE LATERALS INDICATE DEPTH BELOW CURB GRADE, OR GRADE OF CENTER LINE OF STREET.

~~FIGURES IN CIRCLES AT ENDS OF HOUSE LATERALS INDICATE HOUSE LATERALS SHALL BE CONSTRUCTED WITH 1/4" RISE PER FOOT TO PROPERTY LINE.~~

~~WORDS IN CIRCLES AT ENDS OF HOUSE LATERALS INDICATE Y'S SHALL BE LAID HORIZONTAL AND HOUSE LATERALS SHALL BE CONSTRUCTED WITH 1/4" RISE PER FOOT TO PROPERTY LINE.~~

ALL HOUSE LATERALS SHALL BE CONSTRUCTED IN A STRAIGHT ALIGNMENT AT RIGHT ANGLES FROM THE MAIN LINE SEWER EXCEPT AS SHOWN ON THE PLANS. HOUSE LATERALS FROM CHIMNEYS SHALL NOT HAVE AN ANGLE OF LESS THAN 45 DEGREES WITH THE MAIN LINE SEWER.

THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE MADISON 9-4747, EXT. 81531 AT LEAST 24 HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.

~~CONSTRUCTION IN STATE HIGHWAYS SHALL CONFORM WITH STATE HIGHWAY PERMIT AND THE CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION THEREWITH.~~

ALL STATE AND LOCAL TRENCH SAFETY ORDERS WILL BE RIGIDLY ENFORCED.

RESURFACING SCHEDULE: RESURFACE TRENCH WITHIN PAVED AREA WITH PREMIX ROCK AND OIL 3 INCHES IN THICKNESS ON 6 INCHES OF AGGREGATE BASE MATERIALS, EXCEPT AS NOTED BELOW:

PAGE NO.	STREET	STATION LIMITS		TYPE OF RESURFACING
		FROM	TO	

ALL CONCRETE CROSS GUTTERS, CURBS, GUTTERS, PAVEMENT, AND DRIVEWAYS SHALL BE TUNNELED OR JACKED PER LOS ANGELES COUNTY ROAD DEPARTMENT REQUIREMENTS.

THE FOLLOWING LATEST REVISED STANDARD PLANS ON FILE IN THE OFFICE OF COUNTY ENGINEER SHALL APPLY IN THE CONSTRUCTION OF THIS PROJECT:

STANDARD LEGEND	S-a-64
STANDARD BRICK SEWER STRUCTURE	S-a-104
STANDARD MANHOLE FRAME AND COVER	S-a-117
STANDARD MANHOLE STEPS	S-a-162
STANDARD STOPPER	S-a-130
STANDARD WYE SUPPORT	S-a-171
STANDARD SUPPORT AND PROTECTION OF SEWER PIPES	S-a-172
STANDARD BEDDING FOR SEWER PIPES	S-a-179
MINIMUM EXCAVATION SAFETY REQUIREMENTS	S-a-180

THE UNDERGROUND UTILITY COMPANIES WITHIN THE LIMITS OF THIS PROJECT ARE AS FOLLOWS:

(1) DOMINGUEZ WATER CO.
(2) RICHFIELD OIL CO.
(3)
(4)

NO CONNECTIONS FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS WITHOUT WRITTEN PERMISSION FROM THE CHIEF ENGINEER AND GENERAL MANAGER OF THE COUNTY SANITATION DISTRICTS.

TRIM LINE

P.C. 6944
PAGE 1

PRIVATE CONTRACT NO. 6944

PROFILE, ALIGNMENT AND GRADE OF
SANITARY SEWERS
TO BE CONSTRUCTED IN

VICTORIA GOLF COURSE

AND OTHER RIGHTS OF WAY

37140

1 SHEET, 2 PAGES

SCALE VERT. 1" = 4', HORIZ. 1" = 40'

APRIL 1964

COUNTY OF LOS ANGELES, CALIFORNIA

JOHN A. LAMBIE
COUNTY ENGINEER

APPROVED BY C. H. Hughes
SANITATION ENGINEER

RECOMMENDED BY Robert E. Kuhn
ASS'T. SANITATION ENGINEER

DESIGNED BY Bernard I. Valesky
REG. C. E. NO. 10653

J. D. PARKHURST
CHIEF ENGINEER OF COUNTY SANITATION DISTRICT NO. 5

APPROVED BY
OFFICE ENGINEER

NOTES:

WORK SHALL BE CONSTRUCTED ACCORDING TO STANDARD SPECIFICATIONS DATED May 25, 1962, ON FILE IN THE OFFICE OF THE COUNTY ENGINEER AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.

GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURB, CENTER LINE OF STREET OR CENTER LINE OF ALLEY ARE SHOWN BY CIRCLES ON PROFILES. AT ALL POINTS BETWEEN DESIGNATED POINTS THE GRADE SHALL BE ESTABLISHED SO AS TO CONFORM TO A STRAIGHT LINE DRAWN BETWEEN SAID DESIGNATED POINTS.

ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S., SEA LEVEL DATUM OF 1929.

UNIT PRICES FOR ADDITIONAL WORK WHICH MAY BE REQUIRED BUT WHICH CANNOT BE ASCERTAINED IN ADVANCE, SHALL BE SUBMITTED IN THE PROPOSAL.

THIS DRAWING AND THE DATA HEREON ARE HEREBY MADE A PART OF THE SPECIFICATIONS.

LAYOUT	J. FURSE	APR. 1964	UNDERGROUND	R. Scott	6-15-64
TRACED	J. FURSE	APR. 1964	BENCH MARKS	J. J. Lanigan	6-15-64
CHECKED	H. OBRADOVITCH	MAY 1964	MAINTENANCE	C. Pearson	6-16-64
F. B. 2317			INSPECTOR		
A. B. 7338	W. S. 26		RECORD PLANS		

TRIM LINE

TRIM LINE

P.C. 6944 PAGE 2

"This easement was granted on the following conditions. The granting of this easement does not preclude the construction of any building, or any other use, on the surface of the easement."

TRIM LINE

APPENDIX B

California Water Service Company
Domestic Water Atlas Maps

ENGINEERING DEPARTMENT

GIS

DOMINGUEZ DISTRICT
WATER SYSTEM

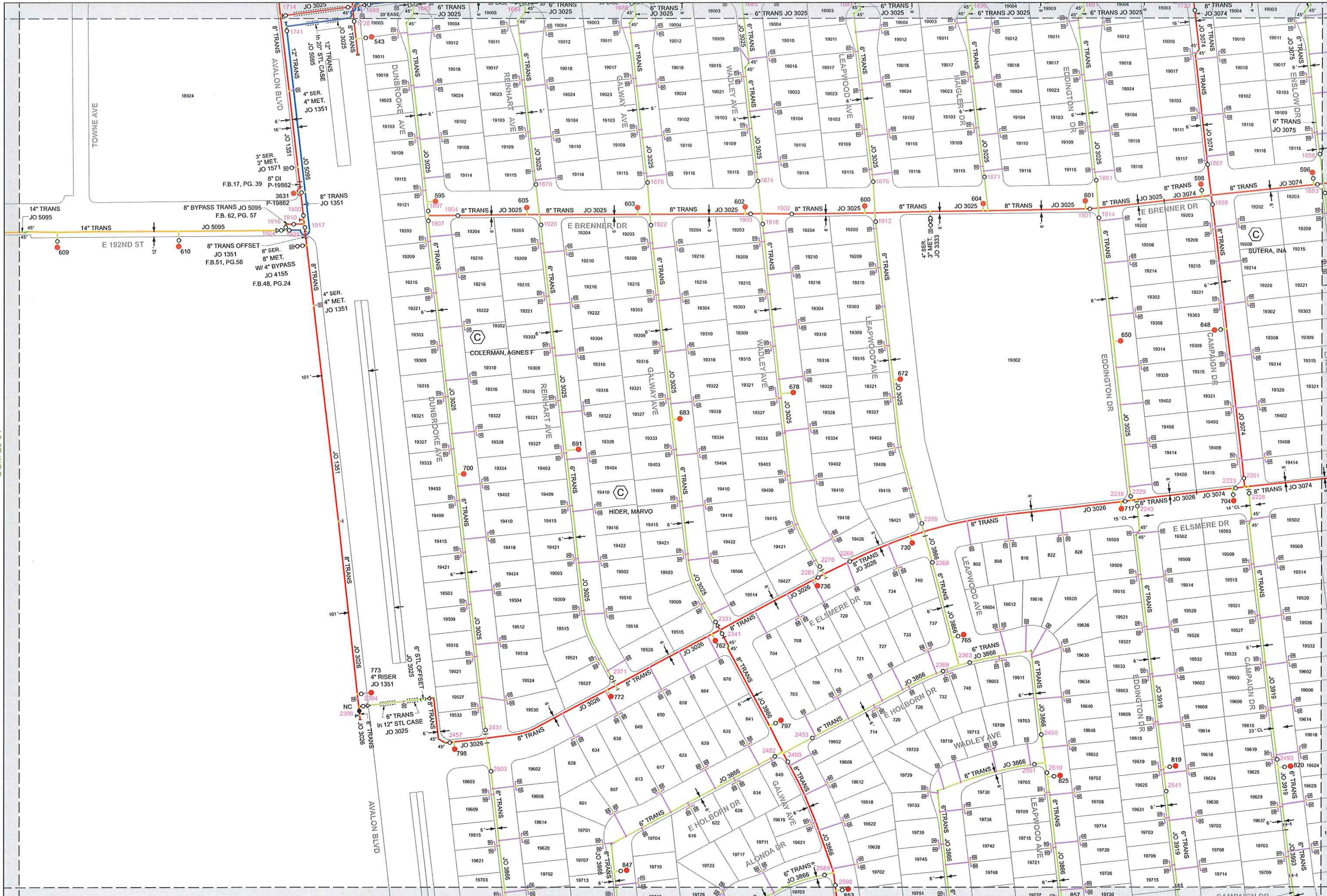
CONFIDENTIAL: Applicant hereby agrees that any plans or markings made by California Water Service (Cal Water) showing the estimated location of its underground facilities is done solely as an accommodation and without any warranties, representations, or guarantees of correctness or accuracy. Applicant acknowledges that said information is a suggestion as to possible locations, as would be necessary to protect Cal Water's property. Applicant accepts full responsibility for any damage to Cal Water's facilities. Applicant agrees that Cal Water is not liable for any direct or indirect damages arising out of the use of said information.

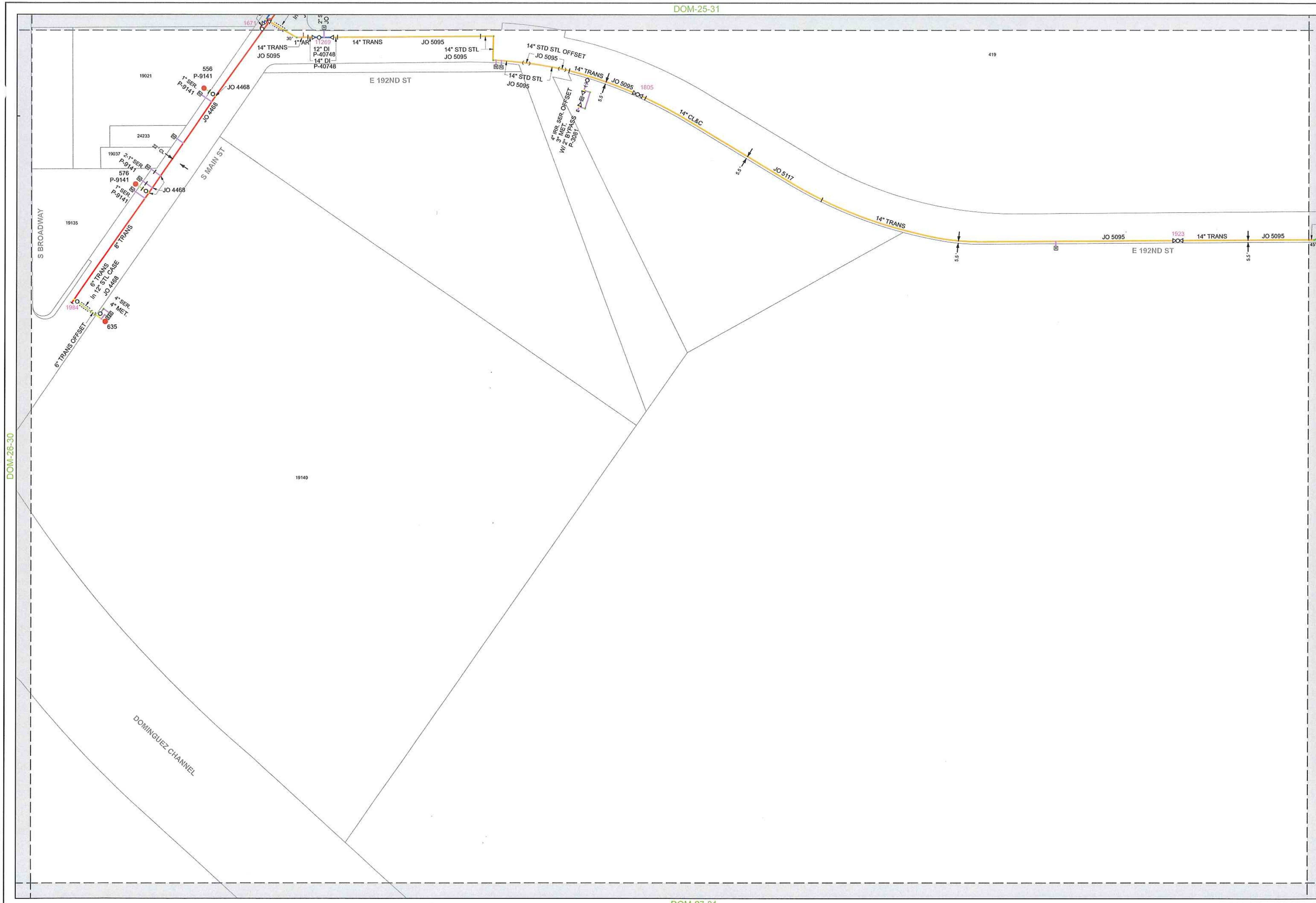
N

SCALE:
1" = 200'

Issued:
October 2016

Plat Sheet:
DOM-26-32





ENGINEERING DEPARTMENT

CALIFORNIA WATER SERVICE

GIS

DOMINGUEZ DISTRICT
WATER SYSTEM

N

SCALE: 1" = 200'

Issued: October 2016

Plat Sheet: DOM-26-31

ENGINEERING DEPARTMENT

CALIFORNIA WATER SERVICE

GIS

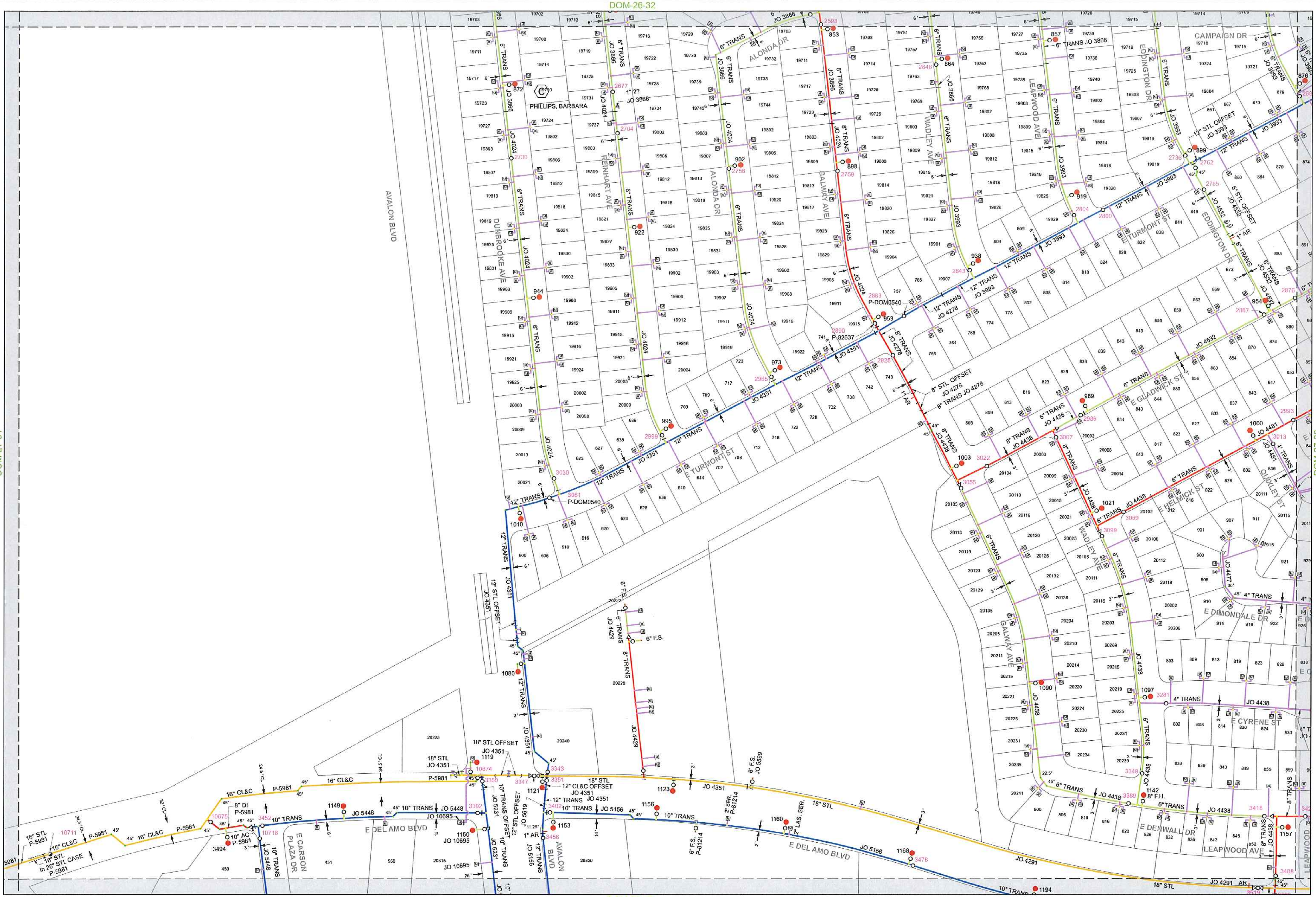
DOMINGUEZ DISTRICT
WATER SYSTEM

N

SCALE:
1" = 200'

Issued:
October 2017

Plat Sheet:
DOM-27-32



DOM-26-32
DOM-27-31
DOM-27-33
DOM-28-32
AVALON BLVD
DUNBROOKE AVE
REINHART AVE
ALONDA DR
GALWAY AVE
WADLEY AVE
LEAPWOOD AVE
EDDINGTON DR
CAMPAIGN DR
E TURMONT ST
E GLADWICK ST
E HELMICK ST
QUIXLEY ST
E DIMONDALE DR
E CYRENE ST
E DENWALL DR
LEAPWOOD AVE
E DEL AMO BLVD
E CARSON PLAZA DR
PHILLIPS, BARBARA
P-DOM0540
18" STL OFFSET
12" CL&C OFFSET
16" CL&C
18" STL
12" TRANS
10" TRANS
8" TRANS
6" TRANS
4" TRANS
JO 4351
JO 4024
JO 3866
JO 3993
JO 4278
JO 4438
JO 4532
JO 4429
JO 4291
JO 5156
JO 5448
JO 10695
P-5981

APPENDIX C

California Water Service Company Domestic Water and County Sanitation Districts of Los Angeles County Will Serve Letters

CALIFORNIA WATER SERVICE
Rancho Dominguez District 2632 West 237th Street, Torrance, CA 90505
Tel: (310) 257-1400

September 11, 2018

Langan
32 Executive Park, Suite 130
Irvine, CA 92614
Attn: Jeffrey Leung

Will Serve Letter
340 M.L.K. Jr. Street (formerly East 192nd Street), Carson, CA
Staff Engineer: Jeffrey Leung

Dear Mr. Leung:

As a regulated utility, California Water Service Company Rancho Dominguez district ("Cal Water") has an obligation to provide water service in accordance with the rules and regulations of the California Public Utility Commission (CPUC). Assuming you receive all required permits from the City of Carson and / or County of Los Angeles, Cal Water will provide water service to the above referenced project. Cal Water agrees to operate the water system and provide service in accordance with the rules and regulations of the California Public Utilities Commission (CPUC) and the company's approved tariffs on file with the CPUC. This will serve letter shall remain valid for **two years** from the date of this letter. If construction of the project has not commenced within this **two year** time frame, Cal Water will be under no further obligation to serve the project unless the developer receives an updated letter from Cal Water reconfirming our commitment to serve the above mentioned project. Additionally, Cal Water reserves the right to rescind this letter at any time in the event its water supply is severely reduced by legislative, regulatory or environmental actions.

Cal Water will provide such potable water at such pressure as may be available from time to time as a result of its normal operations per the company's tariffs on file with the CPUC. Installation of facilities through developer funding shall be made in accordance with the current rules and regulations of the CPUC including, among others, Tariff Rules 15 and 16 and General Order 103-A. In order for us to provide adequate water for domestic use as well as fire service protection, it may be necessary for the developer to fund the cost of special facilities, such as, but not limited to, booster pumps, storage tanks and/or water wells, in addition to the cost of mains and services. Cal Water will provide more specific information regarding special facilities and fees after you provide us with your improvement plans, fire department requirements, and engineering fees for this project.

This letter shall at all times be subject to such changes or modifications by the CPUC as said Commission may, from time to time, require in the exercise of its jurisdiction.

If you have any questions regarding the above, please call me at (310) 257-1400.

Sincerely,

Daniel Armendariz
District Manager

cc: Ting He – Cal Water Engineering Dept
Ralph Felix – Cal Water Operations Manager
Renzo Ayala – Cal Water Interim Superintendent
File

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

February 28, 2019

Ref. Doc. No.: 4914256

Mr. Fred Irianto
Senior Project Manager
Langan
515 South Flower Street
Suite 2860
Los Angeles, CA 90071

Dear Mr. Irianto:

Will Serve Letter for the Carol Kimmelman Sports and Academic Campus Center

The Sanitation Districts of Los Angeles County (Districts) received your will serve letter request for the subject project on January 23, 2019. The proposed project is located within the jurisdictional boundaries of District No. 8. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Del Amo Trunk Sewer, located in Avalon Boulevard south of Del Amo Boulevard. The Districts' 24-inch diameter trunk sewer has a capacity of 3.7 million gallons per day (mgd) and conveyed a peak flow of 2.4 mgd when last measured in 2015.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a capacity of 400 mgd and currently produces an average flow of 254.7 mgd.

3. The expected average wastewater flow from the project, described in the request as a combined 56,000 square feet of administrative or maintenance use and a total of 23,000 square feet of sports type structure, is 24,700 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link.

In determining the impact to the Sewerage System and applicable connection fees, the Districts' Chief Engineer and General Manager will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel or facilities on the parcel. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at (562) 908-4288, extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: A. Schmidt
A. Howard

APPENDIX D

West Basin Municipal Water District Recycled Water Atlas Maps

DF089

186TH ST

186TH ST

186TH ST

C-18

77+77.30

77+41.97

77+10

75+50

26+52.19

26+54

24" CML & WSP
P3 2002-07

28+

24" CML & W
P3 2002

4" BO

AMBLER AVE

CROCKER AVE

TOWNE AVE

METTLER AVE

AVALON BLVD

73 '

AVALON BLVD

73 '

30" WSP CL 200

LOYOLA AVE

LOYOLA AVE

MOREHOUSE DR

GRAMBLING PL

HOWARD AVE

189TH ST

189TH ST

68+81.5

BO

DG088

DG090

67+26.22

3" AV

UNIVERSITY DR

BO

57+25

57+20

2" AV

22 '

P-6 2002-03

12" PVC C 900 CL 200

TOWNE AVE

65+60

65+06.42

30" WSP CL 200

AVALON BLVD

73 '

73 '

DUNBROOKE AVE

REINHART AVE

GALWAY AVE

WADLEY AVE

LEAPWOOD AVE

BRENNER DR

BRENNER DR

ND ST

192ND ST

22 '

48+58.75
24" X 12"

48+58.75
10+00

BO

3" AV

45+22.08
30"-X-24"

BO
60+22.5

60+02.58

44+98.78

12" WSP CL 200

48+70

48+50

24" WSP CL 200

50+94.13

P-5 2002-03

10+01.91

P-5 2002-03

2" AV

10+64

192ND ST

75.41

+70

7.50

BO

44+29.75

52 '

30" PVC CL 200

DH089

0 50 100 200
Feet
NOT FOR CONSTRUCTION USE

WBMWD RECYCLED WATER ATLAS

DISCLAIMER:
This map represents a visual aid intended to assist Public Utility Department personnel with the management of Recycle System facilities. Data provided hereon is not a guarantee of actual field conditions nor a substitute for record drawings and field verification.

May 03, 2010

DG089

DG089

DH088

DH090

DI089

192ND ST

12" WSP-CL-200 — 48+70 — 48+50 — 24"-WSP-CL-200 — 30"-X-24" — 60+02.58

50+94.13 — P-5 2002-03 — 10+01.91 — P-5 2002-03 — 44+98.78

45+22.08

2" AV — 10+64

10+75.41 — 10+70 — 10+67.50

BO — 44+29.75 — 52'

30" PVC CL 200
P-4 2002-03

43+75.32

43+38.55

43+30

C-28 1998-11

30" WSP CL 200

15'

78'

AVALON BLVD

15' EASMT.

34+20

33+47

32+72 — BO

31+93 — 3" AV

P-2 2002-03

DUNBROOKE AVE

REINHART AVE

GALWAY AVE

WADLEY AVE

LEAPWOOD AVE

ELSMERE DR

HOLBORN DR

ALONDA DR

	WBMWD RECYCLED WATER ATLAS	0 50 100 200 Feet NOT FOR CONSTRUCTION USE	DI089		DISCLAIMER: This map represents a visual aid intended to assist Public Utility Department personnel with the management of Recycle System facilities. Data provided hereon is not a guarantee of actual field conditions nor a substitute for record drawings and field verification.	May 03, 2010	DH089

DG089

DH088

DH090

DI089

192ND ST

12" WSP-CL-200 — 48+70 — 48+50 — 24"-WSP-CL-200 — 30"-X-24" — 60+02.58

50+94.13 — P-5 2002-03 — 10+01.91 — P-5 2002-03 — 44+98.78

45+22.08

2" AV — 10+64

10+75.41 — 10+70 — 10+67.50

BO — 44+29.75 — 52'

30" PVC CL 200
P-4 2002-03

43+75.32

43+38.55

43+30

C-28 1998-11

30" WSP CL 200

15'

78'

AVALON BLVD

15' EASMT.

34+20

33+47

32+72 — BO

31+93 — 3" AV

P-2 2002-03

DUNBROOKE AVE

REINHART AVE

GALWAY AVE

WADLEY AVE

LEAPWOOD AVE

ELSMERE DR

HOLBORN DR

ALONDA DR

	WBMWD RECYCLED WATER ATLAS	0 50 100 200 Feet NOT FOR CONSTRUCTION USE	DI089		DISCLAIMER: This map represents a visual aid intended to assist Public Utility Department personnel with the management of Recycle System facilities. Data provided hereon is not a guarantee of actual field conditions nor a substitute for record drawings and field verification.	May 03, 2010	DH089

APPENDIX E

County of Los Angeles Sanitation District - Sanitary sewer Discharge Table

TABLE 1

LOADINGS FOR EACH CLASS OF LAND USE

DESCRIPTION	UNIT OF MEASURE	FLOW (Gallons Per Day)	COD (Pounds Per Day)	SUSPENDED SOLIDS (Pounds Per Day)
R E S I D E N T I A L				
Single Family Home	Parcel	260	1.22	0.59
Duplex	Parcel	312	1.46	0.70
Triplex	Parcel	468	2.19	1.05
Fourplex	Parcel	624	2.92	1.40
Condominiums	Parcel	195	0.92	0.44
Single Family Home (reduced rate)	Parcel	156	0.73	0.35
Five Units or More	No. of Dwlg. Units	156	0.73	0.35
Mobile Home Parks	No. of Spaces	156	0.73	0.35
C O M M E R C I A L				
Hotel/Motel/Rooming House	Room	125	0.54	0.28
Store	1000 ft^2	100	0.43	0.23
Supermarket	1000 ft^2	150	2.00	1.00
Shopping Center	1000 ft^2	325	3.00	1.17
Regional Mall	1000 ft^2	150	2.10	0.77
Office Building	1000 ft^2	200	0.86	0.45
Professional Building	1000 ft^2	300	1.29	0.68
Restaurant	1000 ft^2	1,000	16.68	5.00
Indoor Theatre	1000 ft^2	125	0.54	0.28
Car Wash				
Tunnel - No Recycling	1000 ft^2	3,700	15.86	8.33
Tunnel - Recycling	1000 ft^2	2,700	11.74	6.16
Wand	1000 ft^2	700	3.00	1.58
Financial Institution	1000 ft^2	100	0.43	0.23
Service Shop	1000 ft^2	100	0.43	0.23
Animal Kennels	1000 ft^2	100	0.43	0.23
Service Station	1000 ft^2	100	0.43	0.23
Auto Sales/Repair	1000 ft^2	100	0.43	0.23
Wholesale Outlet	1000 ft^2	100	0.43	0.23
Nursery/Greenhouse	1000 ft^2	25	0.11	0.06
Manufacturing	1000 ft^2	200	1.86	0.70
Dry Manufacturing	1000 ft^2	25	0.23	0.09
Lumber Yard	1000 ft^2	25	0.23	0.09
Warehousing	1000 ft^2	25	0.23	0.09
Open Storage	1000 ft^2	25	0.23	0.09
Drive-in Theatre	1000 ft^2	20	0.09	0.05

TABLE 1
(continued)
LOADINGS FOR EACH CLASS OF LAND USE

DESCRIPTION	UNIT OF MEASURE	FLOW (Gallons Per Day)	COD (Pounds Per Day)	SUSPENDED SOLIDS (Pounds Per Day)
C O M M E R C I A L				
Night Club	1000 ft^2	350	1.50	0.79
Bowling/Skating	1000 ft^2	150	1.76	0.55
Club	1000 ft^2	125	0.54	0.27
Auditorium, Amusement	1000 ft^2	350	1.50	0.79
Golf Course, Camp, and Park (Structures and Improvements	1000 ft^2	100	0.43	0.23
Recreational Vehicle Park	No. of Spaces	55	0.34	0.14
Convalescent Home	Bed	125	0.54	0.28
Laundry	1000 ft^2	3,825	16.40	8.61
Mortuary/Cemetery	1000 ft^2	100	1.33	0.67
Health Spa, Gymnasium				
With Showers	1000 ft^2	600	2.58	1.35
Without Showers	1000 ft^2	300	1.29	0.68
Convention Center, Fairground, Racetrack, Sports Stadium/Arena	Average Daily Attendance	10	0.04	0.02
I N S T I T U T I O N A L				
College/University	Student	20	0.09	0.05
Private School	1000 ft^2	200	0.86	0.45
Church	1000 ft^2	50	0.21	0.11

APPENDIX F

County of Los Angeles Sanitation District - Water Treatment Plant Service Area Map

SANITATION DISTRICTS OF LOS ANGELES COUNTY

LEGEND

- ACTIVE SOLID WASTE FACILITIES
- CLOSED SANITARY LANDFILLS
- WATER RECLAMATION PLANTS (WRP) and JOINT WATER POLLUTION CONTROL PLANT (JWPCP)
- TRUNK SEWERS
- OUTFALLS AND EFFLUENT LINES
- RECYCLED WATER LINES
- (14) SANITATION DISTRICT NUMBER or DESIGNATION
- ADMINISTRATION OFFICE AND FIELD OFFICES
- PUMPING PLANTS
- GAS-TO-ENERGY FACILITIES
- REFUSE-TO-ENERGY FACILITIES
- RECYCLE CENTERS
- INTERMODAL FACILITY (IMF) and MATERIALS RECOVERY (MR) / TRANSFER FACILITIES (TF)

0 0.5 1 2 3 4 5 Miles
0 5,000 10,000 15,000 20,000 25,000 Feet

December 2015

LOS ANGELES COUNTY VICINITY MAP