700 South Flower Street, Suite 2100 Los Angeles, CA 90017 213.266.5208

DATE: August 7, 2019

TO: Mr. Jerry Illoulian
Principal
Illoulian & Illulian Properties, L.P.
8727 Melrose Ave, West Hollywood
West Hollywood, CA 90069

FROM: KPFF Consulting Engineers
700 South Flower Street, Suite 2100
Los Angeles, CA 90017

RE: Santa Monica and Orange Grove Mixed-Use Project: Civil Engineering Initial Study Data

---

This memo summarizes the civil related technical studies needed to evaluate the Santa Monica and Orange Grove Mixed-Use project's impacts relating to surface hydrology, water supply, wastewater, and groundwater.

General

Existing Conditions

The existing site consists of six lots at 7811 Santa Monica Blvd, 1114 North Orange Grove Ave, and 1125 North Ogden Drive in the City of West Hollywood, California. The project site currently consists of existing commercial buildings, residential buildings, and parking lots. The project site is approximately 44,200 square feet (0.92 acres) and appears to be 100% impervious.

Proposed Conditions

The site will be developed into a mixed-use building consisting of two subterranean parking levels, ground level restaurant space, an 82 unit apartment complex, and a 74 room hotel. The development will span approximately to the property line and be six stories above grade.

Excavation Depths and Earthwork Volumes

The estimated depths of excavation expected for the subterranean parking and building foundations depths are approximately 27-34 feet below the finished surface on Santa Monica Boulevard. The assumed floor slab thickness is 5" with a 2" sand barrier per the Geotechnical Engineering Investigation report dated November 17, 2014 by Geotechnologies, Inc. The combined parking structure footprint is approximately 37,430 sq. ft.

The earthwork volume for the project was determined using Civil 3D software for AutoCAD. The net site earthwork as a result of the subterranean parking excavation will be approximately 44,300 cubic yards of cut/export. Assuming a 25 percent expansion factor, this equates to a hauled volume of 55,375 cubic yards. See rough grading plan and sections in Attachment A.

The soil export will be hauled to an acceptable location per local jurisdictions' Haul Route requirements. Since the project is in West Hollywood and adjacent to Los Angeles, it is likely that each jurisdiction will have haul route requirements.

Surface Hydrology

Existing Hydrology

Existing storm water runoff from the project site is conveyed via sheet flow and curb drains to the adjacent streets. The existing site is generally flat with a 1% slope to the west and a 3% slope to the south. The site is located within the Federal Emergency Management Agency (FEMA) Flood Zone X, which denotes an area where the potential for flooding is minimal. There are no surface water bodies in the project vicinity.

The existing site's total peak flow generated from a 50-year storm event is approximately 2.95 cubic feet per second (cfs) with 0.93 cfs flowing to Santa Monica Boulevard, 1.51 cfs flowing to North Orange Grove Ave, and 0.51 cfs flowing to North Ogden Drive. See Existing Hydrology Exhibit in Attachment B.

Proposed Hydrology

Storm water runoff from the Project site will be conveyed to the public streets via roof downspouts and site area and podium drains. The proposed development will decrease the existing impervious area by adding planting and landscaping around the site and upper levels. The existing peak flow of 2.95 cfs generated from a 50-year storm will be reduced by the proposed development to 2.87 cfs.

Existing Water Quality Management

Based on our research and existing records, there are currently no stormwater BMPs on the existing site.

Proposed Water Quality Management - Construction

Within the State of California, the National Pollutant Discharge Elimination System (NPDES) requirements mandate that stormwater Best Management Practices (BMPs) be implemented during project construction. These stormwater BMPs may include, but are not limited to: sandbag barriers, shaker plates, silt fences, fiber rolls, and street sweeping.

Proposed Water Quality Management-Project Implementation

Permanent post-construction stormwater management mitigation will be implemented per the County of Los Angeles Department of Public Works Low Impact Development Standards Manual, dated February 14, 2014.

LID (Low Impact Development) is a storm water management strategy with goals to mitigate the impacts of increased runoff and storm water pollution as close to its source as possible.

Considering the proposed development's subterranean footprint and lack of setbacks, we expect infiltration to be infeasible. Capture and reuse may be feasible to treat a portion of the stormwater, but will depend on overall landscaping. This option should be explored with the Architect and Landscape Architect. Preliminary calculations show the 85^{th} Percentile rainfall flow and volume for the project site will be approximately 0.34 cfs and 2,580 cubic feet (cf), respectively. Based on these approximate values, 100% of the required treatment flow could be treated using biofiltration per the LA county LID manual. Biofiltration systems could be located throughout the project site where feasible. The design team should engage early in satisfying stormwater mitigation requirements.

Groundwater

Existing Groundwater

Existing Groundwater conditions are to be verified pending the completion of the project Geotechnical Investigation Report.

Proposed Groundwater Impacts

Impacts on groundwater due to subterranean parking excavation, including temporary and permanent dewatering will be confirmed pending the completion of the project Geotechnical Investigation Report.

Water Supply

There is an existing 12-inch water main on Santa Monica Blvd, which is owned and operated by the Los Angeles Department of Water and Power (LADWP). A flow and pressure report has been conducted by the LADWP, and is attached to this report. We anticipate a 6-inch fire water service, capable of delivering 1,400 gpm, and 6-inch domestic water service, capable of delivering 700 gpm, to serve the project. Based on the flow report, the 12-inch main has a static pressure of 93 psi and a residual pressure of 88 psi at a flow of 1400 gpm. See the LADWP Flow Test Results in Attachment C.

Currently there are no existing fire hydrants along the proposed project site's property frontage. This includes the north side of Santa Monica Blvd, the east side of Orange Grove Ave, and the west side of Ogden Drive. The project Architect and Civil Engineer should engage the County of Los Angeles Fire Department to determine if public or private fire hydrants are required to be installed as part of this project. If hydrants are required, the proposed hydrants must meet a minimum flow of 1,750 gpm at 20 psi per the LA County Fire Code requirement for a Type 1A building (assumed) with a proposed fire sprinkler system and the three largest successive building floors equating to 108,642 square feet.

For the purposes of this report we are assuming the total water usage per day will be equal to the total sewage discharge per day for the project. Based on the sewage discharge estimates in the next section we anticipate the daily water demand to be approximately 28,049 GPD.

Wastewater (Sewer)

There is an existing 8-inch public sewer main that runs north to south on North Orange Grove Ave, and a 12-inch public sewer main that runs east to west on Santa Monica Blvd. A separate Sewer Capacity Study has been prepared for submittal and approval through West Hollywood Public Works. See separate "Sewer Capacity Study" report dated 04/05/2019.

Using the Sanitation District No. 4 Sewer Load Table and the proposed uses of the project, the following table was created outlining the total estimated proposed sewer load.

Anticipated Sewer Generation and Demand						
Facility Description	**Building Program**	**Units**	**Flow (gpd) per unit**	**Avg Load, Q_{AF} (gpd)**	**Avg Load, Q_{AF} (cfs)**	**Peak Flow, Q_{PF} (cfs)**
Restaurant (Indoor)	230	Seat	30	6,900	0.011	0.0267
Restaurant (Outdoor)	21	Seat	18	378	0.001	0.0015
Hotel Amenity Space	2066	SF	0.5	1,033	0.002	0.0040
Art Galley	1381	SF	0.02	28	0.000	0.0001
Residential Lobby	1850	SF	0.08	148	0.000	0.0006
Studio Apartments	38	Unit	80	3,040	0.005	0.0118
1-Bedroom Apartments	23	Unit	120	2,760	0.004	0.0107
2-Bedroom Apartments	9	Unit	160	1,440	0.002	0.0056
Hotel Lobby	1567	SF	0.08	125	0.000	0.0005
Hotel Rooms	86	Room	130	11,180	0.017	0.0432
Hotel Back-of-House	6211	SF	0.08	497	0.001	0.0019
Fitness Area	650	SF	0.8	520	0.001	0.0020
TOTAL				28,049	0.043	0.108

Existing sewer loads and capacity were generated based on City of West Hollywood Requirements as laid out in the Sewer Flow Report (Appendix D). The following table summarizes the Sewer Capacity Study Results:

Sewer Analysis Summary Table		
	Orange Grove Ave	**Santa Monica Blvd**
Pipe Diameter	8-inch	12-inch
Slope	3.32%	0.32%
Manning N	0.013	0.013
50% Full Capacity	1.10 cfs	1.00 cfs
Monitored Daily Flow	0.020 MGD / 0.031 cfs	0.150 MGD / 0.232 cfs
Existing Peak Flow	0.077 cfs	0.580 CFS
Existing % Pipe Full	12.80%	36.70%
Additional Generated Peak Flow(cfs)	0.108	0.108
Total Proposed Peak Flow (cfs)*	0.186	0.689
Proposed % full*	**19.60%**	**40.30%**

***assuming entire project sewer load connects to single sewer**

Both the 8" sewer main in North Orange Grove Ave and the 12" sewer main in Santa Monica Blvd are below 50% full with the addition of the project's proposed sewer loads, which meets City of West Hollywood requirements. The 8" sewer main in North Orange Grove Ave and the 12" sewer main in Santa Monica Blvd have adequate capacity for this project. See Attachment D for the complete Sewer Capacity Study.

Gas and Power

Gas for the project will be supplied by Southern California Gas. A will-serve letter from Southern California Gas Company can be found in Attachment F. Specific gas demands will need to be determined by the project plumbing engineer.

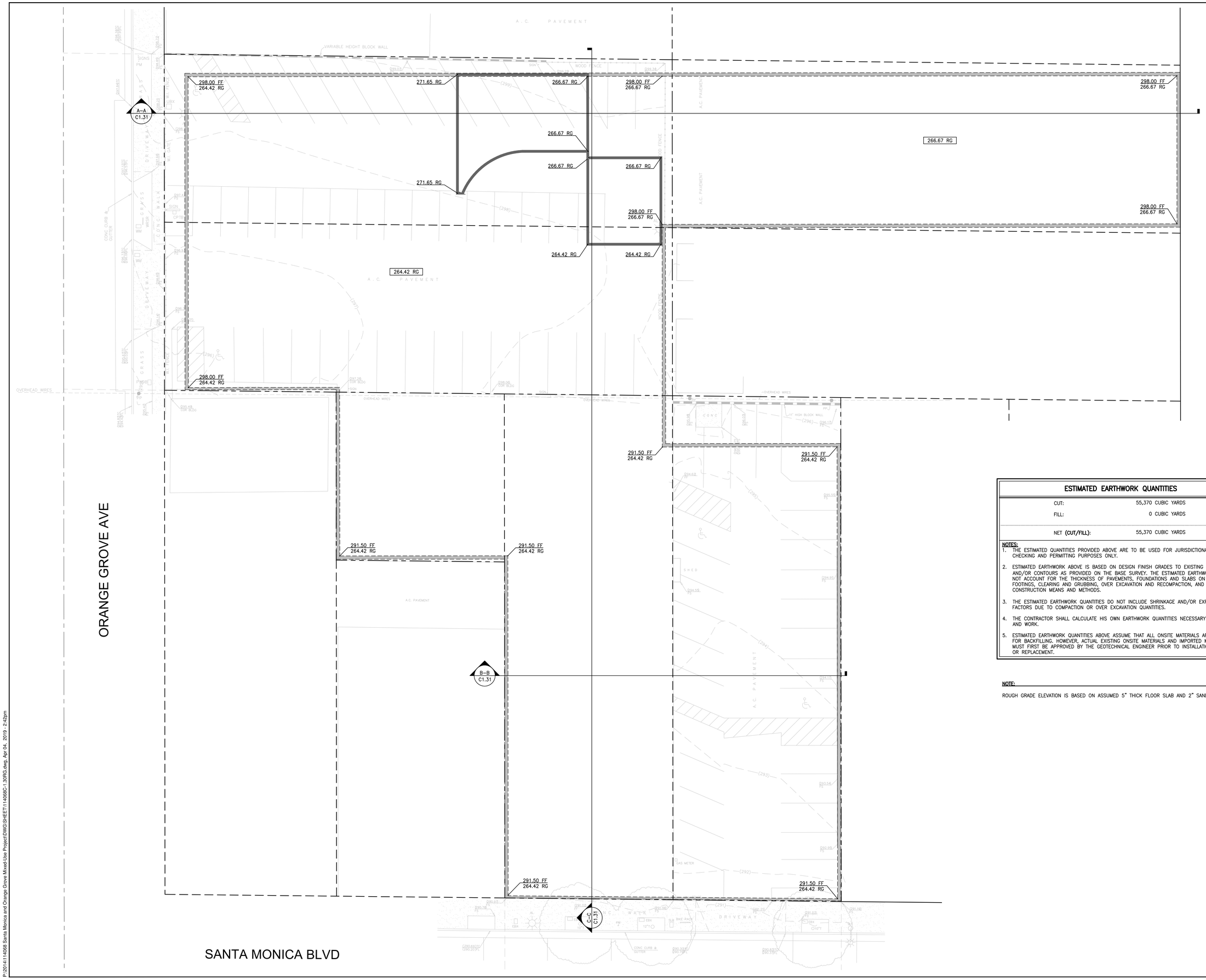
Electrical service will be supplied by Southern California Edison. A letter from Southern California Edison can be found in Attachment E. Specific electrical requirements for the project will need to be determined by the project electrical engineer.

Offsite Improvements

The limit of off-site improvements will be dependent upon the City's requirements set forth in the Conditions of Approval, or similar documents. At a minimum, we expect the scope to include replacement of all curb, gutter, and sidewalk in property frontage. All offsite improvements will be handled through a separate permit with the City of West Hollywood.

ATTACHMENT A

ROUGH GRADING



ESTIMATED EARTHWORK QUANTITIES

CUT:	55,370 CUBIC YARDS
FILL:	0 CUBIC YARDS
NET (CUT/FILL):	55,370 CUBIC YARDS

NOTES:

1. THE ESTIMATED QUANTITIES PROVIDED ABOVE ARE TO BE USED FOR JURISDICTIONAL PLAN CHECKING AND PERMITTING PURPOSES ONLY.
2. ESTIMATED EARTHWORK ABOVE IS BASED ON DESIGN FINISH GRADES TO EXISTING GRADES AND/OR CONTOURS AS PROVIDED ON THE BASE SURVEY. THE ESTIMATED EARTHWORK DOES NOT ACCOUNT FOR THE THICKNESS OF PAVEMENTS, FOUNDATIONS AND SLABS ON GRADE, FOOTINGS, CLEARING AND GRUBBING, OVER EXCAVATION AND RECOMPACTION, AND CONSTRUCTION MEANS AND METHODS.
3. THE ESTIMATED EARTHWORK QUANTITIES DO NOT INCLUDE SHRINKAGE AND/OR EXPANSION FACTORS DUE TO COMPACTION OR OVER EXCAVATION QUANTITIES.
4. THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES NECESSARY FOR HIS BID AND WORK.
5. ESTIMATED EARTHWORK QUANTITIES ABOVE ASSUME THAT ALL ONSITE MATERIALS ARE SUITABLE FOR BACKFILLING. HOWEVER, ACTUAL EXISTING ONSITE MATERIALS AND IMPORTED MATERIALS MUST FIRST BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION, REMOVAL, OR REPLACEMENT.

NOTE:

ROUGH GRADE ELEVATION IS BASED ON ASSUMED 5" THICK FLOOR SLAB AND 2" SAND BARRIER.

N

0 5' 10'

SCALE: 1"=10'

kpff
Consulting Engineers
6080 CENTER DRIVE, SUITE 700
LOS ANGELES, CA 90045
TEL: 310.665.2800
FAX: 310.665.9075
WWW.KPFF.COM

CONSULTANTS

STAMP

REGISTERED PROFESSIONAL ENGINEER
RICHARD MARK DAVIS
No. C48082
Exp. 3/31/20
CIVIL
STATE OF CALIFORNIA

REVISIONS		
DATE	△	ISSUED FOR
XX/XX/XX	1	DESCRIPTION

DATE	XX.XX.XX
PROJECT NUMBER	114068
DESIGNED BY	RR
DRAWN BY	PJ
CHECKED BY	DK
SCALE	AS SPECIFIED

KEY MAP

PROJECT DESCRIPTION

SANTA MONICA AND ORANGE GROVE - MIXED USE DEVELOPMENT

XXXX LOS ANGELES AVENUE
LOS ANGELES, CA 9XXXX

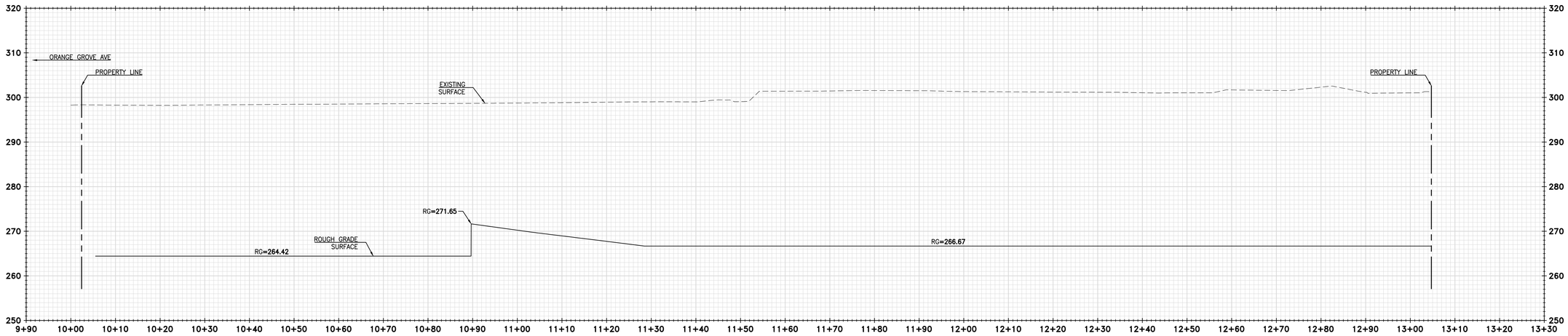
DRAWING TITLE

ROUGH GRADING PLAN

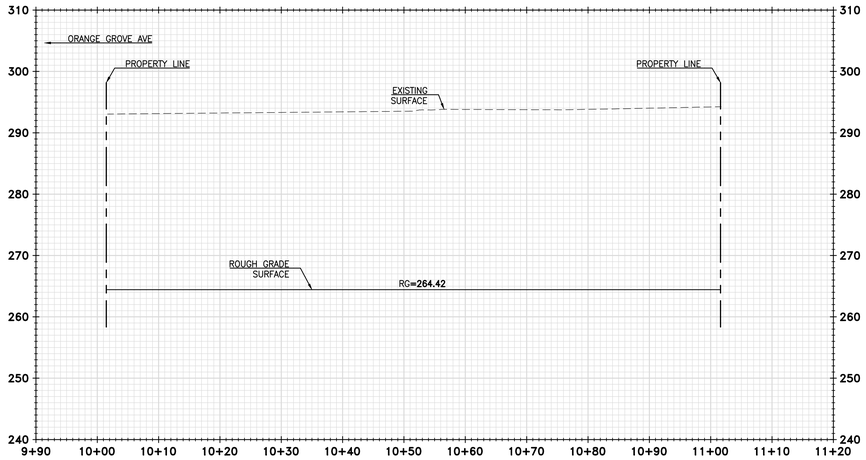
SHEET NUMBER (EXHIBIT NUMBER)

C1.30

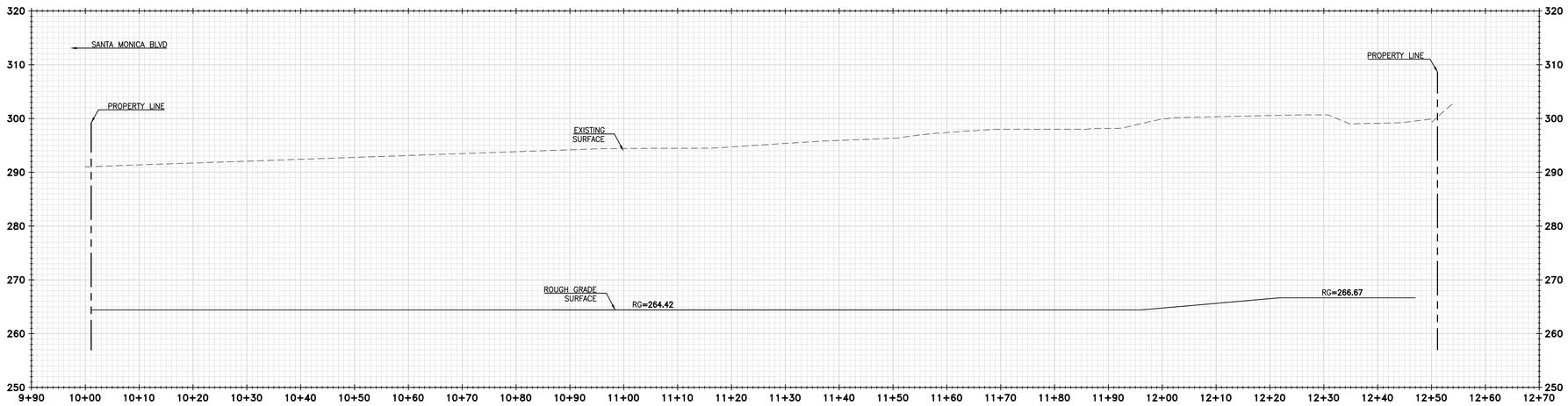
P:\2014\114068 Santa Monica and Orange Grove Mixed-Use Project\DWG\SHEET\114068C-1.30RG.dwg, Apr 04, 2019 - 2:42pm



SECTION A
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'



SECTION B-B
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'



SECTION C-C
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'

NOTE:

ROUGH GRADE ELEVATION IS BASED ON ASSUMED 5" THICK FLOOR SLAB AND 2" SAND BARRIER.

kpff
Consulting Engineers
6080 CENTER DRIVE, SUITE 700
LOS ANGELES, CA 90045
TEL: 310.665.2800
FAX: 310.665.9075
WWW.KPFF.COM

CONSULTANTS

STAMP

REGISTERED PROFESSIONAL ENGINEER
RICHARD HAND DAVIS
No. C48089
Exp. 3.31.20
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION

REVISIONS

DATE		ISSUED FOR
XX/XX/XX	1	DESCRIPTION

DATE	XX.XX.XX
PROJECT NUMBER	114068
DESIGNED BY	RR
DRAWN BY	PJ
CHECKED BY	DK
SCALE	AS SPECIFIED

KEY MAP

PROJECT DESCRIPTION

SANTA MONICA AND ORANGE GROVE - MIXED USE DEVELOPMENT

XXXX LOS ANGELES AVENUE
LOS ANGELES, CA 9XXXX

DRAWING TITLE

ROUGH GRADING PLAN

SHEET NUMBER (EXHIBIT NUMBER)

C1.31

ATTACHMENT B

EXISTING HYDROLOGY

OVERALL SITE

AREA = 0.92 acres
IMPERVIOUS = 100%
Q50 = 2.95 cfs

Q50 SUB-AREA FLOWS (cfs)
A1 = 1.12
A2 = 0.39
A3 = 0.39
A4 = 0.54
A5 = 0.51

FOUNTAIN AVENUE

FD PSMH PER PWFB 1417 PAGE 2458

1319.32'
1029.26'

NOTHING FOUND
NOTHING SET

N89°23'08"W
30.00'

60'
30' 30'

GROVE AVENUE (PUBLIC STREET)

100.02'

CONC CURB & GUTTER

SIGN

PM

GRASS

DRIVEWAY

W.I. FENCE

UBX

AL

W.I. GATE

CONC WALK

WRSR

WM

EXISTING TWO-STORY BUILDING

Fountain Nursery School Inc., Owner

LOT 65, R1

BUILDING CORNER, NORTH FACE OF WALL 0.34' N'LY OF PROPERTY LINE

VARIABLE HEIGHT BLOCK WALL

A.C. PAVEMENT

BUILDING CORNER, NORTH FACE OF WALL 0.64' S'LY OF PROPERTY LINE

N'LY FOW 1.06' S'LY OF PROPERTY LINE

151.16'

181.16'

WOOD FENCE

COR FENCE 1.06' S'LY & 2.06' W'LY OF PL

LOT 76, R1

Florence Mond Trust and Berek Dutkiewicz Trust, Owners

A.C. PAVEMENT

11

2

LOT 66, R1

A1

LOT 75, R1

Viken S. Mouradian Trust and Apelian Mouradian Trust, Owners

15

SIGN

CPTB

15,125 sf

N00°03'21"W

100.01'

BUILDING CORNER 1.38' E'LY OF PROPERTY LINE

EXISTING ONE-STORY BUILDING

A.C. PAVEMENT

LOT 67, R1

BUILDING CORNER 1.25' E'LY OF PROPERTY LINE

LOT 74, R1

Melrose KLN Corp, Owner

BUILDING CORNER 1.11' E'LY OF PROPERTY LINE

EXISTING ONE-STORY BUILDING

BUILDING CORNER 1.01' E'LY OF PROPERTY LINE

30' 30'
60'

NOTHING FOUND
NOTHING SET

OVERHEAD WIRES

30.00'
N89°23'03"W

PWDB

PP

N00°03'16"W

W.I. FENCE

151.17'

OVERHEAD WIRES

181.17'

FENCE 0.11' S'LY & & 2.55' W'LY OF PL

BUILDING CORNER 2.52' S'LY OF PL LINE

BUILDING CORNER 1.56' S'LY OF PL LINE

BUILDING CORNER 0.01' S'LY OF PROPERTY LINE

BUILDING CORNER 0.11' S'LY & 0.20' E'LY OF PL

EXISTING ONE-STORY BUILDING

EXISTING ONE-STORY BUILDING

LOT 69, R1

John Illoulian and Rosette Illoulian ETAL, Owners

LOT 70,R1

John Illoulian and Rosette Illoulian ETAL, Owners

LOT 71, R1

John Illoulian and Rosette Illoulian ETAL, Owners

Michael M. Stevens Co. Trust. and Yvonne Stevens Trust, Owners

LOT 68, R1

ORANGE GROVE

190.04'

N00°03'16"W

N89°23'30"W

FOUND NOTHING ESTABLISHED BY TIES PER PWFB 1417 PAGE 2738

BASIS OF BEARING

SANTA MONICA BOULEVARD

FD SPK/WSHR LS5301 PER PWFB 1417 PAGE 2742

362.35'

OGDEN DRIVE

N

W RC E

S

SCALE 1"=10'

LEGEND

A.C.	ASPHALTIC CONCRETE
AL	AREA LIGHT
CONC	CONCRETE
COR	CORNER
CPTB	CAR PARKING TICKET BOX
E'LY	EASTERLY
FOW	FACE OF WALL
N'LY	NORTHERLY
PL	PROPERTY LINE
PM	PARKING METER
PP	POWER POLE
PSMH	PUNCHED SEWER MANHOLE
PWDB	PET WASTE DISPENSER BOX
PWFB	PUBLIC WORKS FIELD BOOK
S'LY	SOUTHERLY
SPK	SPIKE
UBX	UTILITY BOX
W.I.	WROUGHT IRON
W'LY	WESTERLY
WM	WATER METER
WRSR	WATER RISER
WSHR	WASHER

(6) INDICATES PARKING COUNT

R1 HOLLYWOOD VALLEY VIEW TRACT, MAP BOOK 10, PAGE 192

PARKING

ONSITE PARKING

STANDARD	43
HANDICAP	2
TOTAL	45

LICENSED LAND SURVEYOR
RONALD N. KOESTER
NO. 5930
EXP. DEC. 31, 2014
STATE OF CALIFORNIA

PLANS PREPARED UNDER THE DIRECTION OF

RON KOESTER LS 5930

20 MAR 2014
DATE

REVISIONS

DATE

A.L.T.A./ACSM LAND TITLE SURVEY

CRC 2930

SHEET 2 OF 2 SHEET

PREPARED FOR

FARING CAPITAL LLC.
8687 MELROSE AVENUE, SUITE B538
LOS ANGELES, CA. 90069
c/o Mr. Jason Illoulian

CRC Enterprises
27600 Bouquet Canyon Road Suite 200 Santa Clarita Ca. 91350
Telephone (661) 297-2336 FAX (661) 297-2331

FOUNTAIN AVE.

FD PSMH PER PWFB 1417 PAGE 2458

1319.32'
1129.28'

A.C. PAVEMENT PARKING LOT

Lot 67, R1

Jerry Illoulian & Houri Illoulian ETAL, Owner

BUILDING CORNER 0.89' N'LY OF PROPERTY LINE

EXISTING ONE-STORY BUILDING

BUILDING CORNER 0.58' N'LY OF PROPERTY LINE

Lot 74, R1

Melrose KLN Corp, Owner

N89°23'03"W 81.06'

NOTHING FD NOTHING SET

BUILDING CORNER 2.20' W'LY OF PROPERTY LINE

OVERHEAD WIRES

BUILDING CORNER 0.31' E'LY & 0.11' S'LY OF PROPERTY CORNER

100.0'

150.1'

OVERHEAD WIRES

BUILDING CORNER 0.11' S'LY OF PROPERTY LINE

OVERHEAD WIRES

231.23'

PP

CONC

15' HIGH BLOCK WALL

190.00'

BUILDING CORNER 0.01' E'LY OF PROPERTY LINE

50.00'

EXISTING ONE-STORY BUILDING

BUILDING CORNER 2.52' W'LY OF PROPERTY LINE

50.0'

A Portion Of Lot 69, R1

A2

5,012 sf

③

N00°03'18"W

BUILDING CORNER 0.49' E'LY & 0.11' S'LY OF PROPERTY CORNER

50.8'

N89°23'30"W

50.06'

BUILDING CORNER 0.27' W'LY & 0.11' S'LY OF PROPERTY CORNER

A.C. PAVEMENT

140.01'

Michael M. Stevens Co. Trust. and Yvonne Stevens Trust, Owners

Lot 68, R1

Lot 70, R1

SHED

Lot 71, R1

⑦

Lot 72, R1

150.00'

AVENUE

⑤

A4

A. C. P A T

EXISTING ONE STORY BUILDING
9,997 S.F. AT GROUND LEVEL

150.1

100.00

4,959 sf

7,377 sf

EXISTING ONE STORY BUILDING
Executive Car Leasing Co, Owner

ORANGE GROVE

190.04'

EXISTING ONE-STORY BUILDING

Todah Ents LLC, ETAL, Owner

A Portion Of Lot 69, R1

100.01'

A3

④

N00°03'21"W

BUILDING CORNER 0.43' E'LY & 0.14' S'LY OF PROPERTY CORNER

BUILDING HEIGHT 22.70' ABOVE GROUND

BUILDING CORNER 0.02' S'LY OF PROPERTY LINE

GAS METER

N00°03'23"W

BUILDING CORNER 0.12' E'LY & 0.031' S'LY OF PROPERTY CORNER

40.8'

N89°23'30"W

CONC WALK

AL

EBX

EBX 10"T

EBX 12"T

PM

SLB BIKE RACK

DRIVEWAY

EBX 10"T

SLT

100.11'

CONC CURB & GUTTER

②

①

60'
30' 30'

OGDEN DRIVE

40.00'

SANTA MONICA BOULEVARD
(PUBLIC STREET)

40.00'

N00°03'16"W

N89°23'30"W 131.12'

FOUND NOTHING ESTABLISHED BY TIES PER PWFB 1417 PAGE 2738

NOTHING FD NOTHING SET

40' 40' 80'

100.11'

BASIS OF BEARING

40' 40' 80'

NOTHING FD NOTHING SET

131.12'

362.35'

FD SPK/WSHR LS5301 PER PWFB 1417 PAGE 2742

N

W R E

S

SCALE 1' = 10'

OVERALL SITE

AREA = 0.92 acres
IMPERVIOUS = 100%
Q50 = 2.95 cfs

Q50 SUB-AREA FLOWS (cfs)

A1 = 1.12
A2 = 0.39
A3 = 0.39
A4 = 0.54
A5 = 0.51

LEGEND

AC	ASPHALTIC CONCRETE
AL	AREA LIGHT
CONC	CONCRETE
EBX	ELECTRICAL BOX
E'LY	EASTERLY
FD	FOUND
N'LY	NORTHERLY
PM	PARKING METER
PSMH	PUNCHED SEWER MANHOLE
PP	POWER POLE
PWFB	PUBLIC WORKS FIELD BOOK
SLB	STREET LIGHT BOX
S'LY	SOUTHERLY
SLT	STREET LIGHT
SPK	SPIKE
T	TREE
W'LY	WESTERLY
WSHR	WASHER
R1	HOLLYWOOD VALLEY VIEW TRACT, MAP BOOK 10, PAGE 192

PARKING

STRIPED OFFSITE PARKING	
STANDARD	3
ONSITE PARKING	
STANDARD	24
HANDICAP	2
TOTAL	29

LICENSED LAND SURVEYOR
RONALD N. KOESTER
NO. 5930
EXP. DEC. 31, 2014
STATE OF CALIFORNIA

PLANS PREPARED UNDER THE DIRECTION OF

RON KOESTER LS 5930

20 MAR 2014
DATE

REVISIONS

DATE

A.L.T.A./ACSM LAND TITLE SURVEY

CRC 2930

SHEET 2 OF 2 SHEET

PREPARED FOR

FARING CAPITAL LLC.
8687 MELROSE AVENUE, SUITE B538
LOS ANGELES, CA. 90069
c/o Mr. Jason Illoulian

CRC Enterprises
27600 Bouquet Canyon Road Suite 200 Santa Clarita Ca. 91350
Telephone (661) 297-2336 FAX (661) 297-2331

ZONING INFORMATION

Listed below are Setback, Height, and Floor Space Area Restrictions as disclosed by applicable Zoning or Building Codes unless "None" is stated below. The source of this information is: Stephanie DeWolfe, City of West Hollywood; ph: 323-848-6475

Zoning Designation:
"CC2" COMMUNITY COMMERCIAL 2 DISTRICT

Building Height: 45 Feet or 4 Stories; Minimum Lot Area: 5,000 sq. ft.

Building Setbacks:
Front: 0
Street Side: 0
Side: 10 ft. if adjacent to a residential zone.
Rear: None

Parking Requirements: 3.5 spaces per 1,000 sq. f. for the first 25,000 sq. ft. plus 3 spaces for each additional 1,000 sq. ft. Handicapped: Per ADA requirements.

MISCELLANEOUS NOTES

N1 *PROPERTY HAS DIRECT ACCESS TO N. OGDEN DRIVE, WHICH IS AN EXISTING PUBLIC RIGHT-OF-WAY.*

N2 *THE ADDRESS OF "1125" WAS POSTED AND/OR OBSERVED.*

N3 *THE BASIS OF BEARINGS: S 00°05'30" E, PER PLAT, AS SHOWN ON THE CENTERLINE OF N. OGDEN DRIVE.*

N4 *THE TABLE BELOW DESCRIBES THE TYPE AND NUMBER OF PARKING STALLS ENTIRELY WITHIN PROPERTY BOUNDARY. STALLS THAT ARE PARTIALLY WITHIN BOUNDARY ARE LISTED UNDER THE HEADING "PARTIAL". PARTIAL STALLS ARE NOT COUNTED IN THE TOTAL*

PARKING				
REGULAR	HANDICAPPED	GARAGE	PARTIAL	TOTAL
0	N/A	N/A	N/A	0

N5 *THERE WAS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILD ADDITIONS WITHIN RECENT MONTHS.*

N6 *THERE WAS NO CHANGES IN STREET RIGHT-OF-WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM CONTROLLING JURISDICTION OR EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION REPAIRS.*

N7 *THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, SANITARY LANDFILL OR CEMETERY. NOTE: THERE IS AN EXISTING CEMETERY ABUTTING THE SOUTHERLY LINE OF TRACT 1, AS SHOWN HEREON.*

N8 *NO EVIDENCE OF POTENTIAL WETLANDS WERE OBSERVED ON THE SUBJECT PROPERTY AT THE TIME OF THE SURVEY WAS CONDUCTED, NOR HAVE WE RECEIVED ANY DOCUMENTATION OF ANY WETLANDS BEING LOCATED ON THE SUBJECT PROPERTY.*

N9 *THIS SURVEY MAP CORRECTLY REPRESENTS THE FACTS AT THE TIME OF THE SURVEY.*

N10 *THERE ARE NO DISCREPANCIES BETWEEN THE BOUNDARY LINES OF THE PROPERTY AS SHOWN ON THIS SURVEY MAP AND AS DESCRIBED IN THE LEGAL DESCRIPTION PRESENTED IN THE TITLE COMMITMENT.*

N11 *THE BOUNDARY LINES OF THE PROPERTY ARE CONTIGUOUS WITH THE BOUNDARY LINES OF ALL ADJOINING STREETS, HIGHWAYS, RIGHTS OF WAY AND EASEMENTS, PUBLIC OR PRIVATE, AS DESCRIBED IN THEIR MOST RECENT RESPECTIVE LEGAL DESCRIPTIONS OF RECORD.*

N12 *THE SUBJECT PROPERTY:*
APN: 5530-002-027; OWNER(S): VIKEN & APELIA MOURADIAN; CONTAINS: 7,549± SQUARE FEET OR 0.1733± ACRES, MORE OR LESS.

N13 *ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88 DATUM.*

UTILITY NOTE

The aboveground utilities shown have been located from field survey information only. The surveyor makes no guarantee that the utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further certifies that they are located as accurately as possible from the field information obtained. Subsurface utilities shown are per field evidence and/or obtain plans. The survey does not guarantee that the lines depicted actually exist.

FLOOD ZONE

A FIELD SURVEY WAS NOT CONDUCTED TO DETERMINE THE FLOOD ZONE AREAS. ANY FLOOD ZONE LINES DISTINGUISHING BETWEEN FLOOD AREAS ARE GRAPHICALLY PLOTTED FROM FEMA FLOOD INSURANCE RATE MAPS (FIRM), A FLOOD ELEVATION CERTIFICATE MAY BE NEEDED TO DETERMINE OR VERIFY THE LOCATION OF THE FLOOD AREAS. THE SUBJECT PROPERTY'S COMMUNITY DOES PARTICIPATE IN THE PROGRAM. IT IS DETERMINED THAT THE SUBJECT PROPERTY RESIDES IN THE FOLLOWING FLOOD ZONE(S) "X " AS DETERMINED BY OR SHOWN BY FIRM COMMUNITY PANEL NO. 06037C1605F DATED 9/26/2008 AND IS NOT IN A SPECIAL FLOOD ZONE. THE FLOOD INSURANCE RATE PROGRAM WAS CONTACTED ON 11/4/2015 BY TELEPHONE OR EMAIL (www.fema.gov)

STATEMENT OF ENCROACHMENTS

E1 *No observed or visitable encroachments as of date of survey.*

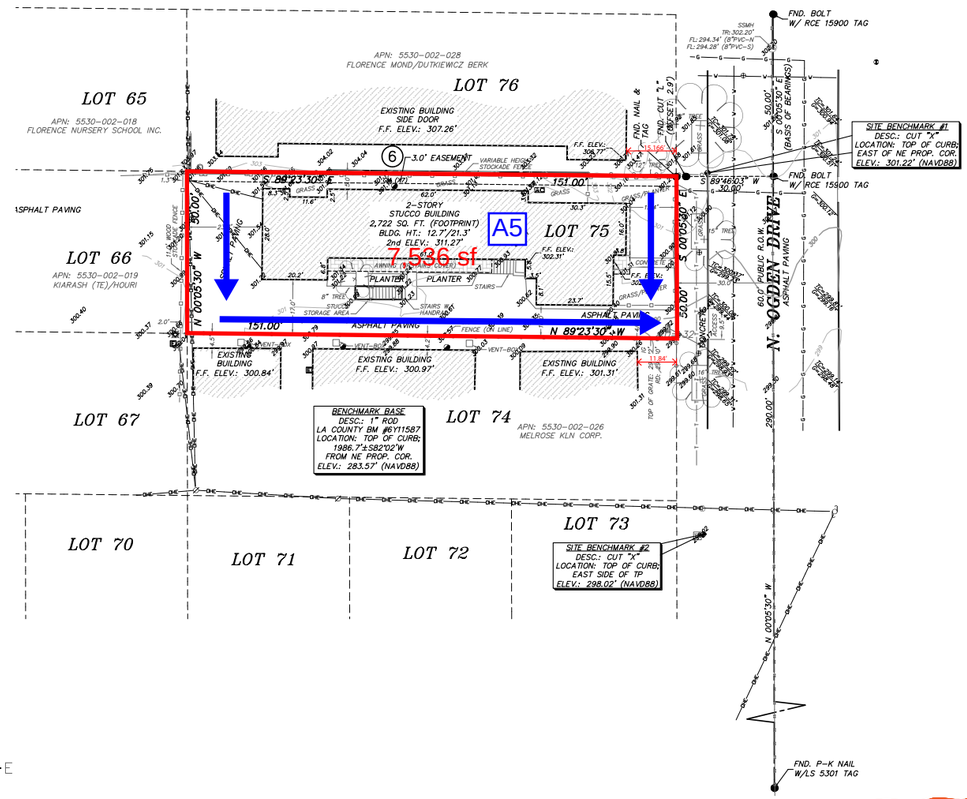
VICINITY MAP

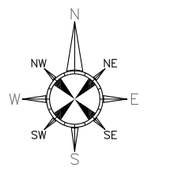
OVERALL SITE

AREA = 0.92 acres
IMPERVIOUS = 100%
Q50 = 2.95 cfs

Q50 SUB-AREA FLOWS (cfs)

A1 = 1.12
A2 = 0.39
A3 = 0.39
A4 = 0.54
A5 = 0.51





20' 0 10' 20' 40'

1" = 20'-0"

LEGAL DESCRIPTION(S)

All that certain real property situated in the County of Los Angeles, State of California, described as follows:

Lot 75 of the Hollywood Valley View Tract, in the City of West Hollywood, County of Los Angeles, State of California, as per map recorded in Book 10, Page 192 of Maps, in the office of the County Recorder of said County.
Assessor's Parcel Number: 5530-002-027

The above described land and shown hereon, is the same as described in Lawyers Title Company's Preliminary Report No. 115083560, bearing an effective date of: N/A.

SURVEY RELATED ITEMS CORRESPONDING TO SCHEDULE B TITLE COMMITMENT

The following is the same as noted in the title report prepared by Lawyers Title Company's Preliminary Report No. 115083560.

(2) *2. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document Recording No: in Book 474, Page 307 and in Book 482, Page 186, both of Deeds.* ***AFFECTS AND THE PROPERTY IS SUBJECT TO THE CONDITIONS AS SET FORTH WITH DOCUMENT. BLANKET IN NATURE; NOT PLOTTABLE.***

(3) *3. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document Recording No: in Book 4056, Page 97, of Deeds.* ***AFFECTS AND THE PROPERTY IS SUBJECT TO THE CONDITIONS AS SET FORTH WITH DOCUMENT. BLANKET IN NATURE; NOT PLOTTABLE.***

(4) *4. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in the above document; Purpose: Pipe lines. Affects: a Portion of said land.* ***NO DOCUMENT NOTED AND/OR PROVIDED.***

(6) *6. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document: In favor of: The Pacific Telephone and Telegraph Company; Purpose: Underground telephone, telegraph and communication structures; Recording Date: November 17, 1964; Recording No: 4739, of Official Records; Affects: the Northerly 3 feet of said land.* ***AFFECTS AND PLOTTED HEREON.***

(7) *7. The Land described herein is included within a project area of the Redevelopment Agency shown below, and that proceedings for the redevelopment of said project have been instituted under the Redevelopment Law (such redevelopment to proceed only after the adoption of the Redevelopment Plan) as disclosed by a document. Redevelopment Agency: City of West Hollywood; Recording Date: June 12, 1997; Recording No: 97-878019, of Official Records; and Recording Date: November 28, 2007; and Recording No: 20072619385, of Official Records.* ***AFFECTS; NON-SURVEY ISSUE AND NOT PLOTTABLE.***

ALTA/ACSM LAND TITLE SURVEY

FOR

OGDEN

PARTNER PROJECT NUMBER 15-151162.2

PROPERTY ADDRESS: 1125 N. OGDEN, WEST HOLLYWOOD, CALIFORNIA 90069

ALTA SURVEY BASED AND RELIED ON LAWYERS TITLE COMPANY'S PRELIMINARY REPORT NO. 115083560, BEARING AN EFFECTIVE DATE OF: N/A.

CERTIFICATION

To:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys jointly established and adopted by ALTA and NSPS, and includes items 2, 3, 4, 5, 6b, 7a, 7b1, 7c, 8, 9, 11b,13, 14, 16, 17, 18, and 19 of Table A thereof. The field work was completed on 11/08/2015.

Date of Plat or Map:

JAMES M. POWERS, PLS, RPLS, CFedS
PLS No.:
IN THE STATE OF: CALIFORNIA
DATE OF SURVEY: 11/08/2015
DATE OF LAST REVISION:

RED PLAINS SURVEYING COMPANY

Survey Prepared By:
Red Plains Surveying Company
1917 S. Harvard Avenue
Oklahoma City, OK 73128
Phone: 405-603-7842 / Fax: 405-603-7852
Email: Comments@rpsurveying.com

PARTNER Engineering and Science, Inc.®
30505 BAINBRIDGE ROAD
SUITE 190
SOLON, OHIO 44139
T 440-987-1001
jdavenport@partneresi.com
http://www.partneresi.com

PAGE 1 OF 1

ATTACHMENT C

LADWP WATER FLOW TEST RESULTS

City of Los Angeles

Los Angeles Department of Water and Power - Water System

S□R □□M□□R **76146**

Fire Service Pressure Flow Report

S□R□IC□ □□M□□R **616772**

□or□ **7811 SANTA MONICA BLVD** □□□ro□ed Date□**4-23-2019**

Proposed Service **6 INCH** o□□o□t□e

12 in□□ □ain in **SANTA MONICA BLVD** on t□e **NORTH** side a□□ro□i□ate□□

155 □eet **EAST** o□ **EAST** o□ **ORANGE GROVE AVE** T□e S□ste□ □a□i□ □□ □ress□re is

129 □si □ased on street □□r□ e□ē□ation o□ **293** □eet a□o□e sea □e□e□at t□is □o□ation□

T□e distan□e □ro□ t□e DW□ street □ain to t□e □ro□ert□ □ine is **15** □eet

System maximum pressure should be used only for determining class of piping and fittings.

Residual Flow/Pressure Table for water system street main at this location

Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)
□	□3				
585	□□				
855	□1				
1□□5	□□				
1□□□	8□				
1□□□	88				

Meter Assembly Capacities

Domestic Meters	
1 in□□ □	5□ □□□
1-1□ in□□ □	□□ □□□
□ in□□ □	1□□ □□□
3 in□□ □	□□□ □□□
□ in□□ □	□□□ □□□
□ in□□ □	□□□ □□□
8 in□□ □	15□□ □□□
1□ in□□ □	□5□□ □□□

Fire Service	
□ in□□ □	□5□ □□□
□ in□□ □	□□□ □□□
□ in□□ □	1□□□ □□□
8 in□□ □	□5□□ □□□
1□ in□□ □	5□□□ □□□

FM Services	
8 in□□ □	□5□□ □□□
1□ in□□ □	5□□□ □□□

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

Notes: Wit□ □□□ □□□ si□ □taneo□s □ow □ro□ □" do□esti□ ser□i□e

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

T□is S□R is □a□id □or one □ear □ro□ □□-□3-1□□On□e t□e S□R e□□ires□t□e a□□i□ant needs to re-a□□□□and □a□a□□i□a□e □ro□essin□ □ee□

□or additiona□in□or□ation □onta□t t□e Water Distri□□tion Ser□i□es Se□tion **WESTERN (213) 367-1225**

ELIA SUN	**ELIA SUN**	**144-177**
Prepared by	**Approved by**	**Water Service Map**

ATTACHMENT D

SEWER CAPACITY STUDY

SEWER CAPACITY STUDY

For:
Santa Monica and Orange Grove Mixed-Use Development
7811 Santa Monica Blvd, 1114 North Orange Grove Ave, &
1125 North Ogden Drive
West Hollywood, CA

Prepared by:
KPFF Consulting Engineers
700 South Flower Street, Suite 2100
Los Angeles, CA 90017
213.418.0201

Date:
04/04/19

Submitted To:
City of West Hollywood Department of Public Works
Engineering Division

Table of Contents

SECTION **PAGE**

APPENDICES

1. Project Description

The Santa Monica and Orange Grove project consists of the design and construction of a mixed-use development at 7811 Santa Monica Blvd, 1114 North Orange Grove Ave, and 1125 North Ogden Drive in the City of West Hollywood, California. The development site currently consists of existing commercial buildings, residential buildings, and parking lots. The site is zoned Commercial, Community 2 (CC2) and Residential, Multi-Family Medium-Density (R3B) per the City of West Hollywood Zoning Map and General Land Use Plan (Appendix B). All existing buildings and hardscape will be removed as part of the proposed project, which includes two parking levels, ground level restaurant space, a 70 unit apartment, and a 86 room hotel.

2. Site Description

The existing site consists of size lots at 7811 Santa Monica Blvd, 1114 North Orange Grove Ave, and 1125 North Ogden Drive in the City of West Hollywood, California. The project site is approximately 44,200 square feet (0.92 acres) and appears to be 100% impervious. Refer to Appendix A for the Project Vicinity Map.

3. Existing Sewer Analysis

Per the City of West Hollywood Master Plan of Sewers and Sewer Facilities Data (Appendix C), there is an existing 8-inch public sewer main that runs north to south on North Orange Grove Ave and a 12-inch public sewer main that runs east to west on Santa Monica Boulevard. As requested by the City of West Hollywood, a sewer manhole on North Orange Grove Ave and Santa Monica Blvd were examined separately to ensure that the proposed project will not overload either sewer lines. Flow monitoring radars were installed in a manhole in North Orange Grove Ave and data was collected over a one-week period, from October 25, 2014 to November 2, 2014. This flow monitoring data was further collected in a manhole on Santa Monica Blvd over a one-week period from March 20, 2019 to March 28, 2019. (See Appendix F for sheets from the Sewer Flow Monitoring Report compiled by Utility Systems Science & Software.)

Pipe Capacity (Q_{CAP}) was calculated using Manning's Formula, per City of West Hollywood Sewer Capacity Study Requirements (Appendix D). See Appendix E for pipe hydraulic calculations.

8-inch sewer on North Orange Grove Ave:

$$Q_{CAP} = 1.10\ CFS$$

12-inch sewer on Santa Monica Blvd:

$$Q_{CAP} = 1.00\ CFS$$

Peak flow (Q_{PF}) rate was calculated by taking the measured average daily flowrate, multiplied by a factor of 2.5, per City of West Hollywood Requirements, (Appendix D). The average measured flow for the manhole on North Orange Grove, during the one-week period was 0.020 MGD, or 0.031 CFS:

$$Q_{PF} = 2.5 * 0.031\ CFS = 0.077\ CFS$$

The average measured flow for the manhole on Santa Monica Boulevard, during the one-week period was 0.150 MGD, or 0.232 CFS:

$$Q_{PF} = 2.5 * 0.232\ CFS = 0.580\ CFS$$

4. Proposed Flow Generation

The anticipated sewer load generation for the proposed development was calculated using the County Sanitation District No. 4 of Los Angeles Mean Loading Table (see Appendix D).

Anticipated Sewer Generation and Demand						
Facility Description	**Building Program**	**Units**	**Flow (gpd) per unit**	**Avg Load, Q_{AF} (gpd)**	**Avg Load, Q_{AF} (cfs)**	**Peak Flow, Q_{PF} (cfs)**
Restaurant (Indoor)	230	Seat	30	6,900	0.011	0.0267
Restaurant (Outdoor)	21	Seat	18	378	0.001	0.0015
Hotel Amenity Space	2066	SF	0.5	1,033	0.002	0.0040
Art Galley	1381	SF	0.02	28	0.000	0.0001
Residential Lobby	1850	SF	0.08	148	0.000	0.0006
Studio Apartments	38	Unit	80	3,040	0.005	0.0118
1-Bedroom Apartments	23	Unit	120	2,760	0.004	0.0107
2-Bedroom Apartments	9	Unit	160	1,440	0.002	0.0056
Hotel Lobby	1567	SF	0.08	125	0.000	0.0005
Hotel Rooms	86	Room	130	11,180	0.017	0.0432
Hotel Back-of-House	6211	SF	0.08	497	0.001	0.0019
Fitness Area	650	SF	0.8	520	0.001	0.0020
TOTAL				28,049	0.043	0.108

5. Results

Below is a summary of the existing sewer analysis, additional generated load, and future condition hydraulics.

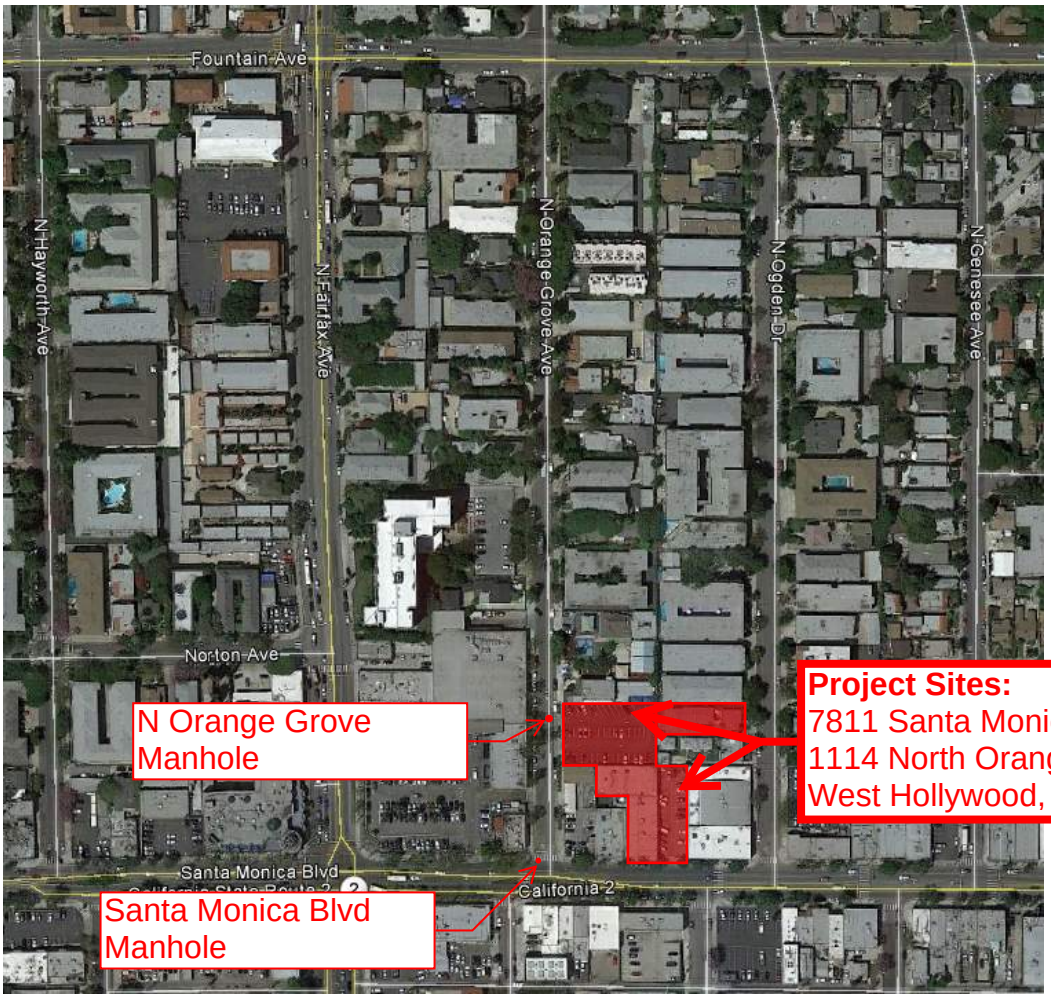
Sewer Analysis Summary Table		
	Orange Grove Ave	**Santa Monica Blvd**
Pipe Diameter	8-inch	12-inch
Slope	3.32%	0.32%
Manning N	0.013	0.013
50% Full Capacity	1.10 cfs	1.00 cfs
Monitored Daily Flow	0.020 MGD / 0.031 cfs	0.150 MGD / 0.232 cfs
Existing Peak Flow	0.077 cfs	0.580 CFS
Existing % Pipe Full	12.80%	36.70%
Additional Generated Peak Flow(cfs)	0.108	0.108
Total Proposed Peak Flow (cfs)*	0.186	0.689
Proposed % full*	**19.60%**	**40.30%**

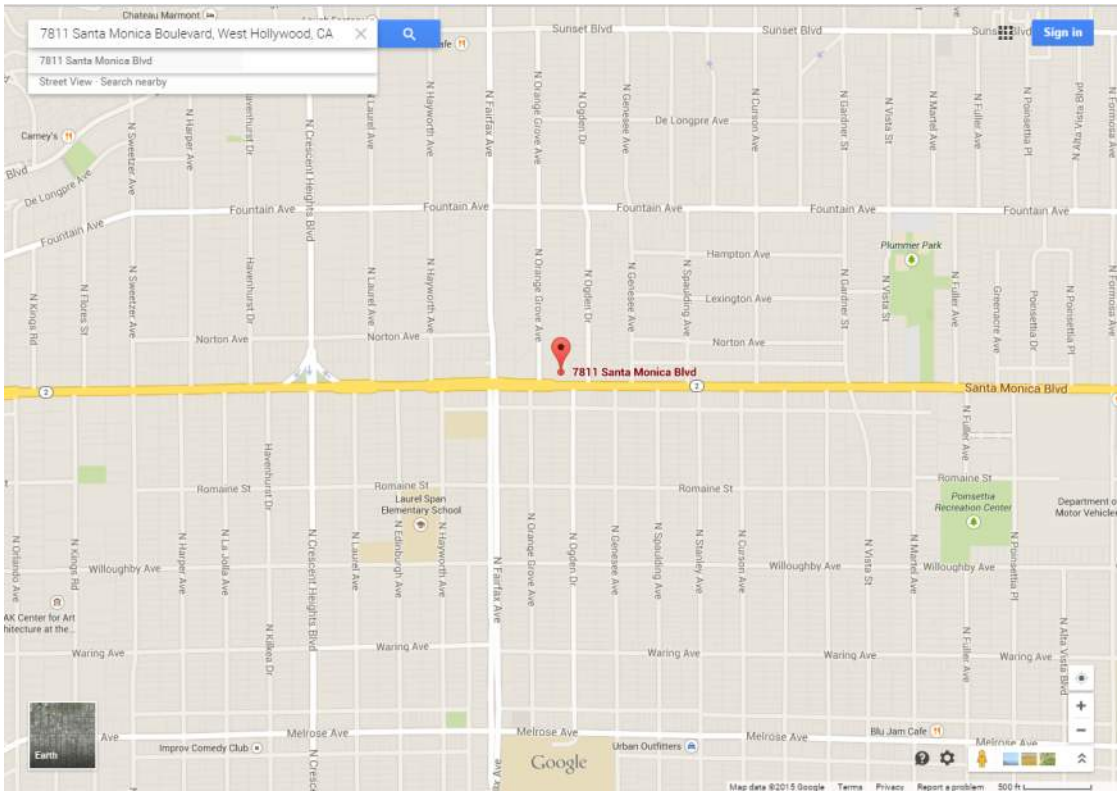
***assuming entire project sewer load connects to single sewer**

Both the 8” sewer main in North Orange Grove Ave and the 12” sewer main in Santa Monica Blvd are below 50% full with the addition of the project’s proposed sewer loads, which meets City of West Hollywood requirements. The 8" sewer main in North Orange Grove Ave and the 12” sewer main in Santa Monica Blvd have adequate capacity for this project.

APPENDIX A

Project Vicinity Map





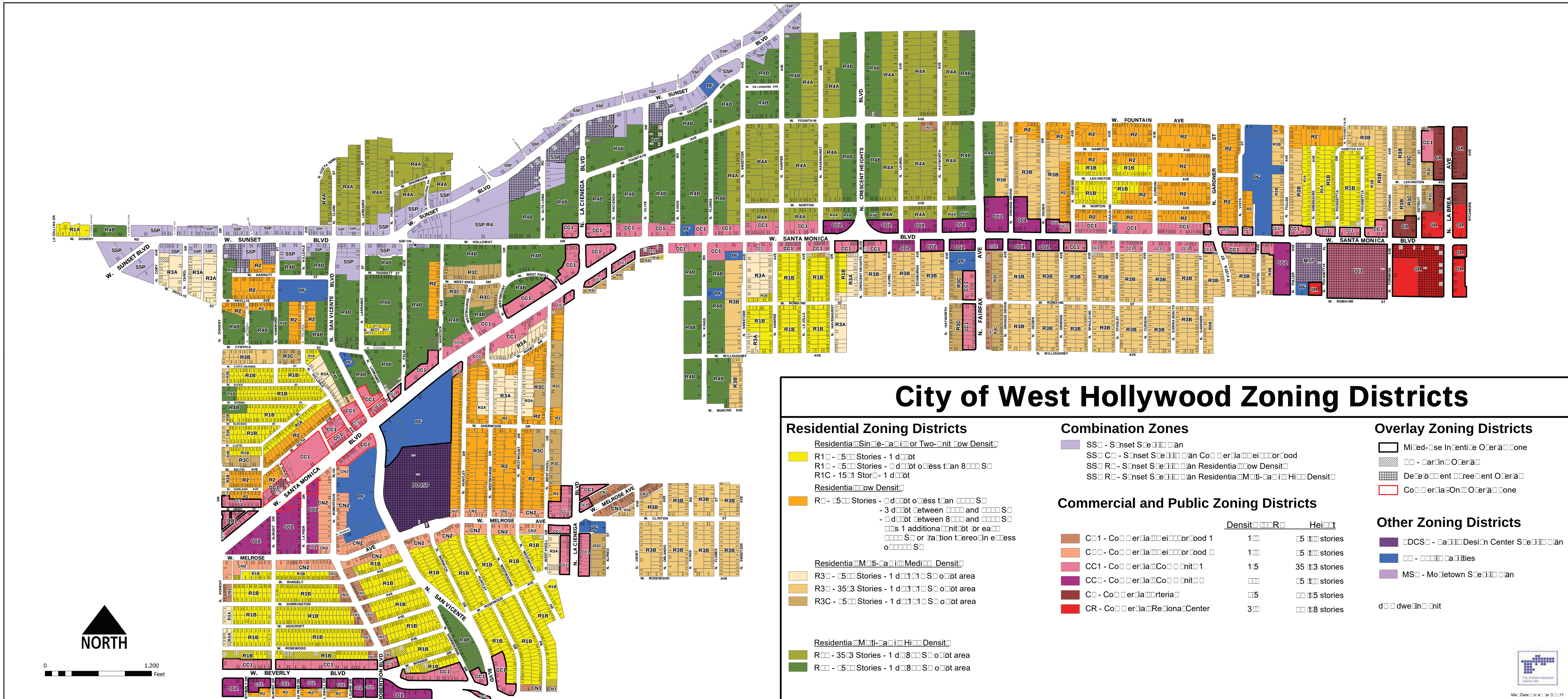
N

NOT TO SCALE

APPENDIX B

City of West Hollywood Zoning Map and General Land Use Plan

City of West Hollywood Zoning Districts



APPENDIX C

City of West Hollywood Master Plan of Sewers and Sewer Facilities Data

PROJECT LOCATION
7811 Santa Monica Boulevard
1114 North Orange Grove Avenue
West Hollywood, CA
& 1125 North Ogden Drive

SCALE 1"=400'
0' 200' 400'

LEGEND

- Service Area Boundary
- Drainage Subarea Boundary
- 0126 Tributary Manhole Number
- City of West Hollywood (Sewer Pipes That are Modeled)
- City of West Hollywood Sewer (Sewer Pipes That are Not Modeled)
- CSDLAC Sewer (Sewer Pipes That are Modeled)
- CSDLAC Sewer (Sewer Pipes That are Not Modeled)
- City of Los Angeles Sewer
- 0147 Sewer Manhole

CITY OF WEST HOLLYWOOD MASTER PLAN OF SEWERS

TRUNK SEWER MAP SERVICE AREAS 5 and 6

Boyle Engineering Corporation

ID	Street/Comments	Drawing No	Year Inst	Size (in)	Material	Manning N	Length (ft)	Ground Elev USMH	Invert Elev USMH	Invert Elev DSMH	Given Slope
060026-060027	FOUNTAIN	CI-359-17A	1925	8.00	VCP	0.013	281	341.00	331.55	329.75	0.00640
060027-060028	FAIRFAX-CSDLAC	CI-359-30A	1925	8.00	VCP	0.013	6	338.00	329.21	327.65	0.26000
060034-060035	FAIRFAX-CSDLAC	CI-359-30A	1925	10.00	VCP	0.013	194	290.00	276.67	271.38	0.03080
060044-060045	ORANGE GROVE	CI-359-20A	1925	8.00	VCP	0.013	218	330.00	322.65	313.95	0.04000
060045-060046	ORANGE GROVE	CI-359-20A	1925	8.00	VCP	0.013	50	324.00	313.79	311.95	0.04000
060046-060047	ORANGE GROVE	CI-359-20A	1925	8.00	VCP	0.013	296	320.00	311.80	301.97	0.03320
060047-060048	ORANGE GROVE	CI-359-20A	1925	8.00	VCP	0.013	296	310.00	301.84	292.01	0.03320
060048-060049	ORANGE GROVE	CI-359-20A	1925	8.00	VCP	0.013	249	300.00	291.88	283.61	0.03320
060049-060051	ORANGE GROVE	PC-7711-P4	1967	8.00	VCP	0.013	37	289.50	283.12	278.64	0.12100
060050-060045	ORANGE GROVE	CI-359-20A	1925	8.00	VCP	0.013	60	320.00	316.19	313.79	0.04000
060051-060034	STA MONICA	PC-7711-P4	1967	12.00	VCP	0.013	352	289.50	278.14	277.03	0.00320
060052-060051	STA MONICA	PC-7711-P4	1967	12.00	VCP	0.013	367	290.50	279.43	278.24	0.00320
060053-060052	STA MONICA	PC-7711-P4	1967	8.00	VCP	0.013	7	290.50	279.70	279.63	0.00960
060054-060053	STA MONICA	MAP 36A	1925	8.00	VCP	0.013	328	290.50	281.25	280.20	0.00320
060055-060054	GENESEE	CI-359-18A	1925	8.00	VCP	0.013	310	299.00	289.99	281.45	0.02760
060056-060055	GENESEE	CI-359-18A	1925	8.00	VCP	0.013	316	308.50	300.22	290.11	0.03200
060057-060056	GENESEE	CI-359-18A	1925	8.00	VCP	0.013	321	322.00	312.05	300.37	0.03640
060058-060057	GENESEE	CI-359-18A	1925	8.00	VCP	0.013	231	330.00	321.89	312.21	0.04200
060059-060060	OGDEN DR	CI-359-19A	1925	8.00	VCP	0.013	319	328.50	319.59	310.03	0.03000
060060-060061	OGDEN DR	CI-359-19A	1925	8.00	VCP	0.013	322	318.50	309.90	298.95	0.03400
060061-060062	OGDEN DR	CI-359-19A	1925	8.00	VCP	0.013	216	307.00	298.82	292.08	0.03120
060062-060063	OGDEN DR	PC-7711-P4	1967	8.00	VCP	0.013	260	300.00	291.96	284.89	0.02720
060063-060052	OGDEN DR	PC-7711-P4	1967	8.00	VCP	0.013	36	291.00	284.07	279.91	0.11560
060064-060057	HAMPTON	CI-359-16B	1925	8.00	VCP	0.013	351	321.50	313.80	312.40	0.00400
060065-060056	LEXINGTON	CI-359-15B	1925	8.00	VCP	0.013	351	311.00	302.94	300.42	0.00720
060066-060055	NORTON	CI-359-14B	1925	8.00	VCP	0.013	351	299.50	291.59	290.19	0.00400
060166-060232	ALLEY SO OF STA MONI	CI-359-11D	1925	8.00	VCP	0.013	263	286.00	279.68	278.63	0.00400
060167-060168	ALLEY SO OF STA MONI	CI-359-11D	1925	8.00	VCP	0.013	280	284.00	277.19	276.07	0.00400
060168-060035	ALLEY SO OF STA MONI	CI-359-11D	1925	8.00	VCP	0.013	16	283.00	276.06	276.00	0.00400
060232-060167	ALLEY SO OF STA MONI	CI-359-11D	1925	8.00	VCP	0.013	311	285.00	278.53	277.29	0.00400

APPENDIX D

City of West Hollywood Sewer Capacity Study
Requirements & LA County Sanitation District No. 4
Mean Loading Table

City of West Hollywood
California 1984

City of West Hollywood
Department of Public Works
Engineering Division

Sewer Capacity Study Requirements

1. The sewer capacity study shall be certified by a California licensed Civil Engineer.

2. Project Description: The study should have a project description describing what is being proposed on the development site. The current land uses and proposed land uses of the development shall also be indentified.

3. Site Description: The site description shall describe the project's location, the approximate acreage of the project site, and contain a vicinity map to identify the project's location.

4. Existing Sewer Pipe Capacity Analysis: This section shall identify any existing connections to the sewer system. A 7-day flow monitoring study will be required to obtain the existing flow capacity. This shall be done at the downstream sewer manhole, or at a location that makes sense to adequately determine existing flow capacity. Additional monitoring locations may be required to verify downstream capacity of the local sewer network as well as if the project will connect to a nearby trunk line. The City of Los Angeles sewers located downstream may be impacted by a proposed development project. Therefore, the sewer study may need to include monitoring locations in the City of Los Angeles. The existing average daily flow (Q_{exist}) and peak flow shall be determined in cubic feet per second.

5. Proposed Flow Generation: This section shall include the proposed land use(s). Flow generation shall be determined by the user category that most closely matches the County Sanitation District No. 4 of Los Angeles County mean loading table. This will determine your average daily flow (Q_{AF}) in gallons per day (gpd) that shall then be converted to cubic feet per second (cfs).

   The City of West Hollywood was an unincorporated area of Los Angeles County until 1984; therefore the sewer system was designed to the County of Los Angeles Department of Public Works standards, where all pipes are designed for peak flow.

   n = 0.013
   D/d ≤ 0.50 for d ≤ 15"
   D/d ≤ 0.75 for d> 15"

   These assumptions will determine the Q_{cap} = Sewer pipe capacity.

The peak flow (Q_{PF}) for this study shall be calculated in cubic feet per second (cfs) by $Q_{PF} = 2.5 \times Q_{AF}$ where 2.5 is the peaking factor used to determine the maximum peak flow rate for sewer diameters less than 15". The peaking factor shall be 2.0 for diameters greater than 15".

6. Conclusion: The conclusion shall identify the sewer capacity of the pipe as a flow rate (Q_{cap}). The calculations shall demonstrate that the sewer mainline has the capacity for the existing flow and the added flow at average and peak conditions. If the sewer is found to be inadequate, recommendations shall be provided to handle the increase in sewer flow. If this is a large site that has several sewer connection options, the conclusion shall address those options and make a recommendation for the project. The recommendations will be incorporated into the mitigation measures for the project.

AN ORDINANCE PRESCRIBING THE CONNECTION FEE RATE AND MEAN LOADINGS PER UNIT OF USAGE FOR COUNTY SANITATION DISTRICT NO. 4 OF LOS ANGELES COUNTY

THE BOARD OF DIRECTORS OF COUNTY SANITATION DISTRICT NO. 4 OF LOS ANGELES COUNTY ORDAINS AS FOLLOWS:

SECTION 1.0 - USER CATEGORIES AND MEAN LOADINGS

Pursuant to Section 3.03(2) of the *Master Connection Fee Ordinance for County Sanitation District No. 4 of Los Angeles County*, the following shall constitute the User Categories and mean loadings per Unit of Usage for flow, Biochemical Oxygen Demand (BOD), and Suspended Solids:

USER CATEGORY	UNIT OF USAGE	FLOW (Gallons per Day)	BOD (Pounds per Day)	SUSPENDED SOLIDS (Pounds per Day)
Acupuncture Office/Clinic	1000 Sq.Ft.	150	0.16	0.10
Arcade - Video Games	1000 Sq.Ft.	80	0.10	0.10
Auditorium	Seat	4	0.01	0.01
Auto Parking	1000 Sq.Ft.	20	0.03	0.03
Auto Body/Mech. Repair Shop	1000 Sq.Ft.	80	0.12	0.19
Bakery	1000 Sq.Ft.	280	2.34	1.40
Bank: Headquarters	1000 Sq.Ft.	150	0.16	0.10
Bank: Branch	1000 Sq.Ft.	80	0.10	0.10
Banquet Room/Ballroom	1000 Sq.Ft.	800	6.67	4.00
Bar: Cocktail, Fixed Seat	Seat	18	0.03	0.03
Bar: Juice, No Baking Facilities	1000 Sq.Ft.	120	0.20	0.20
Bar: Juice, With Baking Facilities	1000 Sq.Ft.	280	2.34	1.40
Bar: Cocktail, Public Table Area	1000 Sq.Ft.	500	4.17	2.50
Barber Shop	1000 Sq.Ft.	100	0.13	0.13
Beauty Parlor	1000 Sq.Ft.	280	0.35	0.35
Bldg. Const/Field Office	Office	150	0.19	0.19
Bowling Alley: Alley, Lanes & Lobby Area	1000 Sq.Ft.	80	0.10	0.10
Cafeteria: Fixed Seat	Seat	30	0.25	0.15
Car Wash: Wand Type	1000 Sq.Ft.	700	3.00	1.58
Car Wash: Tunnel - Recycling Type	1000 Sq.Ft.	2700	11.74	6.16
Car Wash: Tunnel - Non-Recycling Type	1000 Sq.Ft.	3700	15.86	8.33
Chapel: Fixed Seat	Seat	4	0.01	0.01
Chiropractic Office	1000 Sq.Ft.	150	0.16	0.10

USER CATEGORY	UNIT OF USAGE	FLOW (Gallons per Day)	BOD (Pounds per Day)	SUSPENDED SOLIDS (Pounds per Day)
Church: Fixed Seat	Seat	4	0.01	0.01
Church School: Day Care/Elem	Occupant	8	0.01	0.01
Church School: One Day Use	1000 Sq.Ft.	200	0.22	0.17
Cocktail Lounge: Fixed Seat	Seat	18	0.03	0.03
Coffee House: No Pastry Baking & No Food Preparation	1000 Sq.Ft.	120	0.20	0.20
Coffee House: Pastry Baking Only	1000 Sq.Ft.	280	2.34	1.40
Coffee House: Serves Prepared Food	Seat	30	0.25	0.15
Cold Storage: No Sales	1000 Sq.Ft.	20	0.03	0.03
Cold Storage: Retail Sales	1000 Sq.Ft.	80	0.10	0.10
Comfort Station: Public	Fixture	100	0.13	0.13
Commercial Use	1000 Sq.Ft.	80	0.10	0.10
Community Center	Occupant	4	0.01	0.01
Counseling Center	1000 Sq.Ft.	150	0.16	0.10
Credit Union	1000 Sq.Ft.	150	0.19	0.19
Dairy: Retail Area	1000 Sq.Ft.	80	0.10	0.10
Dancing Area (of Bars or Nightclub)	1000 Sq.Ft.	600	1.00	1.00
Dance Studio	1000 Sq.Ft.	80	0.10	0.10
Dental Office/Clinic	1000 Sq.Ft.	250	0.27	0.17
Doughnut Shop	1000 Sq.Ft.	280	2.34	1.40
Drug Rehabilitation Center	1000 Sq.Ft.	150	0.16	0.10
Equipment Booth	1000 Sq.Ft.	20	0.03	0.03
Film Processing - 1 Hour Photo, Etc.	1000 Sq.Ft.	100	0.13	0.13
Gas Station: Self Service	Fixture	100	0.15	0.23
Gas Station: Four Bays Max	Station	430	0.65	1.00
Gymnasium - Basketball, Volleyball	1000 Sq.Ft.	250	0.31	0.31
Hanger (Aircraft)	1000 Sq.Ft.	80	0.12	0.19
Health Club/Spa	1000 Sq.Ft.	800	1.00	1.00
Homeless Shelter	Bed	75	0.13	0.13
Hospital: Convalescent	Bed	75	0.16	0.06
Hospital: Animal	1000 Sq.Ft.	280	0.35	0.35
Hotel: Use Guest Rooms Only	Room	130	0.34	0.13
Jail	Inmate	85	0.22	0.09
Kennel: Dog Kennel/Open	1000 Sq.Ft.	100	0.13	0.13
Laundromat	Machine	170	0.21	0.16
Library: Public Area	1000 Sq.Ft.	80	0.10	0.10

USER CATEGORY	UNIT OF USAGE	FLOW (Gallons per Day)	BOD (Pounds per Day)	SUSPENDED SOLIDS (Pounds per Day)
Library: Stacks, Storage	1000 Sq.Ft.	25	0.03	0.03
Lobby Of Retail Area	1000 Sq.Ft.	80	0.10	0.10
Lodge Hall	Seat	4	0.01	0.01
Lounge	1000 Sq.Ft.	80	0.13	0.13
Machine Shop	1000 Sq.Ft.	80	0.10	0.10
Manufacturing (Dry) Facility	1000Gr.Sq.Ft.	80	0.10	0.10
Massage Parlor	1000 Sq.Ft.	275	0.34	0.34
Medical Building	1000 Sq.Ft.	250	0.27	0.17
Medical: Lab In Hospital	1000 Sq.Ft.	250	0.69	0.31
Medical Office/Clinic	1000 Sq.Ft.	250	0.27	0.17
Mini-Mall	1000 Sq.Ft.	80	0.40	0.27
Mortuary: Chapel	Seat	4	0.01	0.01
Mortuary: Embalming	1000 Sq. Ft.	715	4.77	4.77
Mortuary: Living Area	1000 Sq.Ft.	80	0.14	0.14
Motel: Use Guest Rooms Only	Room	130	0.34	0.13
Museum: All Area	1000 Sq.Ft.	20	0.03	0.03
Museum: Office Over 15%	1000 Sq.Ft.	150	0.19	0.19
Museum: Sales Area	1000 Sq.Ft.	80	0.10	0.10
Office Building	1000 Sq.Ft.	150	0.16	0.10
Office Bldg W/ Cooling Tower	1000 Sq.Ft.	180	0.16	0.10
Pool Hall (No Alcohol)	1000 Sq.Ft.	80	0.10	0.10
Post Office: Full Service	1000 Sq.Ft.	150	0.19	0.19
Post Office: Private Mail Box Rental	1000 Sq.Ft.	80	0.10	0.10
Prisons	Inmate	175	0.45	0.18
Residential Dorm: College Or Residential	Student	75	0.13	0.13
Residential: Boarding House	Bed	75	0.13	0.13
Residential: Apt - Bachelor	Dwelling Unit	80	0.14	0.14
Residential: Apt - 1 Bedroom	Dwelling Unit	120	0.22	0.21
Residential: Apt - 2 Bedroom	Dwelling Unit	160	0.29	0.27
Residential: Apt - 3 Bedroom	Dwelling Unit	200	0.36	0.34
Residential: Apt - >3 Bedroom	Additional Bedroom	40	0.07	0.07
Residential: Condo - 1 Bedroom	Dwelling Unit	120	0.22	0.21
Residential: Condo - 2 Bedroom	Dwelling Unit	160	0.29	0.27
Residential: Condo - 3 Bedroom	Dwelling Unit	200	0.36	0.34

USER CATEGORY	UNIT OF USAGE	FLOW (Gallons per Day)	BOD (Pounds per Day)	SUSPENDED SOLIDS (Pounds per Day)
Residential: Condo - >3 Bedroom	Additional Bedroom	40	0.07	0.07
Residential: Duplex/Townhouse/SFD - 1 Bedroom	Dwelling Unit	130	0.23	0.22
Residential: Duplex/Townhouse/SFD - 2 Bedroom	Dwelling Unit	180	0.32	0.31
Residential:Duplex/Townhouse/SFD - 3 Bedroom	Dwelling Unit	230	0.41	0.39
Residential:Duplex/Townhouse/SFD - >3 Bedroom	Additional Bedroom	50	0.09	0.09
Residential Room Addition: Bedroom	Bedroom	50	0.09	0.09
Residential Room Conversion: Into A Bedroom	Bedroom	50	0.09	0.09
Residential: Mobile Home	Dwelling Unit	160	0.29	0.27
Residential: Artist (2/3 Area)	Dwelling Unit	250	0.45	0.43
Residential: Artist Residence	Dwelling Unit	80	0.14	0.14
Residential: Guest Home w/ Kitchen	Same as Residential Apt			
Residential: Guest Home w/o Kitchen	Bedroom	50	0.06	0.06
Rest Home	Bed	75	0.16	0.06
Restaurant: Drive-In	Stall	40	0.33	0.20
Restaurant: Drive-In	Seat	20	0.17	0.10
Restaurant: Fast Food - Indoor Seat	Seat	20	0.17	0.10
Restaurant: Fast Food - Outdoor Seat	Seat	12	0.10	0.06
Restaurant: Full Service - Indoor Seat	Seat	30	0.25	0.15
Restaurant: Full Service - Outdoor Seat	Seat	18	0.15	0.09
Restaurant: Take-Out	1000 Sq.Ft.	300	2.50	1.50
Retail Area	1000 Sq.Ft.	80	0.10	0.10
Rifle Range: Shooting Stalls, Shooting Lanes, Lobby Area	1000 Sq.Ft.	80	0.10	0.10
School: Arts/Dancing/Music	1000 Sq.Ft.	80	0.09	0.07
School: Day Care Center	Child	8	0.01	0.01
School: Elementary/Jr. High	Student	8	0.01	0.01
School: High School	Student	12	0.01	0.01
School: Kindergarten	1000 Sq.Ft.	200	0.22	0.17
School: Martial Arts	1000 Sq.Ft.	80	0.09	0.07
School: Nursery-Day Care	Child	8	0.01	0.01

USER CATEGORY	UNIT OF USAGE	FLOW (Gallons per Day)	BOD (Pounds per Day)	SUSPENDED SOLIDS (Pounds per Day)
School: Special Class	Student	8	0.01	0.01
School: Trade Or Vocational	Student	12	0.01	0.01
School: Training	Student	12	0.01	0.01
School: University/College	Student	18	0.02	0.02
School: Dormitory	Student	75	0.13	0.13
School: Stadium, Pavilion	Seat	4	0.01	0.01
Storage: Building/Warehouse	1000 Sq.Ft.	20	0.03	0.03
Storage: Self Storage Bldg.	1000 Sq.Ft.	20	0.03	0.03
Store: Ice Cream/Yogurt	1000 Sq.Ft.	80	0.67	0.40
Store: Retail	1000 Sq.Ft.	80	0.10	0.10
Studio: Film/TV - Audience Viewing Room	Seat	4	0.01	0.01
Studio: Film/TV - Regular Use - Indoor Filming Area	1000 Sq.Ft.	80	0.10	0.10
Studio: Film/TV - Industrial Use (Domestic)	1000 Sq.Ft.	80	0.00	0.00
Studio: Recording	1000 Sq.Ft.	80	0.10	0.10
Tanning Salon: Independent, No Shower	1000 Sq.Ft.	80	0.10	0.10
Tanning Salon: Within A Health Spa/Club	1000 Sq.Ft.	800	1.00	1.00
Theater: Drive-In	Vehicle	10	0.01	0.01
Theater: Live/Music/Opera	Seat	4	0.01	0.01
Theater: Cinema	Seat	4	0.01	0.01
Tract: Commercial/Residential	Acre	1	0.00	0.00
Trailer - Const/Field Office	Office	150	0.19	0.19
Veterinary Clinic/Office	1000 Sq.Ft.	280	0.30	0.19
Warehouse	1000 Sq.Ft.	20	0.03	0.03
Waste Dump: Recreational	Station	430	0.54	0.54
Wine Tasting Room: Kitchen	1000 Sq.Ft.	215	0.27	0.27
Wine Tasting Room: All Area	1000 Sq.Ft.	80	0.10	0.10

SECTION 2.0 - CONNECTION FEE RATE

Pursuant to Section 3.02 of the *Master Connection Fee Ordinance for County Sanitation District No. 4 of Los Angeles County*, the Connection Fee Rate shall be $1,710.00 per capacity unit.

SECTION 3.0 - COST ALLOCATION FACTORS

Pursuant to Section 3.03(2) of the *Master Connection Fee Ordinance for County Sanitation District No. 4 of Los Angeles County*, the proportions of the capital improvement component of the connection fee rate which are attributable to flow, BOD, and Suspended Solids, designated as X, Y, and Z, respectively, shall be:

X = 0.6567 Y = 0.1992 Z = 0.1441

SECTION 4.0 - BASIC RESIDENTIAL UNIT

Pursuant to Section 3.03(2) of the *Master Connection Fee Ordinance for County Sanitation District No. 4 of Los Angeles County*, the loadings from a basic residential unit shall be:

$Flow_{bru}$ = 260 gallons per day of Wastewater flow
BOD_{bru} = 0.466 pounds per day of BOD
SS_{bru} = 0.445 pounds per day of Suspended Solids.

SECTION 5.0 - EFFECTIVE DATE

This Ordinance shall become effective on July 1, 1999.

Chairperson, Board of Directors
County Sanitation District No. 4
of Los Angeles County

ATTEST:

Clerk, Board of Directors
County Sanitation District No. 4
of Los Angeles County

APPENDIX E

Hydraulic Calculations

Worksheet for NORTH ORANGE GROVE 8-IN EXISTING

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	3.32	%
Diameter	8.00	in
Discharge	0.077	ft³/s

Results

Normal Depth	0.09	ft
Flow Area	0.03	ft²
Wetted Perimeter	0.49	ft
Hydraulic Radius	0.05	ft
Top Width	0.45	ft
Critical Depth	0.13	ft
Percent Full	12.8	%
Critical Slope	0.00662	ft/ft
Velocity	2.96	ft/s
Velocity Head	0.14	ft
Specific Energy	0.22	ft
Froude Number	2.16	
Maximum Discharge	2.37	ft³/s
Discharge Full	2.20	ft³/s
Slope Full	0.00004	ft/ft
Flow Type	SuperCritical	

Worksheet for NORTH ORANGE GROVE 8-IN PROPOSED

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	3.32	%
Diameter	8.00	in
Discharge	0.186	ft³/s

Results

Normal Depth	0.13	ft
Flow Area	0.05	ft²
Wetted Perimeter	0.61	ft
Hydraulic Radius	0.08	ft
Top Width	0.53	ft
Critical Depth	0.20	ft
Percent Full	19.6	%
Critical Slope	0.00642	ft/ft
Velocity	3.84	ft/s
Velocity Head	0.23	ft
Specific Energy	0.36	ft
Froude Number	2.24	
Maximum Discharge	2.37	ft³/s
Discharge Full	2.20	ft³/s
Slope Full	0.00024	ft/ft
Flow Type	SuperCritical	

Worksheet for NORTH ORANGE GROVE 8-IN CAPACITY

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	3.32	%
Diameter	8.00	in
Discharge	1.090	ft³/s

Results

Normal Depth	0.33	ft
Flow Area	0.17	ft²
Wetted Perimeter	1.04	ft
Hydraulic Radius	0.17	ft
Top Width	0.67	ft
Critical Depth	0.50	ft
Percent Full	49.7	%
Critical Slope	0.01000	ft/ft
Velocity	6.29	ft/s
Velocity Head	0.62	ft
Specific Energy	0.95	ft
Froude Number	2.18	
Maximum Discharge	2.37	ft³/s
Discharge Full	2.20	ft³/s
Slope Full	0.00814	ft/ft
Flow Type	SuperCritical	

Worksheet for SANTA MONICA 12-IN EXISTING

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.32	%
Diameter	12.00	in
Discharge	0.58	ft³/s

Results

Normal Depth	4.41	in
Flow Area	0.26	ft²
Wetted Perimeter	1.30	ft
Hydraulic Radius	2.41	in
Top Width	0.96	ft
Critical Depth	0.32	ft
Percent Full	36.7	%
Critical Slope	0.00562	ft/ft
Velocity	2.22	ft/s
Velocity Head	0.08	ft
Specific Energy	0.44	ft
Froude Number	0.75	
Maximum Discharge	2.17	ft³/s
Discharge Full	2.02	ft³/s
Slope Full	0.00027	ft/ft
Flow Type	SubCritical	

Worksheet for SANTA MONICA 12-IN PROPOSED

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.32	%
Diameter	12.00	in
Discharge	0.69	ft³/s

Results

Normal Depth	4.84	in
Flow Area	0.30	ft²
Wetted Perimeter	1.38	ft
Hydraulic Radius	2.59	in
Top Width	0.98	ft
Critical Depth	0.35	ft
Percent Full	40.3	%
Critical Slope	0.00565	ft/ft
Velocity	2.32	ft/s
Velocity Head	0.08	ft
Specific Energy	0.49	ft
Froude Number	0.74	
Maximum Discharge	2.17	ft³/s
Discharge Full	2.02	ft³/s
Slope Full	0.00037	ft/ft
Flow Type	SubCritical	

Worksheet for SANTA MONICA 12-IN CAPACITY

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.32	%
Diameter	12.00	in
Discharge	1.00	ft³/s

Results

Normal Depth	5.97	in
Flow Area	0.39	ft²
Wetted Perimeter	1.57	ft
Hydraulic Radius	2.99	in
Top Width	1.00	ft
Critical Depth	0.42	ft
Percent Full	49.8	%
Critical Slope	0.00582	ft/ft
Velocity	2.56	ft/s
Velocity Head	0.10	ft
Specific Energy	0.60	ft
Froude Number	0.72	
Maximum Discharge	2.17	ft³/s
Discharge Full	2.02	ft³/s
Slope Full	0.00079	ft/ft
Flow Type	SubCritical	

APPENDIX F

Utility Systems Science & Software Sewer Flow Monitoring Report

Site Report 11-03-2014

Confidential Proprietary Information

Faring capital

On N.Orange Grove Av, just north of Santa Monica Blvd.

Orange Grove & Santa Monica

Manhole No.*

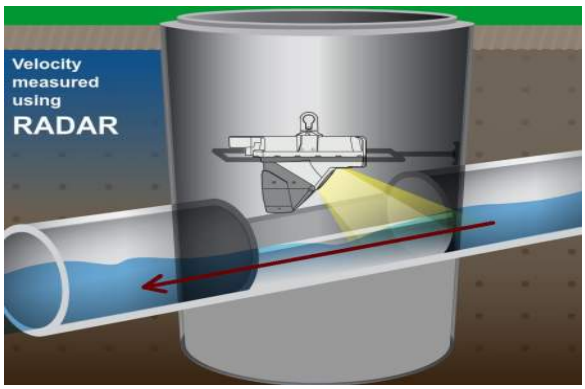
Access:
Manhole

System Type:
Sanitary [X] Storm [ ]

Install Date: 10/25/2014

Map

Technology



Traffic Plan

Flow Meter			
Meter Depth ":91"			
Meter SN ":*			
*			
Avg Velocity	Avg Measured Level		Multiplier
3.94 fps	0.74"		1
Gas			
O2	H2S	CO	LEL
20.9	0	0	0
Notes			
*			
Traffic Safety			
Used cones, signs and a flagger.			
Land Use			
Residential	Commercial	Industrial	Trunk
	X		

Manhole Depth "	8.8'
Pipe Size "	8"
Inner Pipe Size " (In/Out)	8"/8"
Pipe Shape	Round
Pipe Condition	Good
Manhole Material	Brick
Silt (inches)	0
Velocity Profile Data	*
Velocity Profile Taken	
Sensor Offset	14.57"
Sensor Dist. to Crown	6.57"
Flow Direction	Upstream
Flow Heading	South

Meter Site Document

Faring capital

Orange Grove & Santa Monica

On N.Orange Grove Av, just north of Santa Monica Blvd.

Site

Manhole Before Install

Installation Process

Installed

Upstream

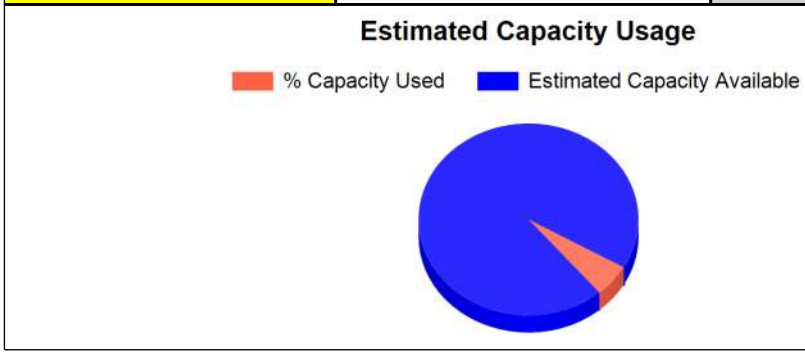
Downstream

Temporary Flow Study

Faring capital

Orange Grove & Santa Monica

Meter Start Date		From	10/25/2014 12:00:00 AM
Meter Stop Date		To	11/2/2014 12:00:00 AM
Velocity (fps)		Level (in)	Flow (mgd)
Average	3.690	0.415	0.020
Maximum	5.309	0.859	0.071
Minimum	1.939	0.151	0.003
Pipe Size		8.000	
Estimated Capacity (mgd)		1.298	
Capacity Used		5.50 %	
Sensor Type		Hach - Flodar	

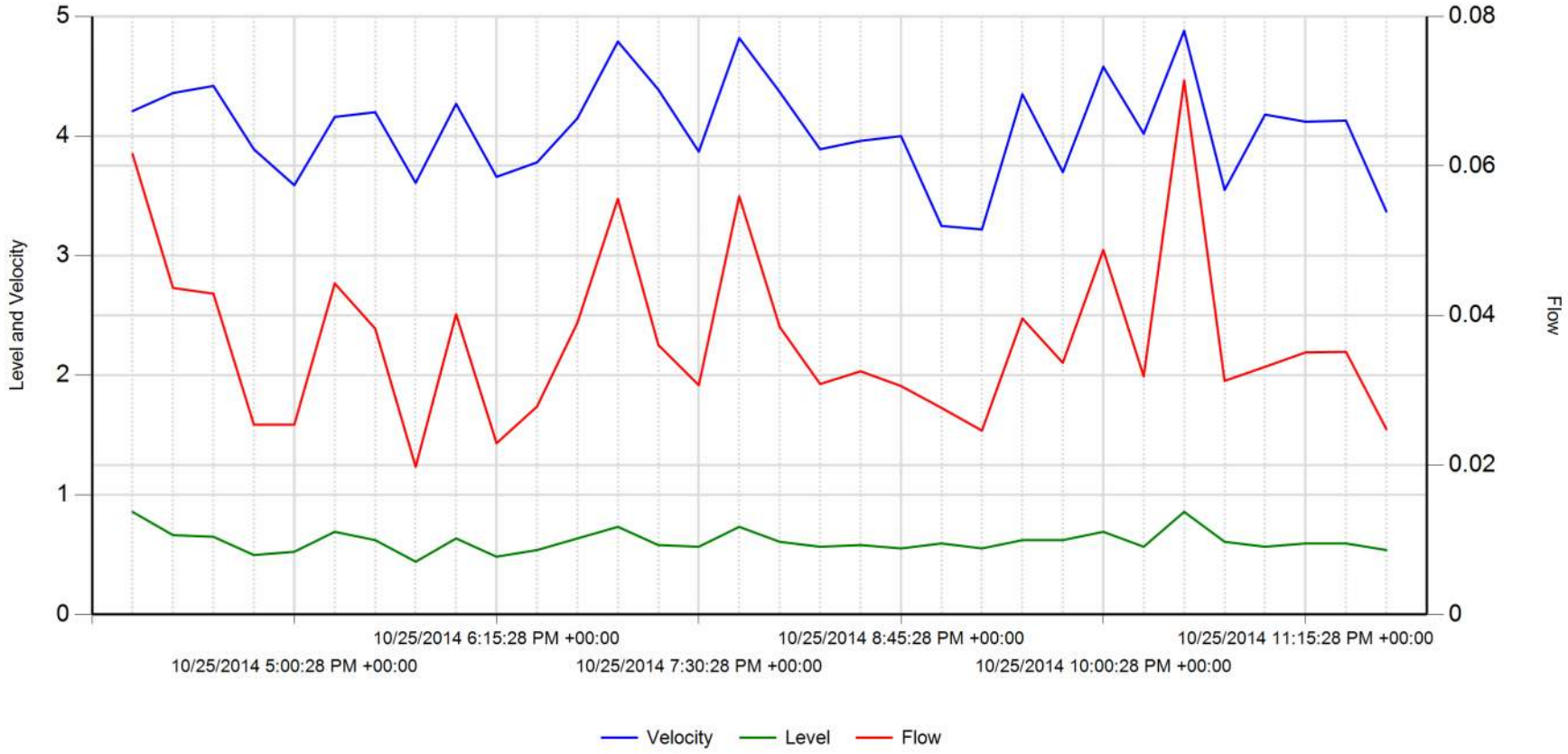


Utility Systems, Science and Software

6190 Fairmount Ave. Suite E
San Diego, CA 92021

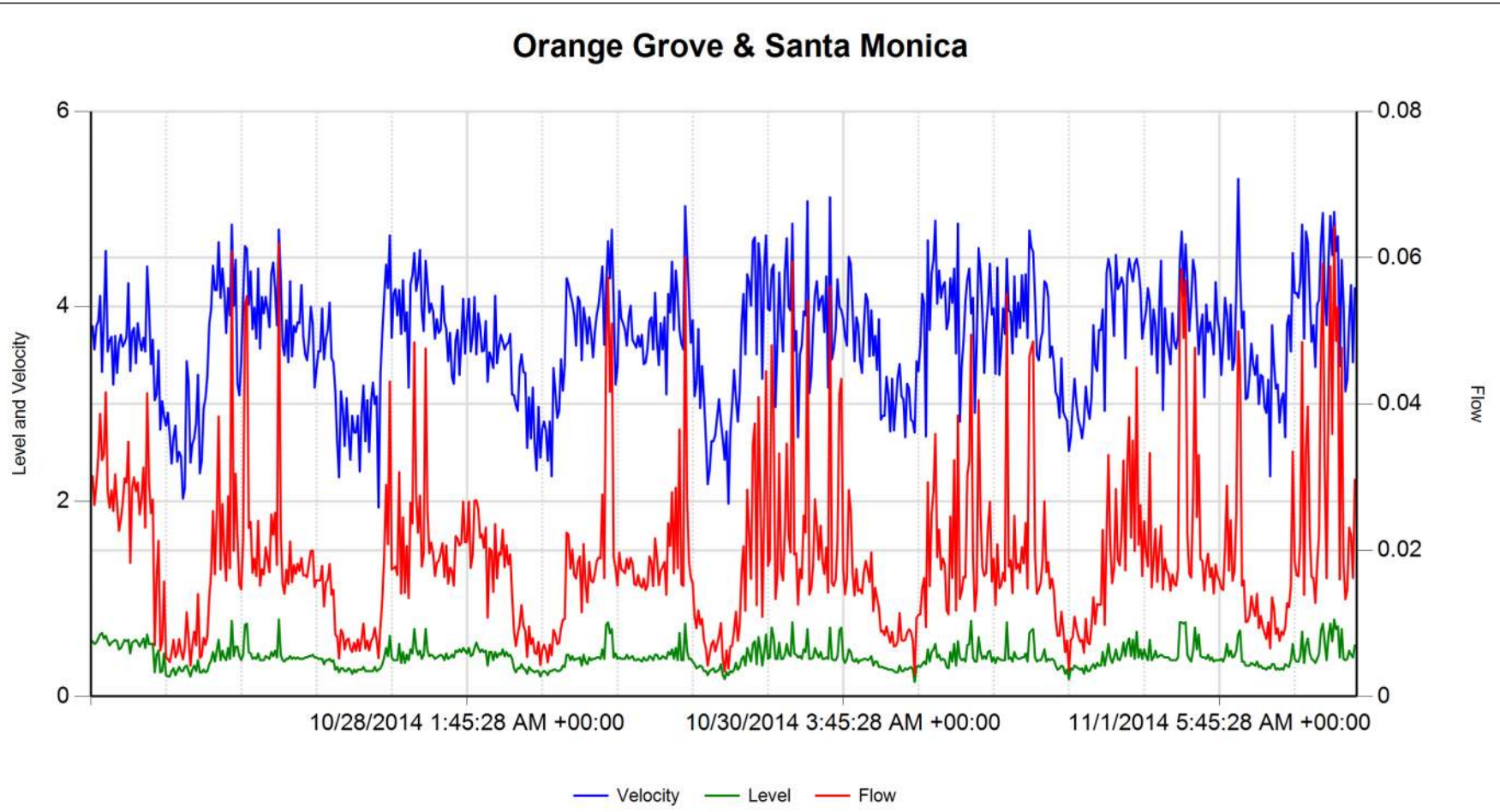
601 N. Parkcenter Drive Suite 209
Santa Ana, CA 92705

Orange Grove & Santa Monica



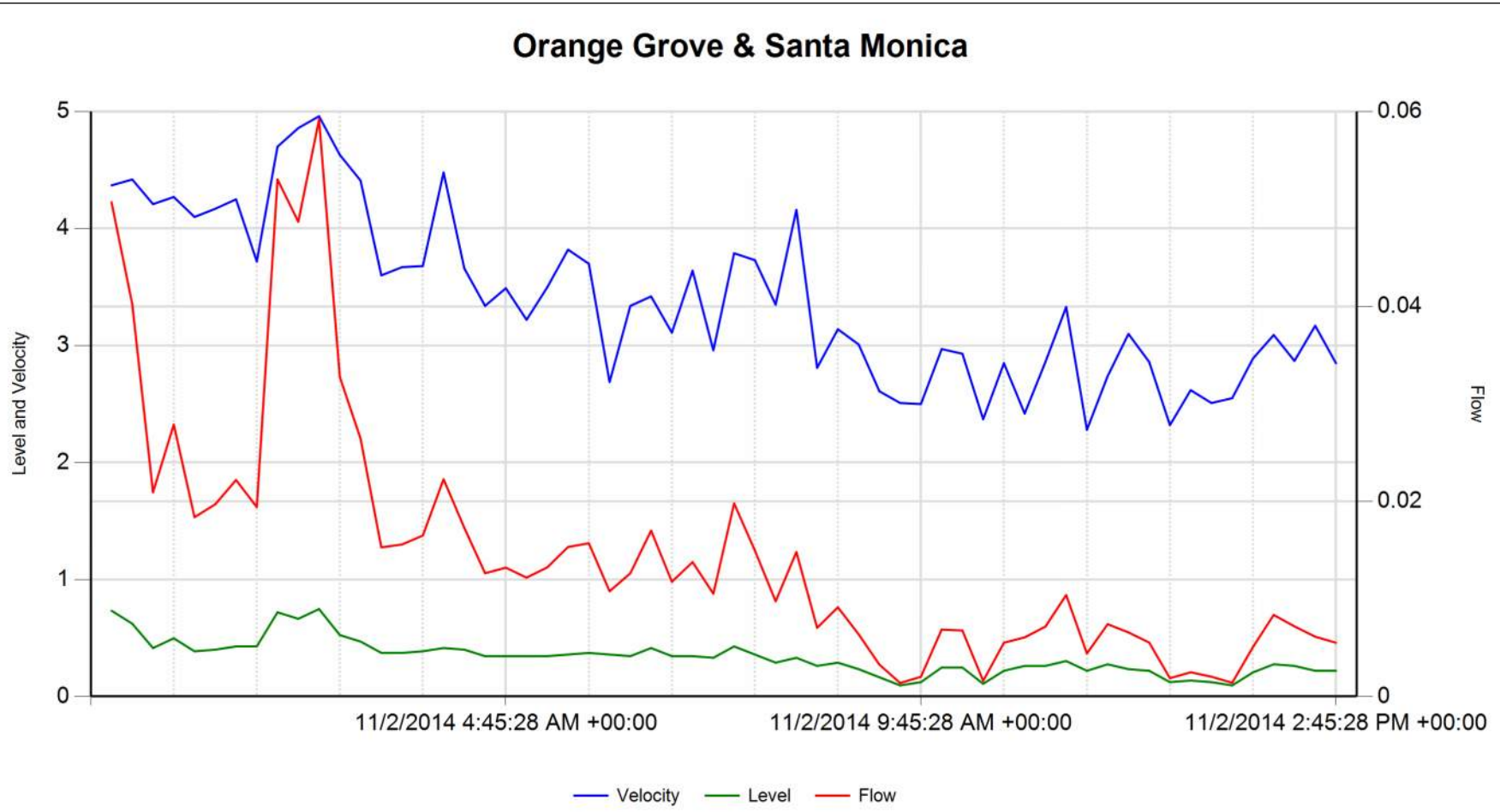
	Velocity (fps)	Level (in)	Flow (mgd)		
Average	4.054	0.612	0.037	**RainFall**	Inches
Maximum	4.880	0.859	0.071		
Minimum	3.220	0.442	0.020		

11/3/2014 1:54:31 PM



	Velocity (fps)	Level (in)	Flow (mgd)		
Average	3.664	0.404	0.019	**RainFall**	Inches
Maximum	5.309	0.789	0.064		
Minimum	1.939	0.151	0.003		

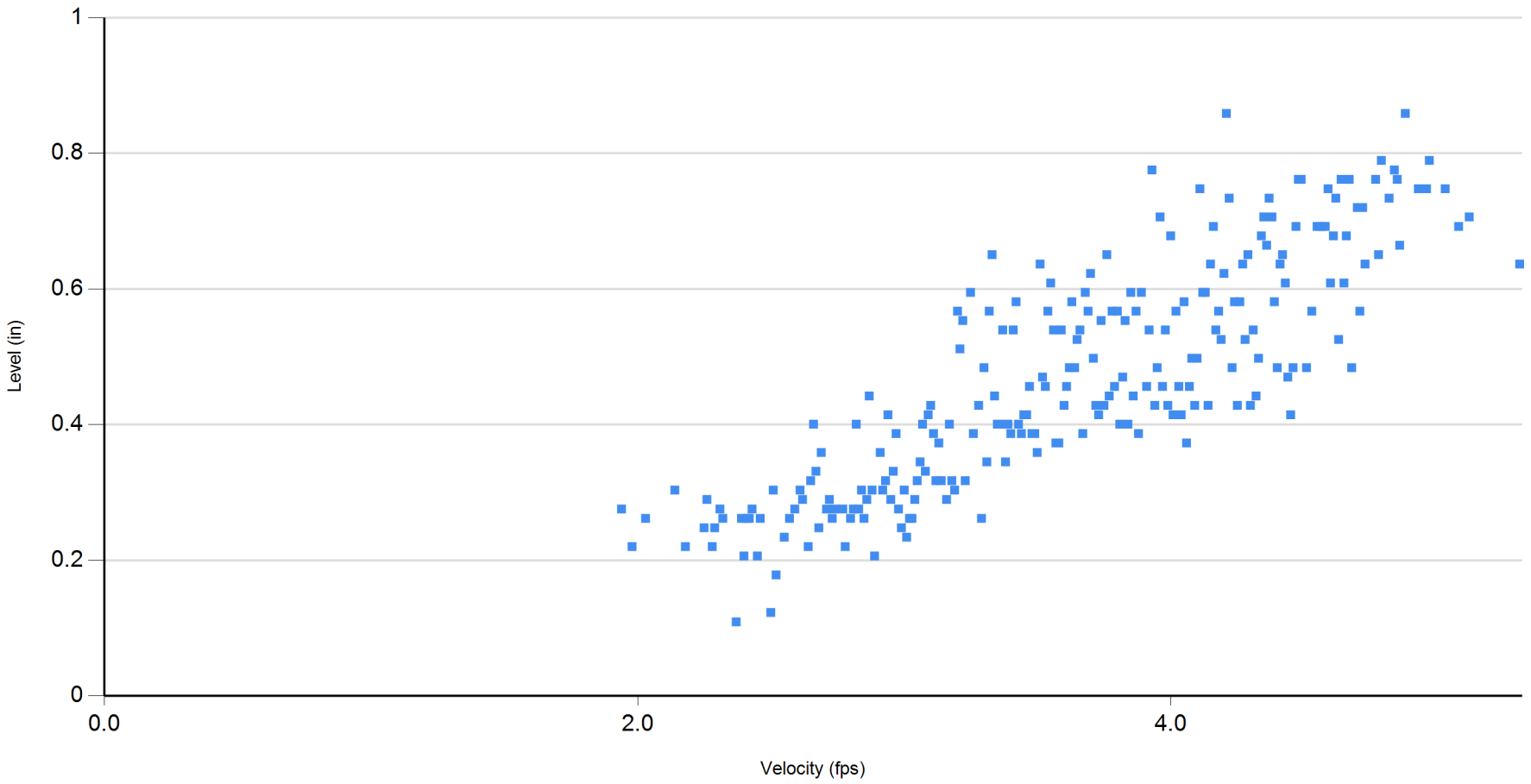
11/3/2014 1:54:31 PM



	Velocity (fps)	Level (in)	Flow (mgd)		
Average	3.392	0.335	0.015	**RainFall**	Inches
Maximum	4.959	0.748	0.059		
Minimum	2.280	0.095	0.001		

11/3/2014 1:54:31 PM

Orange Grove & Santa Monica



10/25/2014 thru 11/2/2014

11/3/2014 1:54:31 PM

Site Report 03-29-2019

Confidential Proprietary Information

Faring

~7825 Santa Monica Blvd, West Hollywood, CA 90046

2019.03 Santa Monica MH 51

Manhole No. 51

Access:

MH in north crosswalk at intersection of Orange Grove Av & Santa Monica Blvd

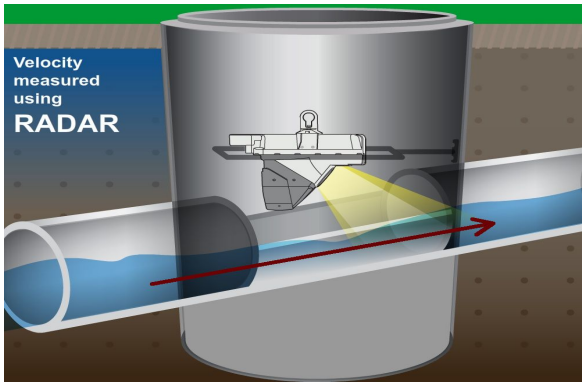
System Type:

Sanitary [X] Storm [ ]

Install Date: 3/20/2019

Map

Technology



CSMD S-1583 Sewer Plan

Flow Meter			
Meter Depth: 121"			
MH Coordinates: 34.090928, -118.360402			
Moderate open channel hydraulics with turbulence due to inflow from lateral			
Avg Velocity	Avg Measured Level		Multiplier
1.25 fps	3.5"		1
Gas			
O2	H2S	CO	LEL
20.9	0	0	0
Notes			
Two inlets from east & north; monitored downstream line to get total flow.			
Traffic Safety			
No formal TCP required; used arrow board, cones & signs per site-specific CA MUTCD TC requirements.			
Land Use			
Residential	Commercial	Industrial	Trunk
	X		

Manhole Depth	141.5"
Monitored Pipe Size	12"
Inner Pipe Size (In/Out)	12"/12"
Pipe Shape	Round
Pipe Condition	Fair
Manhole Material	Brick
Silt	0"
Velocity Profile Data	*
Velocity Profile Taken	0.4 2-D
Sensor Offset	20.15"
Sensor Dist. to Crown	8.15"
Sensor Direction	Downstream
Flow Heading	West

Meter Site Document

Faring

2019.03 Santa Monica MH 51
~7825 Santa Monica Blvd, West Hollywood, CA 90046

Site

Manhole Before Install

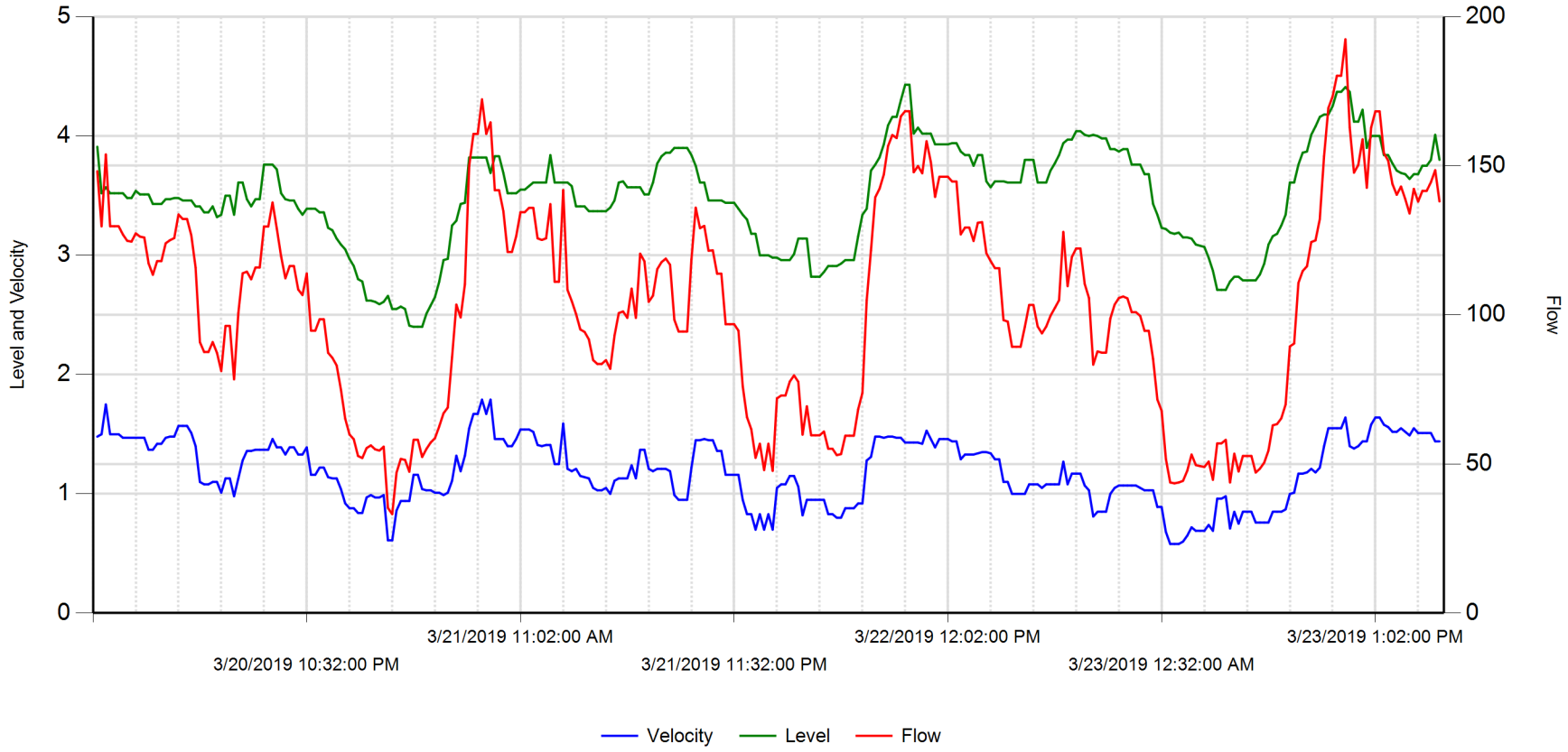
Installation Process

Installed

Upstream

Downstream

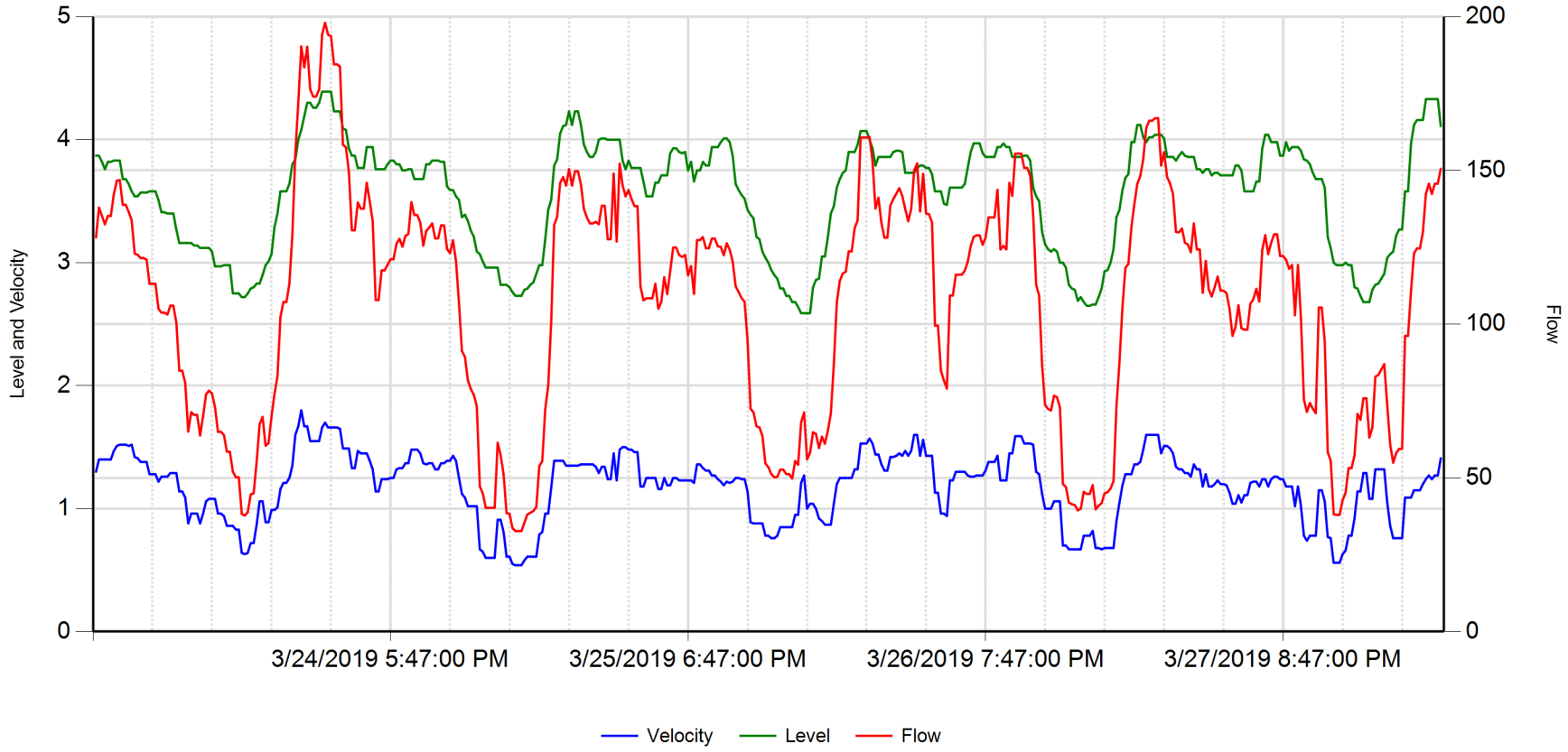
2019.03 Santa Monica MH 51



	Velocity (fps)	Level (in)	Flow (gpm)		
Average	1.186	3.484	103.489	**RainFall**	Inches
Maximum	1.790	4.430	192.430		
Minimum	0.580	2.400	33.194		

3/29/2019 12:30:06 PM

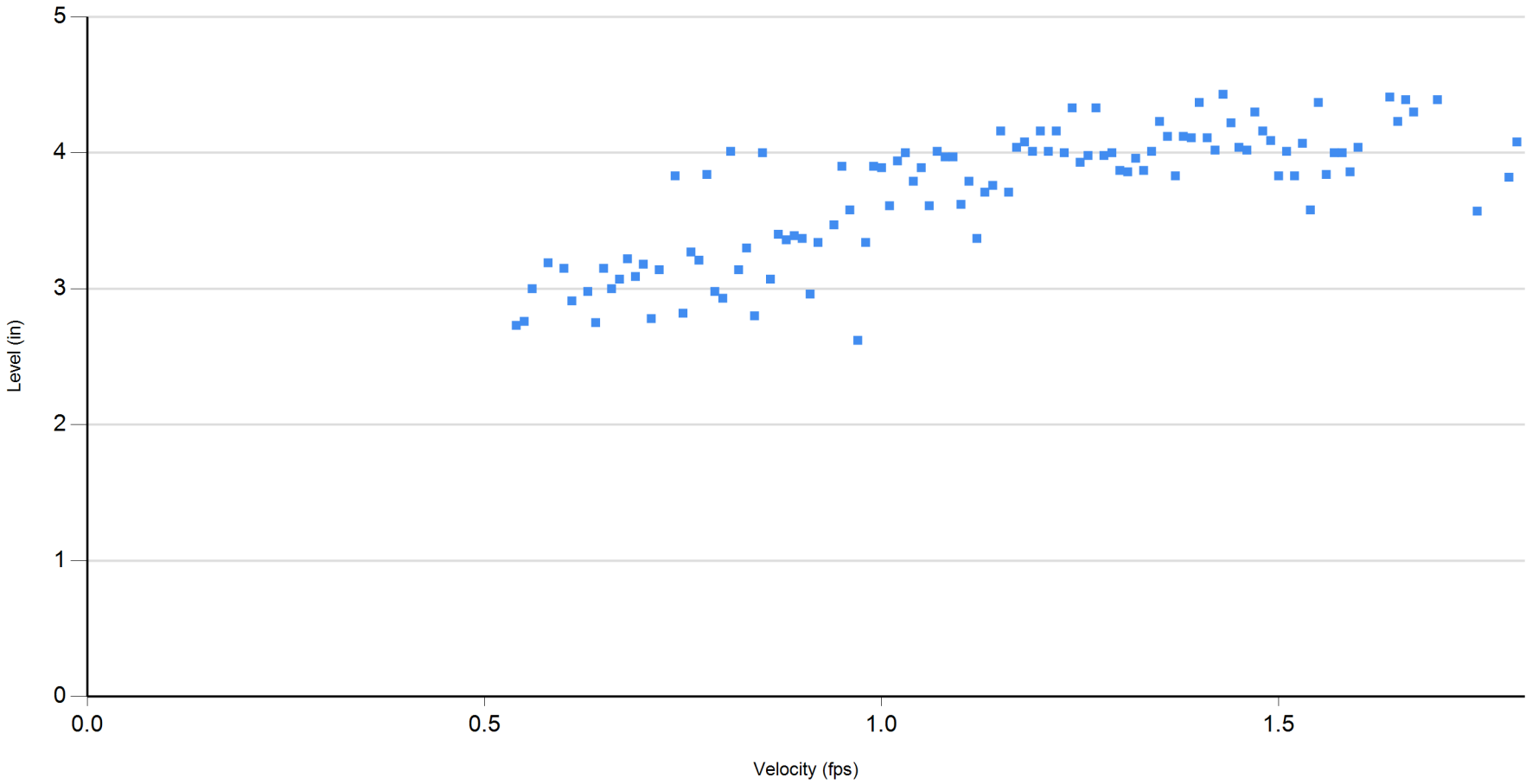
2019.03 Santa Monica MH 51



	Velocity (fps)	Level (in)	Flow (gpm)		
Average	1.178	3.553	106.516	**RainFall**	Inches
Maximum	1.800	4.390	198.055		
Minimum	0.540	2.590	32.708		

3/29/2019 12:30:06 PM

2019.03 Santa Monica MH 51



3/20/2019 thru 3/28/2019

3/29/2019 12:30:06 PM

ATTACHMENT E

SOUTHERN CALIFORNIA EDISON
PROCESS EXPLANATION LETTER

SOUTHERN CALIFORNIA EDISON
An *EDISON INTERNATIONAL* Company

DATE: August 06, 2019

COMPANY: KPFF

SUBJECT: 7965-7985 Santa Monica Blvd, West Hollywood, CA 90046

Your project is located in Southern California Edison (SCE) service territory. SCE will serve the above subject project's electrical requirements per the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs.

SCE may need to conduct utility studies, where applicable, to assess whether additions or modifications to the existing electric infrastructure are required to serve this project. Where applicable, SCE has attached Appendix (B) which not only describes the study, and permitting, but includes a Project Information Sheet that will need to be completed by you and submitted to SCE if your project is at a point where SCE has to determine the required electrical utility work. This Will-Serve letter does not imply that either: (i) these studies have been completed, or (ii) that any required California Environmental Quality Act (CEQA) analysis of project-related electric utility impacts has been conducted.

I am the SCE Design Representative currently assigned to this project. SCE or Applicant will design and construct all required electrical infrastructure to serve this project provided you enter into the applicable contractual agreements with SCE identify scope of electrical utility work required, and supply the following information:

- Site plans as required
- Required contracts and agreements (fully executed)
- Applicable fees
- Local permits
- Required easement documents

Your project will be scheduled for construction once SCE has all the necessary information for your project and you have submitted or agreed to the applicable requirements as stated above, and paid any necessary fees.

If your project will not require SCE services, please notify us so that we can update our records.

SCE appreciates your business. If you have any questions, please feel free to call me at (310) 738-1170.

Sincerely,

SCE Design Representative

Enclosure: Appendix B, where applicable

ATTACHMENT F

SOUTHERN CALIFORNIA GAS WILL SERVE LETTER

□□1 □□□□□is Rd□
Co□ □ton□C□ □□□□□-□□□□

July 25, 2019

KPFF
700 South Flower Street, Suite 2100
Los Angeles, CA 90017
Attn: James Rice

Subject: Will Serve - 5530-002-019 & 5530-002-067 7811 Santa Monica Blvd and 1114 North Orange Grove Ave West Hollywood, CA 90046

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

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

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

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

Sincerely,

William Perez

William Perez
Pipeline Planning Assistant
SoCalGas-Compton HQ